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THE VALUE OF CAVALRY AS A PART OF OUR ARMY.

BY BRIGADIER GENERAL JAMES PARKER, U. S. A.

IN 1912 there was a bill before Congress proposing to reduce the cavalry of the United States Army by mustering out five five of the fifteen regiments of which it is composed. There has also been urged in recent years a proposition in favor of the reduction of each regiment from twelve troops to six squadrons, a measure which might eventually have the same effect. While it is not probable, owing to present exigencies of our foreign relations, that either of these measures will at present be adopted, they are still being considered.

An army exists very largely as an insurance against war or insurrection, just as a police force exists as an insurance against disorder. The army of the United States is unique in this respect—so much has this country, one of the great powers, cut down its military force, that it may be said to exist almost wholly on account of this necessity of insurance aganist war. It has been cut down until it can be regarded merely as the nucleus of our war army; as a school of military art.

Nevertheless, as a military force it is, for its size, an efficient one; as an insurance, it meets its purpose. As a deterrent against agression, against insult, it suffices. This is because of the enormous military strength that backs it, enormous, be-

cause when we study the War of the Rebellion, and consider the magnitude, efficiency and valor of our volunteer armies, and consider that we would now, with our 100 millions of population, be able to raise an army three times as large as that then furnished, in 1865, by the north and south combined, we are impressed with the fact that the United States, potentially, has resources in war, equal to any nation upon earth.

Representing this potentiality, our regular army, for its size, should be as near perfect as it can be made. It should be a school of war, whence military knowledge and training can be disseminated throughout the country. It should be the source from which will come, in war, the expert trainers and instructors which are to whip into shape, quickly, our masses of untrained volunteers. At the same time it should maintain a sufficient number of such special troops as cannot be quickly perfected in time of war.

If we study the War of the Rebellion we will see that while mounted troops were always, during that struggle, of immense value, it required over two years' of training before the cavalry of the Northern Army were fit for fighting. The experience of the Spanish-American War also showed that, in four months our volunteer infantry attained a certain amount of proficiency and steadiness, but at the conclusion of that period no volunteer cavalry, except perhaps the Rough Riders, was fit for active service on horseback.

This was partly due to lack of expert trainers, but mostly due to the fact that in the cavalry, horses, as well as men, have to be trained. And to put an untrained man and an untrained horse together results in delaying the training of both man and horse.

The modern cavalryman must be both an infantryman and a cavalryman. He must be able to fight dismounted with the rifle against infantry. He must be a good rider, have a well trained horse and be an expert with the saber in order to fight mounted against cavalry. He must be a good rider, have a well trained horse and be inured to fatigue to be able to make the long marches as mounted infantry. It is plain that all these things require long training. Thus, if in case of war we desire to have during the first year a force of efficient cavalry, even

one-tenth the size of the force which should be employed, we must have them trained in advance.

The history of our country demonstrates that we are not an exception among nations in the liability to war. And it also demonstrates that most of our wars have been small wars. It is inevitable, on this hemisphere, that this should be the case. We are, fortunately, not in contact with the great military powers and they have little to gain by attacking us. But to avoid concrete instances of what is possible, our history shows us to have engaged in several wars with contiguous nations on this continent in the last seventy years. It also shows we have in a number of instances, barely escaped having such wars.

In any small war in this hemisphere the conditions will be such as to demand the employment of a large proportion of cavalry. The long distances, poor roads, and sparsely settled tracts, which are a characteristic of North and South America, favor the use of mounted troops. Also cavalry has special advantages when used against a poorly armed and poorly disciplined enemy. Its ability to take up a position on the flank or rear of the opposing force, to attack unexpectedly, to spread over the country in many detachments, thus multiplying its whereabouts and threatening attack at many points, is particularly demoralizing to an army of untrained troops or of militia or home guards. Modern cavalry, whose principal weapon is the rifle, and which does most of its fighting on foot, (being as formidable on the firing line as the same number of infantry), possesses the ability which infantry does not possess, of being able to move quickly and at will over extremely long distances, choosing its own routes, its own object and point of attack. If one road is obstructed it can choose another; if the enemy lies in the way it can make a long detour and pass around him. It is not dependent, for food or forage, on the trains of wagons coming from the rear—if supplies give out it can move to where they are more abundant. It is its glory to march within the enemy's lines, cut off from succor and reinforcement, trusting to the strength and speed of its horses to retrieve any mistakes. In a desert country, devoid of water, making operations by infantry difficult, the cavalry is able to make the long marches necessary to cover the distance to the next stream.

In many parts of America travel is almost entirely by horseback—what more natural than that armies should then be composed of horseman? We see an instance of this in the revolution now going on in a sister republic, where the contending forces are largely mounted.

To realize the value of cavalry it is necessary to understand how it is used; and in regard to this many false ideas have been promulgated. In the old days cavalry fought infantry by riding it down. Since against good infantry, armed with the magazine gun, this can no longer be accomplished, it is claimed by some people that the day of cavalry is passing. But this is a mistake. Cavalry, even more than in the past, exists for the purpose of attacking infantry, as was shown during our War of the Rebellion. But it must as a rule attack dismounted, with the rifle. The term "mounted infantry" is no longer one of reproach. Man for man, when on foot, cavalry is equal to the best infantry. Its training makes it as accurate and as formidable with the rifle; and its mobility enables it to be sent in a few hours or minutes to distant points, striking where reinforcements are of the greatest importance, and where its value as infantry is doubled. Now that the use of the aeroplane and the dirigible balloon enables the commanding general to spy out the flanks, the rear and the weak points of the enemy's army, an overwhelming necessity exists for quick moving riflemen, who can strike at these points before they can be reinforced or protected. Foot infantry is not always available for this purpose—it moves, as a rule, too slowly; but cavalry, which the best practice now substitutes for mounted infantry, arrives quickly, and once there goes into the fight, fresh, without fatigue. This use of cavalry was highly developed by both North and South during the Civil War. In its adoption we were fifty years ahead of other nations.

During the Civil War our cavalry grew in importance and in renown from year to year—the proportional numbers were constantly increased, until, in Virginia, under Sheridan and Stuart and in the West, under Wilson and Forrest, we had *armies* of cavalry, which were consistently and continually employed in fighting infantry, riding long distances and attacking them in the flank or rear, on foot. It was this use of cavalry by the

North which brought about the triumph of Nashville in the West and Appomattox in the East. It was this use of cavalry by the South, by Forrest, Morgan, Wheeler, and other leaders, which so long held our armies at bay in Kentucky and Tennessee. The invention of the wireless, the aeroplane and the dirigible balloon has now added to the value of cavalry for this purpose, as has also the use of the magazine gun of long range.

There is a certain class of military writers, especially in Europe, who are so much impressed with the mounted action of cavalry, and its glories, in the past, that they ignore dismounted action. They refuse to believe the logic of the magazine gun, or the lessons of our rebellion and of the war of 1870, and still contend that cavalry, mounted, can ride down and disperse good infantry. To them the war of 1861–65 is almost a sealed book. The war of 1870 was too soon over to convince them. The Boer War taught them little. Their arguments are taken from the Wars of Napoleon. To them the rifle is an unimportant part of the cavalryman's equipment, but the horse, the saber and the lance everything. Their writings deal solely with the glory and the terror of the charge. Their views dominate the military books and journals of Europe.

It would perhaps be well for Americans, who know better, were this false doctrine to continue in other armies, for then, in case of a conflict, we would have a great advantage. Nevertheless, these writers, by ignoring the advantages of dismounted action, give a reasonableness to the claim that the utility of mounted troops in war is much diminished. The truth is, on the contrary, that dismounted fighting has so largely increased the value and the opportunities of cavalry that much larger forces of cavalry are necessary now than formerly.

Should cavalry when fighting cavalry always remain mounted?

A fenced-up country like that of the United States militates very much against the mounted use of cavalry. A country of ditches, like that of northern Italy, has the same effect. A perfectly open, flat country, without fences, as in Germany and France, gives the enemy time to dismount and repel the mounted charge with the far-reaching rifle.

It would seem that a country with moderate cover, but without fences, gives now the best opportunity for the mounted attack of cavalry.

To give a simple instance of the action of cavalry against cavalry in such a terrain and its advantages and limitations, let us imagine a regiment of "red" cavalry marching in a certain direction and a regiment of "blue" cavalry opposing its march. The two forces arrive in sight of each other, say at a distance of half a mile. The blue cavalry dismounts and opens fire. If well trained it can do this in two minutes. The red cavalry, on the other hand, can traverse a half-mile at a fast gallop in two minutes. If the red cavalry leader is courageous and quick at seizing opportunities he should plunge in among the dismounted blue cavalry before they have time to fire more than a few shots, when, encumbered with their led horses, they would be at his mercy.

If the distance on meeting were more than a half-mile, and the blue cavalry dismounted then the red cavalry might with advantage retreat to the nearest cover and make a detour around the blue cavalry. For if it attempted to make a mounted attack the blue cavalry would have time to dismount and open a hot fire. If the red cavalry, on the other hand, dismounted, in its turn, and opened fire, there would result a rifle duel. The progress of the red cavalry would be effectively delayed.

As long as the red cavalry leader insists on remaining mounted and conducts himself with discretion the blue cavalry can accomplish nothing by dismounting.

It is evident in such a terrain that most of the fighting, when cavalry meets cavalry, will be mounted, but that occasions often will arise for dismounted fighting.

A slight examination of the foregoing example will demonstrate that the occasions for combat arising when cavalry fights cavalry form combinations without number, these combinations being made up of the different distances which separte the combatants, the factors of cover and obstacles, the disposition taken by the enemy, etc., etc. To meet these different contingencies and select promptly the proper form of attack, requires in a cavalry leader experience and genius.

This illustration also gives an example of a situation which would often occur in war. One of the principal functions of cavalry is the act of preceding the main body of the army, forming a curtain or screen, thus preventing the enemy's cavalry from

discovering the dispositions of the main body or from delaying its march. The duty of cavalry of each side, therefore, is to pierce or overthrow the opposing cavalry. In this struggle both mounted and dismounted fighting is necessary.

It is evident that a cavalry force, to be efficient, must be highly trained, not only that long marches may be made without undue fatigue to men and horses, but also to be effective in the numerous methods of mounted and dismounted fighting. They must also make themselves familiar with the varying phases that combat may assume, and which in the cavalry are far more numerous than in the infantry. They must be commanded by officers of experience, of resourcefulness and of quick decision, in order that they may take advantage of the almost innumerable, widely varying conditions that present themselves.

I think it will be apparent, from even the most cursory statement of the functions of cavalry in combat, that as much depends on the leader as on the troops. This has often been shown in war, for instance by Forrest, in the wonderful results accomplished by poorly trained cavalry. The failure of cavalry to accomplish much, therefore, in the recent war between the Japanese and the Russians in Manchuria can not be explained by the lack of training or the presumption that it had no opportunities in general. Combine a chief, who does not care to use his cavalry to the limits of its capacities, with subordinate cavalry commanders who lack zeal and resourcefulness, and cavalry fails. Such a combination has existed in many wars and instances, where the inaction of the cavalry has been a matter of surprise and has temporarily given grounds for the belief that the value of cavalry has diminsihed.

In the Boer War of 1900–1903 the extraordinary resistance offered by the Boers to the superior forces of the English was due largely to the fact that the Boer forces were mounted infantry. They occupied an immense country, which they were enabled to traverse freely and quickly by means of their horses —appearing here, there, and everywhere, with extraordinary rapidity; striking the flanks, the rear, the lines of communication, the isolated detachments of their antagonists. They seldom fought mounted, but they used their horses to reach dis-

tant points, dismounting to fight, mounting to march. As a result of these tactics they were able to keep up the war for a long period and to force the English to bring into the field armies that outnumbered them ten to one. As a deduction from this war it was announced by Field Marshal Lord Roberts, that the "principal" weapon of cavalry in modern war is not the lance or saber, but the rifle. As a result of this war the English, like ourselves, believe in the employment in war of great masses of cavalry, mounted riflemen, ready to fight cavalry on horse back, but also available for all the duties of infantry—a "Cavalry-Infantry" who can march sixty miles in ten hours, reaching the flanks, rear or weak points of the enemy's line, dismount, attack and carry positions held by infantry by assault.

When battle lines, as in Manchuria have a front of from twenty to eighty miles, the use of great cavalry reserves for such purposes will be indispensable to victory. Modern lines, owing to the tremendous range and power of cannon and small arms, can rarely be pierced, as in the old days, even though thinly manned. But their flanks and rear are very vulnerable. Hence the importance of the great "cavalry reserve" of the modern battlefield.

The proportion of cavalry to infantry has always been decided by the resources of a country more than by any other factor. Generally speaking, the more cavalry in an army, up to a certain limit, the better. The last census shows in the United States over 20,000,000 horses, and while most of these can not be used for cavalry service, we can undoubtedly mount a larger number of cavalrymen than any other nation except perhaps Russia. In case of war we can count as foot troops of the first line our regular infantry, our Phillippine Scouts, our marines, and when not threatened by sea, most of our coast artillery troops, a toal of over 60,000 regulars, in comparison with which force our fifteen regiments of cavalry are a small contingent. If the militia are called into service, the disproportion becomes even greater, since there are but few militia cavalry troops. While this continent is not so well fitted for cavalry of the old type, fighting solely on horse back, the trees, woods, hills, which cover all of our more thickly settled states, favor the use of modern cavalry, which, if in attacking mounted

must attack by surprise and in attacking dismounted must place their horses out of sight.

We in this country are not altogether free from the fear of civil disturbances, and while it is assumed the States are in a position to cope with these, history shows many instances when they have been obliged to call upon the general Government for assistance. The use of cavalry for putting down riots is attended with special advantages, because horsemen are able to disperse mobs without bloodshed, while infantry, set upon by crowds, are often obliged to use their firearms, killing the innocent as well as the guilty.

Much is said about the extra cost of cavalry as compared with infantry. This may be the case in some foreign countries, where men cost little and horses and forage cost much. But in this country, in comparison with the cost of the liberal pay, rations, clothing, barracks, etc., of officers and enlisted men, the cost of horses and forage is little. As a matter of fact it has been demonstrated that our cavalry regiments cost about one-third more than our infantry regiments.

The fifteen regiments, of which our cavalry is composed, are among the best trained, best disciplined, proudest regiments of the army. Traditions, usages, appreciations, bind men together and make them formidable. The soldier, in battle, fights for the honor and glory of his regiment, and the prouder the regiment the more splendid the heroism. Destroy the traditions of regiments and years will not suffice to replace them. Our army should not be experimented with lightly. Its organization should not be changed except as a result of the mature study and reflection of the best minds in the Republic.

THE LEGAL STATUS OF A CONQUEST MADE BY THE UNITED STATES.

CONSIDERED WITH SPECIAL REFERENCE TO THE CONSTITUTION, THE LAWS, AND THE TERRITORIAL BOUNDARIES OF THE UNITED STATES.

BY MAJOR CHARLES D. RHODES, FIFTEENTH CAVALRY.

FOREWORD.

THE following paper, submitted as the writer's graduation thesis from the Army Staff College (1908), is published at this time in the belief that the problems of military government discussed therein, have now a peculiar interest for officers of the Army and Navy; and in the hope that what represents many months of painstaking research by the essayist, will have some present value to those who may be confronted with the complex legal problems of governing acquired territory.

I. THE MILITARY STATUS.

The right to institute military government over conquered territory, as a belligerent right of the dominant nation, is unquestioned. [Ex Parte Milligan, 4 Wall, p. 142.] As the history of our own as well as foreign countries has shown, it is not alone a right but oftentimes an act of humanity, exercised in behalf of non-combatants, for whom otherwise anarchy would result. However, its main consideration is founded on the broad ground of military necessity, and the highest court of our country so decided, as long ago as the acquisition of California [Cross vs. Harrison, 16 Howard, pp. 164, 193.] and New Mexico, [20 Howard, pp. 176, 177.] resulting from the war with Mexico.

Its territorial extent is to be tested by the standard of exclusive possession, of the territory over which military authority can be asserted; and it becomes operative only when the hostile forces having been expelled, the army of occupation is able to make its authority respected. [Birkhimer p. 72.]

During the war with Mexico, military government began at Tampico and extended over the State of Tamaulipas, when the Mexican authorities had surrendered or been driven out. [Fleming vs. Page 9, Howard p. 614.] In our more recent occupation of the Philippine Islands, military government was exercised from the date when the city of Manila was captured (August 13, 1898). [Birkhimer, p. 59.] But it would appear that almost immediately the United States assumed sovereignty over the entire Philippine Islands, although it could not strictly be held that exclusive possession was exercised; that the hostile forces were expelled, or that the army of occupation was able to make its authority felt in all parts of the Islands.

But the position taken by the American Commissioners at the Treaty of Paris, was that United States sovereignty attached when Manila, the capital city, was occupied by the military forces of the United States. [Magoon, p. 247.] And in fact, the proclamation of the Military Governor of January 4, 1899, was addressed to *the people of the Philippine Islands*, and gave detailed instruction for military government throughout the Islands, and for the opening of ports to foreign trade. [Report W. D. 1899, Vol. 1, Part 4, p. 68.] But it is interesting to note that previous to the precipitation of hostilities by the insurgent government at Iloilo (February 11, 1899,) it was regarded as somewhat uncertain whether the United States had the legal right of occupying that port (except by Spain's consent), until the treaty of peace was ratified. [Ibid, p. 86.] While Spain had virtually abandoned Iloilo, a strict interpretation of international law would still give her right to enter that port and collect duties.

In Porto Rico, the military government was administered as though it were a permanent possession of the United States, even before the treaty of peace had been ratified, or even signed. The natural inference would be that the sovereignty of the

United States was considered as attaching with the occupation of the city of San Juan (October 18, 1898), or possibly with the signing of the peace protocol (August 12, 1898). [History of Military Government (Thomas), p. 308.]

In ancient conquests, military government was administered according to the will of the conqueror, and even now, this doctrine is recognized by the law of nations. But by the usage of war, this rule is now so far modified as to continue the municipal law of the conquered territory, so far as is consistent with effective military control. But all political functions exercised by the deposed government, cease, [Magoon, pp. 13-14. Lieber's Instructions, sec. 1, par. 6.] and during military occupation the inhabitants become subject to such laws as the conqueror may choose to impose.

As to duration, military government may continue, not only during the prosecution of a war, but until the dominant power sees fit to institute civil government. This question was given early consideration in our country's history, in the continuance of military government in California, long after peace with Mexico. [Cross vs. Harrison, 16 Howard p. 164. Also, Magoon, p. 17.]

This course was followed in the military government of the reconstructed Confederate States, succeeding the War of the Rebellion, and in the State of Texas continued until April 16, 1870. It has been followed in the administration of the Philippine Archipelago, for two years after the signing of the treaty with Spain; and in South Africa, British military government over the Boer republics continued until local conditions were deemed satisfactory for civil government. "The experience of the United States Government," says Birkhimer, "but adds to the evidence derivable almost universally from the history of other nations, that military government ceases at the pleasure of him who instituted it, upon such conditions as he elects to impose; and that its termination is not, in point of time, either necessarily or generally conincident with the cessation of hostilities." [Birkhimer, p. 368.]

But in the continuation of military government after the cessation of hostilities, the laws of war should be modified to meet the conditions of peace. Here the great over-ruling

law of necessity still obtains, and should local conditions following a treaty of peace, require a resumption of the severe measures of war, the urgency of the necessity will alone be the criterion of such action. [Ibid, p. 361-362. Magoon, p. 15, citing, Ex Parte Milligan, 4 Wall 2, p. 127; Lieber's Justification of Martial Law; Raymond vs. Thomas, 91 U. S. pp. 712-716. Civil government cannot take place at once, Downes vs. Bidwell, 182 U. S. p. 246. (Syllabus.)]

The military administration of occupied territory whose municipal laws are more or less at variance with the free institutions of our government will always present peculiarly vexatious problems to a military commander. The history of military government in the Phillippines is, therefore, of particular interest to the student, evidencing the many complex problems which confront the governor of occupied territory especially where there is considerable doubt as to whether the occupation is to be permanent or temporary. [See Appendix for compilation of Philippine problems.]

The effect of a treaty of peace has the effect of making known the policy of the dominant nation with respect to occupied territory, and if the conditions imposed by the treaty provide for permanent transfer of territory, the sovereignty of the victors immediately attaches upon ratification of the treaty. [Magoon p. 19.] And although, as has been said, military government may still continue upon such conditions as the sovereign power elects to impose, it would seem that under our liberal institutions, the main purpose of such government would be to create conditions as soon as practicable after war has ceased, looking towards the institution of civil government. [Magoon p. 21, citing authorities.] And this has ever been our policy, in military government in Mexico, in the acquisition of New Mexico and California, in the reconstruction of the Confederate States, and in territory ceded by the Treaty of Paris.

II. ACQUISITION OF TERRITORY BY THE UNITED STATES.

That the authority to extend the boundaries of the United States is purely a political question, and that in its discussion the courts must respect the pronounced will of the legislative

power, has been determined upon numerous occasions. [Magoon p. 47, citing Foster vs. Neilson, 2 Peters pp. 253, 309.]

"A declaration of war by Congress does not imply an authority to the President to extend the limits of the United States by conquering the enemy's country. That is, he may take possession of the enemy's country, and hold it as a means of prosecuting the war, but that does not make the conquered territory a part of the United States. It could be annexed to the United States only by the act of the legislative department." [Fleming vs. Page, 9 Howard, p. 603.]

The power to acquire territory cannot be derived from any narrow or technical interpretation of the Constitution. It is a power incidental to sovereignty, growing out of the fact that the United States is a nation, endowed with the aggregate of powers delegated to the national government by the Constitution. [Black's Constitutional Law (2d Ed.) p. 228. Magoon, p. 37, citing Amer. Ins. Co. vs. Canter, Peters, p. 542; Mormon Church vs. U. S., p. 136, U. S. 1, p. 42.]

As early as the year 1828, Chief Justice Marshall said:

"The Constitution confers on the government of the Union the powers of making war and of making treaties; consequently, that government possesses the power of acquiring territory, either by conquest or by treaty."

And again, in Fleming vs. Page (9 Howard 614), the Court said: [See also same citation, p. 616. Amer. Ins. Co. vs. Canter, 1 Peters, pp. 517, 541, 542. Downes vs. Bidwell, 182 U. S., p. 246 (Syllabus.)]

"The United States * * * may extend its boundaries by conquest or treaty, and may demand the cession of territory as the condition of peace, in order to indemnify its citizens for the injuries they have suffered, or to reimburse the Government for the expenses of the war, but this can only be done by the treaty-making power or the legislative authority."

Territory acquired by conquest, is in its incipiency to be regarded merely as *property* or spoil of war; [Magoon, pp. 37, 48.] and, although, during the duration of war, and until confirmed by treaty, such acquisitions are not to be considered permanent, yet for every commercial and belligerent purpose, they are treated as part of the domain of the conqueror, so

long as he retains possession and government. [Birkhimer, par. 39, p. 74.] By the laws and usages of nations, conquest is a valid title. [Fleming vs. Page, 9 Howard, pp. 603, 615.]

Wars are usually ended through treaties of peace, which, in case of the United States, must receive the confirmation of the Senate and the approval of the Executive. But the ratification of a treaty by the Senate, *creates* a contract without *executing* it; and when it requires legislation before it becomes operative, it will take effect merely as a national compact upon being proclaimed, but does not become operative as to the particular engagements, until the requisite legislation has been enacted. [Magoon, 36, citing Foster vs. Neilson, 2 Pet., pp. 253, 314, 315. U. S. vs. Arredondo, 6 Pet., pp. 691, 734, 735. Opinion Atty. Gen. Vol. 6, pp. 750, 296.] In fact, an examination of all treaties of the United States which acquired territory, will show that to extend the boundaries, legislation was considered necessary; and this, in spite of the manifest purpose of the treaty to extend the boundaries. [Magoon, 43, 40. See also, Jones vs. U. S., 137 U. S., pp. 202, 212.]

In the case of Downes vs. Bidwell (182 U. S. 319), Mr. Justice White, in a concurring opinion of the majority says:

"When the various treaties by which foreign territory has been acquired, are considered in the light of the circumstances which surround them, it becomes to my mind clearly established, that the treaty-making power was always deemed to be devoid of authority to incorporate territory into the United States without the assent, express or implied, of Congress, and that no question to the contrary has ever been mooted."

Following this doctrine, the United States Peace Commissioners at Paris, in 1898, stipulating that Spain should assume towards our conquests, the position occupied by the other nations of the earth, affirmed that this territory, "was not part of this Union," or "included in our established boundaries," since these were matters depending upon "our Constitution and the acts of Congress." [Magoon, 45. Hawaii vs. Mankichi, 190, U. S., p. 199.]

That the United States may acquire territory, which without being incorporated into the United States, may still *appertain to* to the Union, was exemplified as early as the year 1856,

when Congress passed the Guano Islands Act, which by Section 1, provided:

"That whenever any citizen of the United States discovers a deposit of guano on any island, rock, or key, not within the lawful jurisdiction of any other government, * * * such island, rock, or key, may at the discretion of the President, be considered as appertaining to the United States."

Here, it may be pointed out, the authority to acquire has been delegated by Congress to the Executive. On the other hand, Texas and Hawaii were annexed to the United States by joint resolution of Congress, which was quite as effective as though negotiated by treaty. The case is quite conceivable where an act or resolution of Congress might be the only formal method of annexation, as, for example, if the United States should decide to annex Cuba. [See also, Jones vs. U. S., 137 U. S., p. 202, (Syllabus); 212, Key vs. U. S., do.]

It is pertinently pointed out in the majority opinion of Downes vs. Bidwell, [Downes vs. Bidwell, 182 U. S., p. 311.] that should the doctrine prevail that territory could not be acquired without incorporation into the United States, the nation might find itself totally unable to acquire a naval station, a coaling station, or a military base, upon an island inhabitated by a people utterly unfitted for American citizenship.

This view of the Supreme Court, that territory may be acquired without incorporation, has been consistent with various acts of the Government in the past, which cannot be logically explained except upon the theory that the United States possesses this power:

1. "The simultaneous acquisition and admission of Texas as a State by joint resolution. This action can be referred to no grant of power under the Constitution, unless it be admitted that Congress is vested with the right to determine when incorporation arises.

2. "The 13th Amendment to the Constitution, Section 1, which provides that, 'Neither slavery nor involuntary servitude except as a punishment for crime * * * shall exist within the United States, *or any place subject to its jurisdiction.*' "

"The inference is obvious, that there may be places subject to the jurisdiction of the Union, which are not incorporated in it."

3. "The decisions of the Supreme Court have, from time to time affirmed this doctrine. [Mr. Justice White, in Downes vs. Bidwell, 182 U. S., p. 338, citing Amer. Ins. Co. vs. Canter, 1 Pet., p. 542; Fleming vs. Page, 9 How. pp. 603, 614; Cross vs. Harrison, 16 How., pp. 164, 197.]

The most recent opinion of the Supreme Court so clearly sums up this doctrine, that it is worthy of being quoted in full. [Ibid, 182 U. S., p. 336.]

"It is then, as I think, indubitably settled, by the principles of the law of nations, by the nature of the government created under the Constitution, by the express and implied powers conferred upon that government by the Constitution, by the mode in which these powers have been executed from the beginning, and by an unbroken line of decisions of this court, first announced by Marshall, and followed and lucidly expounded by Taney, that the treaty-making power cannot incorporate territory into the United States without the express or implied assent of Congress; that it may insert in a treaty, conditions against immediate incorporation; and that on the other hand, when it has expressed in the treaty the conditions favorable to incorporation, they will, if the treaty be not repudiated by Congress, have the force of the law of the land, and, therefore, by the fulfillment of such conditions, cause incorporation to result.

"It must follow, therefore, that where a treaty contains no conditions for incorporation, and above all, where it not only has no such conditions, but expressly provides to the contrary, incorporation does not arise until, in the wisdom of Congress, it is deemed that the acquired territory has reached that state where it is proper that it should enter into and form a part of the American family."

The latter part of the above opinion, referred to the treaty of peace with Spain, in which there was not only no stipulation for incorporation, but on the contrary it was expressly provided that, "the civil rights and political status of the native inhabitants of the territories ceded," shall be determined by Congress.

Accordingly, while the island of Porto Rico was not, in an international sense to be considered as foreign territory, —since it was subject to the sovereignty and was owned by the United States, it was foreign to the United States in a domestic sense, because it had not been incorporated into the United States, but was merely appurtenant thereto. [Downes vs. Bidwell, 182 U. S., p. 342 (Mr. Justice White.) Fourteen Diamond Rings; 183 U. S., p. 176.]

This decision but reaffirmed the opinion expressed in the case of De Lima vs. Bidwell, [182 U. S. 1.] which held that Porto Rico was not foreign territory after the cession, but yet that it was "appurtenant territory," only, within the revenue clauses of the Constitution.

A more recent decision of the Supreme Court extends this doctrine to the Philippine Islands—the Court holding that no distinction could be made between Porto Rico and the Philippines, after the ratification of the treaty of peace with Spain, April 11, 1898.

At the present time, Congress has not by legislation, extended the boundaries of the United States, to include Porto Rico, the Philippine Islands, Guam, Tutuila, or the Panama Canal Strip.

III. THE GOVERNMENT OF ACQUIRED TERRITORY.

Under our peculiar form of government, assumption of sovereignty over acquired territory, has presented many complex problems for adjudication, which would be more or less lacking under a despotism or even a limited monarchy. This has been particularly brought home to the American people, since our acquisition of Porto Rico and the Philippines, where the question of how to govern, and to what extent the Constitution and laws of the United States were applicable, have received the earnest consideration of the legislative, executive, and judicial branches of our government.

As has already been dwelt upon, so long as military government is a necessity, the Executive may govern the dependency under the war powers of the Constitution; but when military government is no longer a belligerent right and a permanent government is about to be instituted, the latter is undoubtedly

a legislative function, conferred by the Constitution upon Congress. ["All legislative powers herein granted, shall be vested in Congress." (Art. I, Sec. 1, United States Constitution.)] But as to just when and where the line of demarcation shall be drawn between the executive and the legislative functions of the government, has been a subject of contention, between the President and Congress on several occasions.

This was notably the case in the acquisition of New Mexico and California. By a resolution of Congress of March 2, 1867, the attempts of the President to install permanent governments in the Southern States, was denounced as illegal and temporary, [Referred to in Magoon, pp. 25 and 364.] and led to the enactment of the Reconstruction Acts. After the recent war with Spain, Congress provided for civil government in Porto Rico by the "Foraker Act," passed March 3, 1899, between the protocol of August, 1898, and the exchange of ratifications in April, 1899. In the Philippines, where a state of insurrection still existed after peace with Spain, President McKinley as a war measure, attempted to arrange for partial civil administration in the Islands, by the appointment of the first Philippine Commission. The lattter was directed to exercise legislative functions within certain limitations, co-existant with military government. [These powers included rules and regulations for raising revenue, the expenditure of public funds, the civil service, the courts, and other civil matters.] On July 4, 1901, civil government was formally instituted, except as to certain districts, in which insurrection still continued to exist.

During this period, the Executive governed the Philippines provisionally through his military agents, in a lawful exercise of his exectuive power. As has already been shown, this government originated through belligerent occupation, and as was determined in the case of Cross vs. Harrison, was not dissolved by the cession of the islands at the end of the war with Spain. [16 Howard, pp.164, 191.]

From time to time, the Executive had informed Congress as to the course pursued in the Philippines, and finally, by the Congressional legislation known as the "Spooner Amendment" to the Army Appropriation Bill, approved March 2, 1901, Congress ratified the temporary government created by the

President, provided for the regular reports to Congress on the first day of every session as to the acts and doings of said government, and for other matters, until a permanent government was established. [For the Spooner Ammendment, see Magoon, p. 233.]

In thus taking action relative to executive procedure exercised by the President under his war powers, Congress plainly exercised its own war powers, for which many precedents existed during the Civil War. Thereafter, the President still administered affairs in the Philippines, but it was by and with the assent of Congress.

Finally, by the organic act of July 1, 1902, Congress provided a permanent civil government for the Philippines.

In Cuba, the United States never assumed sovereignty. In fact, by an Act of Congress, passed April 20, 1898, the government publicly disclaimed any intention of securing or exercising sovereignty. The military government exercised in the island of Cuba, was derived, as in Porto Rico and the Philippines, under war powers originating through the expulsion of Spanish sovereignty. In continuing to administer such government, the Executive purported to be exercising the right of a belligerent, founded upon necessity; the sovereignty of the Cuban people remained dormant. [Magoon, pp. 31, 34.]

Moreover, these war powers of the Executive, were not alone those granted him by the Constitution, but those flowing from the resolution of Congress, approved April 20, 1898, directing the President to use land and naval forces to expel Spanish sovereignty, pacify the island, and establish a stable government for the Cubans.

But as to the legislative powers excerised by the President in the Philippine Islands, subsequent to the ratification of the treaty and preceding Congressional assent to the provisional government, there have been those who who have maintained that the Executive usurped the functions of the Congress.

It has been claimed that the Philippine Insurrection was an insurrection pure and simple, and not a formal war in which the combatants are accorded belligerent rights; that the President enjoyed under his military powers, only the authority he would have had in the United States, when insurrection existed

and that in exercising legislative powers for the Philippines—especially in his delegation of unusual powers to the Philippine Commission, [See President's Message of December 3, 1900. Also, Law and Policy of Annexation (Randolph) p. 106.] he was arrogating to himself the Constitutional powers of Congress.

But the contention of the executive department of the governement, has been that "all departments of the government of the Philippines, are to be considered as instruments with which a belligerent is waging war; and that its courts as well as its cannon may be used to weaken its enemy and strenthen itself." [Magoon, p. 279.] And Chief Justice Chase, in the minority opinion of Ex-Parte Milligan, has declared that the war powers of Congress "necessarily extend to all legislation essential to the prosecution of war with vigor and success, except such as interfere with the command of armies and the conduct of campaigns." [Ex-Parte Milligan, 4 Wall, p. 139.]

There seems to be little doubt that the military goverment in the Philippines, originally established for prosecuting the war with Spain was of necessity merged into that exercised during the Insurrection. The sovereignty acquired by conquest and treaty, gave the United States the legal right to enter into peaceable and undisputed possession—which right was opposed by an armed insurrection which required that military government be continuous. It, therefore, had every legal right accorded a belligerent.

Viewed as a matter of history as well as of public policy, it would seem that Congress also held this view. Before its adjournment in March, 1899, it had provided for the acquisition of the Philippines; the session which began in December, of the same year, saw no legislation for the Philippines; and during this period and that which followed, executive regulation of affairs in the Archipelago was a necessity. Tacitly, the Congress approved of a theory that the military and civil agents of the Executive *on the ground*, with an intimate knowledge of local conditions, were better able to legislate, than Congress, sitting thousands of miles away.

In connection with this discussion of the government of unorganized territory, it is interesting and instructive to consider the legal status of the island of Tutuila.

This island was acquired for a United States naval station, by a convention entered into December 2, 1899, between Great Britian, Germany, and the United States. On April 17, 1900, the national colors were hoisted at Pago-Pago, and a naval captain published to the islanders, a proclamation of the President, announcing United States sovereignty and protection over the islands.

The first naval governor received no instrction as to government, other than that "a simple, straightforward method of administration, such as to win and hold the confidence of the people," [History of Military Government (Thomas), p. 312.] was expected of him. Since that time, the island has been governed by the Executive through the Navy Department, as territory appertaining to the United States. A consular court is maintained there. The Secretary of the Navy administers the customs without regard to the revenue laws of the Unted States, and collects duties on goods imported from the United States. On the other hand, the Secretary of the Treasury admits products of and importations from the Islands, into the United States, free of duty. [History of Military Government (David Yancey Thomas, Ph. D.) citing letter from Treasury Department (p. 325), dated March 3, 1904.]

The relative governing powers of the President and of Congress are well stated in Halleck's International Law: [Halleck's International Law (3d, 158) Vol. 2, Chap. 34, p. 483.]

"It, however, is well settled by the Supreme Court, that as constitutional Commander-in-Chief he (the President) is authorized to form a civil or military government for the conquered territory during the war; and that when such territory is ceded to the United States, as a conquest, the existing government so established does not cease as a matter of course, or as a consequence of the restoration of peace; that on the contrary such government is rightfully continued after the peace and until Congress legislates otherwise. * * * So long as that government continues * * * it represents the sovereignty of the United States, and has the legal authority

to enforce and execute the laws which extend over such territory. Congress may at any time put an end to this government of the conquered territory, and organize a new one. * * * The power of Congress over such territory is clearly exclusive and universal."

So much for the governing power of appurtenant territory. The more important question of the extent to which the Constitution and Laws of the United States shall apply to such territory, will now be taken up and discussed. [To justify continuance of executive government *in bello cessante*, Magoon cites (p. 17), Lamar vs. Brown, 92 U. S., p. 157, 193; Leitensdorfer vs. Webb, 20, How. p. 176; Texas vs. White, 7 Wall p. 700; *et alia*.]

IV. THE APPLICATION OF THE CONSTITUTION AND LAWS OF THE UNITED STATES.

To acquired territory, *Ex proprio Vigore*.

It is a cardinal rule in the interpretation of constitutions, that the instrument must be so construed as to give effect to the intention of the people who adpoted it. [Black's Constitutional Law, p. 68.]

It is, therefore, most fitting that in discussing a question which has been more or less a subject of contention since the organization of our government, some study should be given to the original intent of the framers of the Constitution of the United States, as well as to trace the successive application of its principles to territory acquired by purchase or conquest.

While it is a matter of common remark by people who have made but cursory investigation of the subject, that territorial expansion or the so-called Imperialsim of the present day, could not have been anticipated or forseen by the framers of the Constitution, there are many facts in the early history of our government which seems to indicate that the possibility of a future American Empire was not unthought of by our forefathers. [Much of the following information is derived from The Administration of Dependencies (Alpheus Snow) G. P. Putnam Sons, 1902.]

Franklin, who made the first draft of the Articles of Confederation, published in 1757, a "Plan For Settling Two Colonies West of the Alleghany Mountains," and in his first draft

of the Articles of Confederation, he provided for receiving into the Confederation, not only all other British Colonies on the American continent, but also the West Indies, the Bermudas, and even Ireland. Moreover, Mr. John Dickinson, one of the leading lawyers of Pennsylvania and perhaps the originator of the idea of a Federal Empire, was the statesman who wrote the original so-called "territorial clause" in the Articles of Confederation, which clause—later embodied into the Constitution of the United States, and defining the power of the government "to dispose of the lands," has more important bearing on territorial expansion, than any other in the Constitution.

In the Articles of Confederation, a sharp distinction seems to have been drawn between admission to the Union, which carried with it representation in Congress; and the "disposing of territory" occupied by colonizing companies, managing affairs with the Indian tribes, and other matters outside of the Confederation proper, but within its lawful purview.

In the year following the adoption of the Articles of Confederation, the United States signed a treaty of alliance and commerce with France, which among other things provided:

"*Article V.*—If the United States should think fit to attempt the reduction of the British power remaining in the northern parts of America, or the islands of Bermuda, those countries or islands, in case of success, shall be confederated with or *dependent upon* [The italics are ours.] the said United States."

In addition to the significant reference in this Article to future *dependencies* in contra-distinction to acquisitions which should be confederated with the United States, the Treaty makes use of the word "*subjects*" as distinguished from the words "*citizens and inhabitants.*" Also, in the Supplementary Instructions of Congress, the phrase appears—"*subjects, people, and inhabitants.*" In fact, there is much in the early discussion of Congress and in the contemporaneous writings of statesmen, to show that Congress was looked upon as the successor of the King, with authority to legislate both for the States of the Union, and for those terrotirial regions external to the Union, but subject to its control. [The Administration of Dependencies (Snow) Chap. XXI. Also referred to in Bancroff's History of the U. S.]

When in the year 1787, the Constitution of the United States was drafted, Gouverneur Morris introduced the present Article IV, Section 3, which was unanimously adopted:

"The Congress shall have power to dispose of and make all needful rules and regulations, respecting the territory and other property, belonging to the United States."

Subsequently, at the time of the Louisiana Purchase, when the government of acquired territory was under discussion, Morris was asked to give his views regarding the scope and meaning of this clause. He replied:

"I always thought that when we should acquire Canada and Louisiana, it would be proper to govern them as provinces and allow them no voices in our councils. In wording the third section of the fourth article, I went as far as circumstances would permit, to establish the exclusion. Candor obliges me to add my belief that, had it been more pointedly expressed, a strong opposition would have been made."

We thus see that very early in the history of our government, there were those who had in mind, the probability of territorial expansion, by the addition of dependencies which should not necessarily form part of the family of States. We had previously shown that unorganized territory is not legally incorporated in the United States, until Congress in its wisdom saw fit to decide.

We may next inquire more particularly, whether, Congress having acquired territory, the Constitution extends thereto *ex proprio vigore.*

History shows that when the time came to adopt a Constitution which should replace the defective Articles of Confederation, the troubles and perplexities which surrounded the new States were so many and so great, that it was with some little difficulty that a union of independent States was effected.

It is perhaps due in part to this reason, that the United States Constitution contains but one clause providing for the government of new territory, which, among the enumerated powers of Congress, authorizes it "to dispose of and make

all needful rules and regulations respecting the territory or other property belonging to the United States." [Art. IV, Sec. 3, of the Constitution.]

Other portions of the Constitution are addressed to the States, which, having no power to acquire new territory, had none to delegate to the United States. If, therefore, Congress has power to acquire territory, as we have tried to demonstrate, there appears to be absolutely no provision in the Constitution, to limit or hamper legislation by Congress for acquired territory.

At the time of the famous Dred Scott decision, [Chief Justice Waite, in Nat. Bank vs. Yankton, 101 U. S. p. 129] it was held by Chief Justice Taney, that the "disposing clause" of the Constitution, applied only to property held by the States at the time of the adoption of the Constitution, and was never intended to authorize the establishment of territorial governments. This theory rests upon the assumption that the power of the United States to acquire and govern new territory, rests, *not* upon the "disposing clause" but upon the power given, to create and admit new States, conferred upon Congress by the first paragraph of Article IV, section 3.

But for over a century, Congress has uninterruptedly exercised this power, and the Supreme Court has repeatedly held that Congress "has full and complete legislative authority over the people of the Territories, and all the departments of the Territorial government." [Scott vs. Sandford, 19 How. 393.] Even in the Dred Scott decision, it was acknowledged by the Court, that the right to acquire territory involved the right to govern it.

And if Constitutional history governing the acquisition of new territory, be reviewed, it will be seen that Congress has been quite consistent in recognizing the difference between States and Territories, under the Constitution. [Downes vs. Bidwell, 182 U. S. p. 258; Dorr vs. U. S., 195 U. S. pp. 140, 143.

To illustrate: Congress has from time to time advanced the doctrine that the privileges and rights created by the Constitution, are not inherent, but are bestowed only as acts of grace, upon aliens, fitted to receive such benefits. Hence, the naturalization and exclusional laws. [Magoon, 90.]

Furthermore, Congress has repeatedly by enactment, extended the application of the Constitution and laws of the United States to organized territory. [See Section 1891, R. S. 1878, for law.] The undoubted inference is that Congress has not regarded the Constitution and Laws as extending thereto, *ex proprio vigore*.

After the cession of Louisiana in 1803, the Territory of Orleans had for eight years an entirely different system of customs from that of the United States, which justified the conclusion that the ports of Territories are not the same as the ports of States, within the meaning of the Constitution.

Again, in the cession of Florida, in 1819, goods imported into the United States from Florida, were subject to the laws regulating entrance of foreign goods, until Congress saw fit to change the law.

And in annexing Hawaii, a discrimination was made against Hawaiian ports, wholly inconsistent with the revenue clauses of the Constitution, if the latter were operative. [Downes vs. Bidwell, 182 U. S. p. 256.] The islands were merely annexed, and not incorporated. [Hawaii vs. Mankichi, 190 U. S. p. 199.]

More recently, in acquiring territory through the Spanish War, Congress—as if to make doubly certain the non-extension of the Constitution to such possesions, specifically excepted the application of Section 1891, R. S. 1878, which extended the Constitution and laws of the United States to newly acquired terriroties.

But however harmonious has been the attitude of Congress, in regard to this question, the opinions of the Supreme Court of the United States have not been so consistent.

Some of them have been based upon the theory that the Constitution does not apply without express legislation; others, arising from territorial cases where such legislation has been enacted, contain language which would justify the inference that such legislation was unnecessary, [Downes vs. Bidwell, 182 U. S. p. 259.] and that the Constitution took effect immediately upon cession.

The case of Loughborough vs. Blake, which was decided in 1820, and which involved the right of Congress to impose a

direct tax upon the District of Columbia, has been frequently used to sustain the theory that the Constitution is in force in the Territories, *ex proprio vigore*. In the opinion of the Supreme Court, it was contended that the power of taxation must be exercised uniformly throughout the United States, and that the latter terms referred to the whole "American Empire"—the "Great Republic which is composed of States and Territories." [C. J. Marshall, in Lough. vs. Blake, 5 Wheaton, pp. 317, 319.]

An attempt has been made to reconcile this opinion with a subsequent decision of the same distinguished jurist in a similar case, by the interpretation that the Court did not intend to extend the Constitution to the District of Columbia, *ex proprio vigore*; but that since the power to tax is an inherent and sovereign right of government, it was applicable to all territory, whether organized or unorganized. [Magoon, pp. 91-92.]

In this subsequent case of the American Insurance Company vs. Canter (1 Peters 511,) the contention was that since the judicial power of the United States extends to all cases of admiralty and maratime jurisdiction, and is vested in "one Supreme Court and in such inferior courts as Congress shall from time to time, ordain and establish," Congress could therefore not vest admiralty jurisdiction in courts created by a Territorial Legislature. [See also, Thompson vs. Utah, 170 U. S. p. 349. McAllister vs. U. S., 136, U. S. 1, p. 44.]

Here, Chief Justice Marshall affirmed the judgment of the Circuit Court, which was against the contention. In other words, the judicial clause of the Constitution (Art. III Sections 1 and 2,) has no application to Territorial Courts, and, with respect to the latter, Congress has unrestricted power. It must be assumed from this, that the other powers vested in Congress by the Constitution, have no application to the Territories, or that the judicial clause is exceptional in that particular. [Downes vs. Bidwell, 182 U. S. p. 267.] As a matter of fact, these courts are not Constitutional but legislative courts, and in legislating for the territories, Congress exercises the combined powers of the general and of a state government. [Loughborough vs. Blake, 5 Wheaton, p. 317.]

The theory sustained by the opinion in the previous case of Loughborough vs. Blake, having been thus in a sense repudiated by the case of American Insurance Company vs. Canter, the latter decision prevailed until 1849, viz.: that the American Union and its dependencies constituted an American Empire, under a flexible unwritten constitution, of which such portions of the United States Constitution and Laws of the Union as were applicable to dependencies, formed a part. [The Administration of Dependencies (Alpheus Snow) p. 553.]

In the year 1849, Mr. Calhoun revived the old theory that the Territories formed an imperfect but tangible part of the American Union, and that the Constitution was applicable there, with the same force as in the States.

The difference in the point of view at this period, may be traced in the organic acts of the Territories of New Mexico and Utah. That of the former provided that the Constitution and all laws of the United States which are not locally inapplicable, should have the same force and effect in the said Territory of New Mexico, as elsewhere within the United States. The organic act of Utah on the other hand, provided that the Constitution and Laws of the United States should be in force in that Territory, "so far as the same, or any provision thereof, may be applicable." The former made the Constitution effective in the Territory of New Mexico, and was intended to strengthen the claim that Congress had power to make this *slave* territory; the latter act of Utah, may be interpreted as meaning that the Constitution was applicable, only as the basis of a greater unwritten constitution of the American Empire. [The Administration of Dependencies (Snow) pp. 554, 555.]

Since the above period, with the exception of the Dred Scott case (decided in 1857), the interpretation put upon the application of the Constitution to territorial dependencies, has been more or less uniform. [Downes vs. Bidwell, 182 U. S. p. 279.]

In this famous case, [Scott vs. Sandford, 19 Howard p. 393.] already referred to, it would seem that Chief Justice Taney attempted to confine the application of the "disposing clause" of the Constitution to the Northwest Territory; while other

justices interpreted it as referring only to disposition of the *primary* title to the soil in dependencies. The majority of the Court did not hold to either of these constructions. [The Administration of Dependencies (Snow) p. 557.] The doctrine announced by the Chief Justice, that the United States could acquire territory, only for the purpose of creating States, was accepted by the Court, but it has often been asserted that the language quoted is non-essential *dicta* because the whole doctrine rests upon the premise that the sole authority for acquiring territory, depends upon the power of Congress to create and admit new States—a proposition which has been held in no other case. Such a doctrine is in direct contravention of prior decisions, and of subsequent decisions of the Supreme Court, and contrary to the interpretation put upon the Constitution by Congress. [Magoon, 82, citing many cases.]

Of this doctrine, Senator Thomas H. Benton has said: [Thirty Years in the U. S. Senate. Vol. II, pp. 713, 714.]

"The Constitution does nothing of itself—not even in the States for which it was made. Every part of it requires a law to put it into operation. No part of it can reach a Territory unless imparted to it by Act of Congress."

A long line of Supreme Court decisions support this opinion.

In the case of National Bank vs. County of Yankton, (101 U. S. p. 129), decided in 1897, Chief Justice Waite said:

"The organic law of a Territory takes the place of a Constitution, as a fundamental law of the local government."

In the case of the Mormon Church vs. United States, (136 U. S. p. 3), the Supreme Court said:

"Doubtless Congress, in legislating for the Territories, would be subject to those fundamental limitations in favor of personal rights, which are formulated in the Constitution and its amendments; but, these limitations would exist, rather by inference and the general spirit of the Constitution from which Congress derives all its powers, than by any express and direct application of its provisions."

The most serious discussion of this constitutional question has taken place in connection with the so-called Insular cases, following the acquisition of territory through war with Spain, and the annexation of Hawaii.

The anomalous condition of military government in the island of Cuba, where, as has already been stated, the United States assumed no sovereignty, has been declared by the Supreme Court to be a *trust* held by the United States for the Cuban people. [Neeley vs. Henkle, 180 U. S. p. 109, (Syllabus.)]

In the case of Hawaii vs. Mankichi, [Hawaii vs. Mankichi, 190 U. S. p. 197] involving the proposed nullification of a conviction rendered before annexation, certain features of which were contrary to the Constitution of the United States, the Supreme Court held that although the organic act of annexation provided for the continuance of municipal legislation until Congress otherwise determined, the latter body did not intend to impose upon Hawaii every clause of our Constitution.

The leading case of Downes vs. Bidwell, [Downes vs. Bidwell, 182 U. S. p. 144] decided May 27, 1901, and which has already been frequently referred to, involved the validity of a special tariff for the island of Porto Rico, established by Act of Congress, on April 12, 1900. In this decision, the Supreme Court upheld the authority of Congress to establish a tariff for the Island, different from that of the United States. Five of the Justices, constituting a majority of the Court, while holding somewhat different views as to the details of the opinion, thus sustained the doctrine that there is an Empire, made up of the American Union and its dependencies; and, that for this greater Federation, there is an unwritten Constitution, based upon the Constitution of the United States.

Of the Justices constituting the majority, one (Mr. Justice Brown) regarded this unwritten Constitution as being almost entirely disscoiated from the Constitution of the United States; one (Mr. Justice Gray) was rather non-commital; and three justices (Mr. Justice White, Mr. Justice Shiras, and Mr. Justice McKenna) held that the United States Constitution is only the basis of that unwritten Constitution, which is applicable to dependent territory. The four dissenting justices (Chief Justice Fuller, and Justices Brewer, Peckham, and Harlan), held to the doctrine that because the Constitution of the United States prescribes that all taxes, duties, and imposts shall be uniform throughout the United States, they must like-

wise be uniform throughout the American Empire. [The Administration of Dependencies (Snow), p. 563.]

Says the majority opinion of the Court: [Downes vs. Bidwell, 182 U. S. p. 279 (Mr. Justice White).]

"The Constitution is applicable to territories acquired by purchase or conquest, only when and so far as Congress shall direct. Notwithstanding, its duty to guarantee to every State in the Union, a republican form of government, (Art. IV, Sec. 4.), * * * Congress did not hesitate in the original organization of the Territories of Louisiana, Florida, the Northwest Territory and its sub-divisions of Ohio, Michigan Illinois and Wisconsin, and still more recently in the case of Alaska, to establish a form of government bearing a much greater analogy to a British crown colony, than a republican State of America, and to vest the legislative power either in a governor and council, or a governor and judges, to be appointed by the President.

"It was not until they had attained a certain population that power was given them to organize a legislature by vote of the people. In all these cases as well as in Territories subsequently organized west of the Mississippi, Congress thought it necessary either to extend the Constitution and Laws of the United States over them, or to declare that the inhabitants should be entitled to enjoy the right of trial by jury, of bail, and of the privilege of the writ of *habeus corpus*."

The previous case of De Lima vs. Bidwell, [182 U. S. 1.] had determined that after the establishment of the sovereignty and jurisdiction of the United States over Porto Rico, the latter ceased to be "foreign territory" within the meaning of the Dingley Act; so that duties collected at that time on goods coming from Porto Rico into the United States, were declared unlawfully exacted. Four justices dissented on the ground that territory was foreign so far as customs was concerned, until Congress made it domestic by extending to it the custom laws. Louisiana and Tampico were cited as precedents, the absence of law, being taken as the ground of the decision in regard to the latter, in Fleming vs. Page, already referred to. [History of Military Government (Thomas) pp. 321–322.]

The case of Dooley vs. U. S. (182 U. S. p. 222), which followed, determined that duties were rightfully collected on goods

coming to Porto Rico from the United States, before the treaty of peace (April 11, 1899), but were unlawfully collected after that date. It also sustained the continuance of military government after the treaty. Thus it held to the ruling in the case of De Lima vs. Bidwell, that after the ratification of the treaty, Porto Rico ceased to be foreign territory, within the meaning of the tariff laws.

As the conditions in the Philippine Islands were similar to those in Porto Rico, it followed that the case of the Fourteen Diamond Rings vs. U. S. (183 U. S. p. 176) reaffirmed the opinion held in De Lima vs. Bidwell, and applied that doctrine to the Philippines.

This was succeeded by the Second Dooley case, [Dooley vs. U. S., 183 U. S. p. 151] which sustained the constitutionality of the "Foraker Act" in Porto Rico, with respect to duties from the United States to that Island; and held that the Constitutional provision declaring that no tax shall be laid on articles exported from any State, had no application to Porto Rico, which, in the case of De Lima vs. Bidwell, was held not to be foreign within the meaning of the general tariff laws. [Syllabus, Ibid.]

In this Second Dooley case, Mr. Justice White, in an opinion concurring with the majority, refers so clearly to the relation of the Insular Cases, that his remarks are well worthy of quotation: [Dooley vs. U. S., 183 U. S. p. 163. See also Dorr vs. U. S. 195, U. S. p. 138.]

"In De Lima vs. Bidwell, and Dooley vs. United States, *supra*, it was held that instantly upon the ratification of the treaty with Spain, Porto Rico ceased to be a foreign country within the meaning of the tariff laws of the United States. In Fourteen Diamond Rings, *post* 176, it has just been held that the Philippine Islands immediately upon the ratification of the Treaty, ceased to be foreign country within the meaning of the tariff laws; and, of course, as these Islands were acquired, this ruling is predicated on the decisions in De Lima and the Dooley cases, above referred to.

"It is true that both in the De Lima and the Dooley cases, as well as in the case of the Diamond Rings just decided, dissents were announced. None of the dissents, rested however,

upon the theory that Porto Rico or the Philippine Islands had not come under the sovereignty and become subject to the legislative authority of the United States, but were based on the ground that legislation by Congress was necessary to bring the territory within the line of the tariff laws in force at the time of the acquisition; and especially was this the case where the new territory had not, as the result of the acquisition, been incorporated into the United States as an integral part thereof, though coming under its sovereignty and subject as a possession, to the legislative powers of Congress."

But it has been claimed that if Porto Rico was not foreign within the meaning of the tariff laws, and that consequently the tax laid on goods entering that island from the United States is not within the purview of the impost or the inhibition of the expost clauses of the Constitution, then Porto Rico is domestic territory and the tax is void because repugnant to the first clause of Section 8, of Article I, of the Constitution, conferring upon Congress "the power to lay and collect taxes, duties, imposts, and excises * * * but all duties, imposts, and exercises, shall be uniform throughout the United States."

But, says the Supreme Court, "this contention is but a re-statement of the proposition which the Court held to be unsound in Downes vs. Bidwell;" which held the uniformity clause of the Constitution to be inapplicable to Porto Rico. [The majority opinion in the Second Dooley case, cites Woodruff vs. Parham, 8 Wall p. 123, which held that the term "impost" does not refer to articles imported from one State to another, but only from foreign countries.]

And thus we see that according to the most recent rulings of the highest judicial authority in the land, the territory acquired by the United States through the war with Spain, is not a part of the United States within that provision of the Constitution which provides for uniform duties, imposts and excises throughout the United States; nor is it foreign territory within the meaning of the general tariff laws. It is territory *appurtenant* to the Union, acquired through the sovereign powers of the nation, governed by Congressional legislation through executive agents, and subject to the United States Constitution only so far as Congress in its wisdom, sees fit to extend and apply it.

V. THE LEGAL STATUS OF AMERICAN CITIZENS IN TERRITORY APPERTAINING TO THE UNITED STATES.

In the preceding pages it has been shown that following a conquest, military government founded upon necessity may continue as long as the dominant power sees fit.

Under the war powers of military occupation, there can be little question as to the status of American citizens: soldiers and camp followers are amenable to the rules and Articles of War, or to the laws of war, and are not amenable to the laws or courts of the occupied territory. Criminal laws of the conquering state have no validity in territory under military government, which, for belligerent purposes is always considered foreign; while those of the conquered state are retained as an act of grace for the benefit of the conquered alone. Legally, they have absolutely no jurisdiction over members of the invading army, retainers or camp followers thereof, or other civilians in the service of the conquering state. [Birkhimer p. 153, citing Dow and Johnson, 100 U. S. p. 158. Coleman vs. Tenn. 97 U. S. p. 509. Birkhimer, 165, citing, 50 Atty. Gen. p. 55; 97 U. S. p. 509. Clode, Military and Martial Law, p. 95.]

The legal tribunals for the trial of American citizens under the jurisdiction of military government are therefore courts-martial, or provost courts and military commissions, depending upon whether or not the persons are connected with the army, either in government employ, or otherwise voluntarily accompanying it. [Birkhimer, pp. 165 and 351.]

After the precedents established through the use of these war courts in the Mexican, Civil and Spanish Wars, and the Philippine Insurrection, there is little or no question at the present time, as to their jurisdiction and authority. So that we shall pass rapidly to that phase of the question, involving the legal status of Americans, under that form of civil government—whatever its character, which succeeds military government.

In the discussions which have preceded, it has been shown that while American sovereignty follows the flag, the provisions of the American Constitution do not follow *ex proprio vigore*. Such being the case, the question has arisen whether in that

acquired territory which is neither wholly foreign nor wholly domestic, American citizens can be deprived by legislation of certain rights guaranteed by the Constitution; whether they do not carry with them by certain principles of ex-territoriality, the privileges of the Bill of Rights—more especially if their presence in dependent territory is in obedience to the will of the sovereign power; and whether, when acting as executive agents of that sovereign power, Federal protection is not thrown around them, when acting in the performance of duty imposed by the Constitution and Laws of the United States.

History has shown, and it cannot be denied, that in the reconstruction of territory gained by purchase or conquest, a condition of affairs often ensues, wholly incompatible with the granting of a liberal civil government, and the enjoyment of the complete bill of rights of our Constitution.

The native inhabitants may still be exceedingly unfriendly, or even hostile to the new government; their racial characteristics may be such as are inconsistent with the rendering of exact justice to their own citizens or to aliens; they may so lack intellectual or moral development, as to wholly or partially unfit them for self-government; or their previous domination by a sovereign power of a different code of laws may be such as to temporarily, at least, disable them for unprejudiced administration of Anglo-Saxon standards of equity and integrity.

Therefore, in instituting civil government over the territory acquired by the recent war with Spain, it was to be expected that Congress would withhold from the Islands the provisions of Section 1891, R. S., of 1878, which applied the Constitution to organized territory.

However, in the organic Act of Congress, approved July 2, 1902, providing civil government for the Philippines, practically every safe-guard of the Federal bill of rights was accorded the Philippine people with the exception of trial "by an impartial jury of the State and District wherein the crime shall have been committed" which was omitted; and "presentment or indictment by a Grand Jury" for which was substituted merely "due processs of law" for all criminal offenses. In Porto Rico, the "Foraker Act" continued in force the existing laws, except as modified by the Military Government; extended the Statutory

law of the United States to the Island, except where locally inapplicable; and expressly provided for the privilege of the writ of *habeaus corpus*. [See *United States Statutes*, 1900-01, p. 77. The Foraker Act was passed April 12, 1900, and Civil Government began May 1, 1900.]

It is, therefore, evident that, the provisions of the Constitution not extending of themselves to unincorporated territory, American citizens appearing before the latter's courts, may be denied certain of the benefits of American citizenship, under the Constitution. More particularly, this may be a denial of the right to trial by jury, one of the fixed institutions of the common law, dating back to Magna Charta.

The Supreme Court of the United States has determined that this provision of the bill of rights may be withheld in its decision in the case of Dorr vs. U. S. (190 U. S. p. 154), in which it says:

"The case (referring to Hawaii vs. Mankichi, 190 U. S. p. 197), is authority for the result arrived at in the case now before us, to wit, that a jury trial is not a Constitutional necessity in a criminal act in Hawaii or in the Philippine Islands."

Judge Magoon argues quite convincingly, in similar vein: That the common law did not attach to territory acquired by the United States through the late war with Spain; that the civil law continued in force, as it did for a time in territory acquired by the Louisiana purchase; that the right of trial by jury, however high its character, is an acquired right, not an inherent, fundamental right, such as life and liberty; and that if the right of trial by jury is derived from the Constitution, the right is in abeyance until Congress extends the right to the territory in question. [Magoon, pp. 110 113.]

The opposite view is expressed in the dissenting opinion of Dorr vs. United States, delivered by Mr. Justice Harlan: [Dorr vs. U. S. 195, U. S. p. 156.]

"According to the principles of the opinion just rendered, neither the Governor or any civil officer in the Philippine Islands, although citizens of the United States, although under an oath to support the Constitution, and although in those distant possessions for the purpose of enforcing the author-

ity of the United States, can claim of right the benefit of the jury provisions of the Constitution, if tried for crime committed in those Islands.

"There are many thousands of American soldiers in the Philippines. Besides, they are there by command of the United States to enforce its authority. They carry the flag of the United States, and have not lost their American citizenship. Yet, if charged in the Philippines with having committed a crime against the United States, of which a civil tribunal may take cognizance, they cannot under the present decision, claim of right a trial by jury. So that, if an American soldier in the discharge of his duty, goes into what some call our outlying dependencies, he is, it seems, 'outside of the Constitution.'"

So also, in Coleman vs. Tennessee (97 U. S. pp. 509, 516,) the Supreme Court said:

"Aside from this want of jurisdiction, there would be something incongruous and absurd in permitting an officer or soldier of an invading army to be tried by his enemy whose country he had invaded."

To be sure, we have established consular courts in certain uncivilized and unenlightened countries for the trial of American citizens, to which the right of trial by jury does not apply; and quite recently have established a Federal Court at Shanghai, under the jurisdiction of the State Department, of similar nature.

But this is as it should be, for according to the general rule of International Law, every independent state exercises full and complete jurisdiction over all persons physically situated, whether those persons are permanently or transitorily present; [Pomeroy's International Law, p. 202.] and consular courts are established by treaty for the protection of American Citizens. [In re Ross, 140 U. S. p. 453.]

Similarly, it would seem that insular-courts might try American citizens in outlying possesions, if such citizens have voluntarily taken residence in such territory, with full knowledge that it is legally not a part of the United States, within the full application of the Constitution. Their Constitutional rights would seem to be as much in abeyance as if they had taken residence in a foreign country.

But it would appear to be different with those agents of the sovereign power, whether civil or military, who are present by command of that sovereign, to enforce its authority. And this, for the following reasons:

1. Whether the territory be looked upon as quasi-foreign or quasi-domestic, such agents are entitled to all the well-known rights and privileges of *ex-territoriality*.

In Coleman vs. Tennessee, [Coleman vs. Tennessee, 97 U. S. pp. 509, 515. Also Schooner Exchange vs. McFaddon, 7 Cranch p. 144.] the Supreme Court remarked:

"It is well settled that a foreign army, permitted to march through country, or to be stationed in it by permission of its government or sovereign, is exempt from the civil and criminal jurisdiction of the place."

2. The courts of territory appurtenant to the United States are legally without jurisdiction. The agents of the Federal Government are sent to such territory to support the Constitution and laws of the United States there; and it is well known that their presence in such territory has been a necessity. In fact, it is not too much to say that in the majority of cases following conquest of foreign territory, the presence of troops is a strong moral factor in supporting civil government; in many cases, such civil government would not stand for a moment, without the presence of troops.

Such being the case, we find the laws of the United States extending Federal protection to its agents, in the performance of its legal duties, one of which as is quite conceivable being, its moral presence in conquered territory.

In the case of *in re* Fair [*In re* Fair, Fed. Report, p. 149.] the syllabus of the Court states:

"An officer or agent of the United States, who does an act which is within the scope of his authority as such officer or agent, cannot be held to answer therefor under the criminal laws of another and different government.

"The care, judgment, and discretion, which should be exercised by an officer of the United States in the performance of his duty, as such officer, are not to be measured by the criminal laws of a state."

In Tennessee vs. Davis, the syllabus of the Court reads:

"The general goverment must cease to exist whenever it cannot enforce the exercise of its Constitutional powers within the States, by the instrumentality of its officers and agents. * *

"If the case, whether civil or criminal, be one to which the judicial power of the United States extends, its removal to the Federal Court does not invade State jurisdiction. On the contrary, a denial of the right of the general government to remove, take charge of, and try, any case arising under the Constitution and laws of the United States, is a denial of its conceded sovereignty over a subject expressly committed to it."

Again, in the case of *in re* Neagle, the Supreme Court expressed the following opinion: [*In re* Neagle, 135 U. S. 2, p. 62 (quoted in the Graften Case). See also, *in re* Fair, 100 Fed. Rep. p. 157; U. S. vs. Clark, 31 Fed. Rep. p. 713.]

"The United States is a government with authority extending over the whole territory of the Union * * * . While it is limited in the number of its powers, so far as its sovereignty exends, it is supreme. No State government can exclude it from the exercise of any authority conferred upon it by the Constitution; obstruct its authorized officers against its will; or withhold from it for a moment, the cognizance of any subject which that instrument has commited to it."

But it may be argued that the courts of dependent territory are true Federal Courts, especially since they are authorized to prosecute in the "name of the United States."

But numerous decisions have maintained that territorial courts are not United States Courts, within the meaning of the Constitution. [Good vs. Martin, 90 U. S. pp. 90, 98; McAllester vs. U. S. 141 U. S., pp. 174, 184; Reynolds vs. U. S., 98, U. S. p. 145; Clinton vs. Englebrecht, 13 Wall pp. 434, 447; Hornbuckle vs. Tombs, 18 Wall, pp. 648, 655.]

If we find the United States protecting its agents in prosecutions involving their constitutional duties in territory on the North American continent, how much more reason is there for such protection—as admirably pointed out by the counsel in the Grafton Case, in territory gained by conquest from Spain, with all the natural prejudices against the agents of the dominant

power, with laws based on the Spanish code, and whose citizens are not citizens of the United States. [Magoon, pp. 60, 114.]

How, it may be asked, should the present status of Federal agents, be corrected?

1. In the first place, in territory acquired through conquest, the Executive in recommending and Congress in providing civil government for all or any part of such territory, should err on the side of caution. Among our people there seems to exist what at times almost amounts to a hysteria, to introduce civil government among people who are not only not intellectually or morally fitted for it, but are oftentimes far happier to be ruled temporarily, at least, by the strong hand. Premature establishment of civil government, is alike embarrasing to both civil and military authorities, resulting in prejudice to United States authority in the eyes of the conquered race. Far preferable, it would seem to military men, would be a liberal military government with municipal self-government, until there is absolutely no doubt that the people are prepared for the responsible duties of provincial or insular self-government.

2. The establishment of a District Court in some one place, in each of our insular possessions, with the usual functions. There can be no doubt that the trial by jury, prescribed for Federal Courts in clause 3, Section 2, of Article III, of the Constitution, could be successfully applied to criminal cases involving Federal Agents, whether the latter be American citizens or aliens.

3. As an alternative for the above, let all cases noted, be sent to the nearest United States Court—say to San Francisco from the Philippines, for trial—principals, witnesses, and attorneys.

Only by some such correction of legal status as the above, will Federal Agents of the Union, feel that acting as such in territory appertaining to the United States they have not been shorn of certain of the rights of their American citizenship, by the very soverign authority, whose mandates they are endeavoring to uphold and defend among an alien people.

And now, looking in retrospect at the foregoing study of the American Constitution in its relation to the legal status of acquired territory, it seems that the breadth and depth

of its scope and purport have ever been commensurate with all demands of the past, and will be equal to all requirements of the future.

There have been those who feared that it might not rise to conditions born of conquest in foreign lands; those who expatiated upon fancied imperfections, not forseen by the framers; and those, indeed, who feared that its powers were being overridden in adapting its provisions to new and strange situations.

But it would be strange indeed, if its framers intended to deprive their successors in the Federal Government, of any of those sovereign powers possessed and maintained by any other great government.

As Mr. Justice Bradley remarked in the Legal Tender Cases: [12 Wall p. 554.]

"The Constitution of the United States established a Government, not a league, compact, or partnership. * * * As a Government, it was invested with all the attributes of sovereignty. It is not only a Government, but it is a National Government, and the only government in this country, that has the character of nationality. Such being the character of the General Government, it seems to be a self-evident proposition that it is invested with all those inherent and implied powers, which at the time of adopting the Constitution, were generally considered to belong to every government as such, and as being essential to the exercise of its functions."

Always a marvellous instrument, the unprejudiced student finds it rising superior to all doubts and equal to all situations—more than ever a wonderful monument to the foresight and wisdom of its progenitors.

APPENDIX I.

SOME OF THE MORE IMPORTANT PROBLEMS WHICH CONFRONTED MILITARY GOVERNMENT IN THE PHILIPPINES.

1. *Slavery in the Sulu Archipelago.* A treaty of August 20, 1899, continuing generally the relations previously existing between the Sultan of Sulu and Spain, recognized the continuance of slavery. This agreement was subsequently approved by President McKinley, with the proviso that it should never

be construed as giving consent by the United States to the existence of slavery or polygamy. No action was ever taken upon it by Congress. It was later abrogated by the President —March 2, 1904, because of failure of the Sultan to fulfill the conditions of the treaty. (Report of the War Dept. 1899, Vol. 1, Part 4, pp. 152–154.).

2. The Spanish tariff laws first put in force, as well as the revised tariffs, provided for export duties, which was contrary to the Constitution, if the latter applied to conquered territory. (Magoon, p. 217; also, Report W. D., 1899, I, pt. 4, p. 313).

3. After the beginning of the Philippine Insurrection, the territory was considered hostile, and controllable by the war powers of the President; hence, the imposition of taxes to control trade with the insurgents, for which there were Mexican and Civil War precedents. (Magoon, p. 210)

4. *The right to regulate inter-island trade.* Damages were demanded by a British vessel—*Will of the Wisp*—because forbidden by the military government to trade with the Sulu Islands, contrary (as alleged) to the protocols agreed to in 1885, between Great Britian, Germany and Spain.

Held, by the War Department, that treaties of commerce do not attach to the soil upon a change of sovereignty. (Magoon, p. 302.) A similar complaint was made by Germany in 1900—that protocols did not cease; that Spain had never acquired sovereignty over the Sulu group; and that trade restrictions were contrary to the open-door policy. Held, by Secretary Root, that *military necessity* required the regulation of trade, and was independent of the permanent tariff policy of the United States, or its position concerning the protocols. (Magoon, p. 338.)

5. Held, by the Military Government, that claims of individuals for the return of money, bonds, or securities, held by the former Spanish Government, for various purposes, were claims against Spain and not against the United States, as all funds in the Insular Treasury were surrendered as *public funds.* (Magoon, p. 624.)

6. Held, by the Secretary of War, that captured funds could be disposed of neither by military or civil government, but that such property instantly became public property of the United States, and the right to dispose thereof is vested in Congress. (Magoon, p. 621.)

7. Held, in the case of certain individuals who applied for the return of their estates which had been "embargoed" by the Spanish authorities, on charges of treason, that the United States was not justified in setting aside the laws of Spain, the decisions of her courts, or even the decrees of that country; but that the relief prayed for was civil in its nature, and should be sought in the civil courts of the conquered territory. (Report W. D., 1899, I, pt. 4, p. 38.)

8. Held by the Secretary of War, in the claim of a London firm, forwarded through diplomatic channels, for damages growing out of the failure of the municipality of Manila to keep an alleged contract—which fact the municipality denied—that the claim was one for unliquidated damages, which, being alien claims, should be presented by the British Government to Congress, through the Secretary of State. (Magoon, p. 409.)

9. Held, by the Military Government, that while the military authorities held only the City of Manila, a railroad tax could not be collected because it was a provincial tax, and subject to dispute by the Spanish Governor at Iloilo. (Report W. D., 1899, I, pt. 4, p. 31.)

10. The War Department (May 11, 1899), having directed the Collector of Customs at ports under Military Government to perform the duties formerly belonging to United States Consuls or Consulars Officers—it was held that these officials were representatives of the Insular Government and not of the United States; and that their reports should properly be made to the War Department, and not to the State Department. (Magoon, p. 487.)

11. Throughout the administration of Military Government, especially after the beginning of hostilities with the insurgents, it was held proper and necessary to deny liberty to the press by rigid censorship of the local press, and of press-despatches.

12. A short time after the occupation of Manila, orders were issued, applying the United States exclusion laws to Chinese immigration—an order founded on public policy rather than military necessity. (Report W. D., 1899, I, pt. 4, p. 33.)

RÔLE AND ORGANIZATION OF CAVALRY.

By Captain HOWARD R. HICKOK, Fifteenth Cavalry.

"The Pendulum swings from side to side,
As ever it has and must,
It swings to right, it swings to wrong,
It tarries at each a bit too long;
But it never stops at the golden mean,
And never will till the old world machine,
Is scrapped in cosmic dust."

So much has been recently said and written concerning cavalry and there has been so much cant, sophistry, and mis-statement on the subject that the present time is opportune to examine the evidence and to review some of the points bearing on the matter.

Medieval influences and institutions had passed out practically by the end of the Thirty Years' War. Firearms had come into general use, both for mounted and dismounted use, but the tactical use of the various tactical branches was capable of development, needing only the brain of a master to discern and put into effect the necessary changes. The Seven Years' War at this juncture brought forward Frederick the Great who, at least so far as concerned cavalry, created the solution.

The flint lock musket was adopted toward the close of the Seventeenth Century and was continued as the military small arms for a century and a half. It was the weapon used in the Wars of Frederick the Great, of the French Revolution, and of Napoleon. While sighted up to 200 yards, it was most useful and effective within 100 yards. Only within seventy-five yards was it at all accurate. In other words, cavalry could

then remain all day waiting for the golden moment at a distance from the firing line at which it would be absolutely safe but at which now it would be subjected to annihilation.

FROM 1740 TO 1861.

"When Frederick the Great ascended the Prusssian throne he found his army very highly disciplined and capable of maneuvering with considerable precision, but the system of tactics was very faulty. The cavalry was composed of large men mounted upon powerful horses, and carefully trained to fire in line both on foot and on horseback. The force was of the heaviest type and quite incapable of rapid movement. In fact, the cavalry of all European States had degenerated into unwidely masses of horsemen, who, unable to move at speed, charged at a slow trot and fought only with pistol and carbine." ["History of Cavalry," Denison, p. 255.]

"His first change was to prohibit absolutely the use of firearms mounted, and to rely upon the charge at full speed, sword in hand. He taught his horsemen to disregard the fire of the enemy's squadrons, and to rush in with the utmost vigor, and in order that this charge at speed should be as effective as possible, he lightened the equipment and armament of his soldiers, and took every possible measure to enable them to move rapidly and in good order over every kind of ground." [Denison pp. 255-6.]

" * * * Out of twenty-two great battles fought by Frederick, his cavalry won at least fifteen of them.

"Cavalry at this time reached its zenith. Everything had paved the way for it, and it only required the genius to see the opening, and take advantage of it, to give cavalry the greatest success. For nearly fifty years both the horse and foot in all armies had been relying mainly on firearms. The infantry had abandoned the pike, and adopted the bayonet, which, although a good enough defense against cavalry charging at a slow trot, was not very available against a charge at full speed. The slow and unwieldly horsemen, against whom Seidlitz and Ziethen led the active cavalry of the great Frederick, could not with their useless and clumsy pistols and carbines check the advance of charging squadrons which, inspired by their rapid

movement, would be carried violently through the hostile ranks. Warnery says, and we can well believe him, 'Experience has convinced me in more than a hundred occasions, for I have never seen a squadron depend upon its fire, that has not been overthrown by that which came upon it at speed without firing.'

"The infantry, also, unaccustomed to the new style of fighting would at first be taken by surprise and defeat; and, once broken, the carnage would be so great as to have a very serious moral effect upon the remainder of the army. One or two successes would so improve the moral of cavalry, and so dispirit the infantry, that in every succeeding action the horseman would more easily break the ranks of the foot soldiers, and in the confidence of success, the charge would be so boldly and violently given as to crush everything before it. This has evidently heen one reason of the wonderful and continual successes of the cavalry under the great Seidlitz and the other Prussian leaders during the Seven Years' War.

"At no time in ancient or modern history, not even in the wars of Hannibal and Alexander, have more brilliant deeds been performed by the cavalry than were achieved by the horsemen of Frederick the Great in his later wars; and the secret of their success lay in the careful training of the individual soldier, in the constant maneuvering in masses, in the reliance upon the sword, and in the fiery energy as well as the prudent judgment of the great general who commanded it." [Denison, pp. 256–7.]

"Seidlitz and Ziethen both bestowed great attention to the instruction of the cavalry. After the men had been well trained in the riding schools they were maneuvered in large masses over rough ground to prepare them for service before the enemy. Seidlitz was accustomed to exercise his regiment at full speed over broken ground, and men were often killed.

"Frederick once found fault with him on account of the number of deaths so occasioned, Seidlitz cooly answered—'If you make such a fuss about a few broken necks, your Majesty will never have the bold horsemen you require in the field.' This anecdote is a striking illustration of the spirit in which

the cavalry of the great Frederick were trained and handled." [Denison, pp. 263–4.]

Besides reforming its tactics, Frederick reorganized his cavalry. His regiment of cuirassiers contained five squadrons each of two companies of seventy men each, which is the basis of the general European cavalry organization as it exist today. Likewise Frederick's cavalry tactics are the general principles on which European cavalry is employed even to this day.

"The great success of the Prussian monarch in these campaigns, in the face of enormous odds, gave the Prussian army an extraordinary reputation and established Frederick as the most skillful general of the age. The reforms in drill and organizations introduced by him were naturally copied and imitated by the other European nations until the Prussian system became the model of the civilized world.

"This naturally had an important influence upon the cavalry, and for many years, in fact we may say almost to the present day, the cavalry systems of most armies were based in their main feature upon the Prussian cavalry of Seidlitz and Ziethen." [Denison, p. 276.]

But, skillful as was Frederick's cavalry on the battlefield, it was deficient in minor tactics and this deficiency led more than once to disaster. The Napoleonic wars followed soon after those of Frederick and the lessons and resultant changes were still evident. Napoleon, past master of the military art that he was, recognized the powers and limitations of cavalry of the time and took the steps to adopt the means at his disposal to the circumstances. He organized an efficient light cavalry service for minor operations and heavy masses for battle. The consumption of men in his wars being enormous, to replace them the training was necessarily limited. This led to the employment of great masses which overcame the enemy by sheer weight. The range of firearms had remained as in the time of Frederick and the employment of masses in this way would not subject troops to the annihilation of the present day firearm. The efficiency of his cavalry, both on the field of battle and in detached and minor operations, was maintained on a par with that of the other arms and contributed equally

with them to his successes. The mounted charge was its habitual battle tactics.

"The battle of Eylau has been often referred to by the writers on cavalry tactics; and the circumstances of the snow-storm rendering the muskets of the infantry useless, mentioned to illustrate the fact that in heavy rains and snow, infantry might often be placed at the mercy of the cavalry who relying upon the *'armes blanches'* could charge the foot soldiers, when deprived of their great defensive power, the musketry fire. At the present day, however, since the discovery of fixed ammunition, such a thing cannot occur, and that point loses, therefore, its interest to the cavalry officers of the future." [Denison, p. 309.]

"It is a fact well worthy to be remembered, that this (1806–7) was the first campaign that Napoleon ever fought in which his successes were not decisive and vigorously followed up. To the Russian cavalry can be attributed the great change, and we shall soon see how the influence of these irregular and undisciplined horsemen was in the end the most important influence in destroying the gigantic power founded by the marvellous military genius of the great Napoleon." [Denison, p. 310.]

"The following opinion of a French officer, General Morand, as to the value of the Cossack and their service in the war of 1812 is clear and to the point. He says: 'But these rude horsemen are ignorant of our divisions, of or regular alignment, of all that order which we so overweeningly estimated. There custom is to keep their horse close between their legs; their feet rest in broad stirrups, which support them when they use their arms. They spring from a state of rest to a full gallop, and at that gallop they make a dead halt; their horses second their skill, and seem only part of themselves; these men are always on the alert, they move with extraordinary rapidity, have few wants, and are full of warlike ardour.'

"'What a magnificent spectacle was that of the French cavalry, flashing in gold and steel under the rays of a June sun, extending its lines upon the flanks of the hills on the Niemen, and burning with eagerness and courage. What bitter reflections are those of the ineffectual maneuvers which exhausted it

against the Cossack, those irregular forces until then so despised but which did more for Russia than all the regular armies of that empire! Every day they were to be seen on the horizon; extended over an immense line, whilst their daring flankers came and braved us even in our ranks. We formed, and marched against this line, which the moment we reached it, vanished, and the horizon no longer showed anything but birch trees and pines; but an hour afterwards, whilst our horses were feeding, the attack was resumed, and a black line again presented itself; the same maneuvers were resumed, which were followed by the same results. It was thus that the finest and bravest cavalry exhausted and wasted itself against men whom it deemed unworthy of its valor, and who, nevertheless, were sufficient to save the empire, of which they are the real support and sole deliverers. To put the climax to our affliction it must be added, that our cavalry was more numerous than the Cossacks, that it was supported by the artillery, the lightest and bravest, the most formidable that ever was mowed down by death. It must further be stated that its commandant, the admired of heroes, took the precaution of having himself supported in every maneuver by the most intrepid infantry; and nevertheless, the Cossacks returned covered with spoils and glory, to the fertile banks of the Danaetz, whilst the soil of Russia was strewn with the carcases and arms of our warriors, so bold, so unflinching, so devoted to the glory of our country.'

"It is an interesting and instructive fact that these horsemen were in 1813 and 1814 armed and accustomed to operate upon a somewhat similar system to that which, we shall find, was used most extensively and successfully by the cavalry engaged during the American Civil War. In the campaign on the Elbe and Rhine the Cossack fought often as mounted infantry. Having referred to the great service of these troopers, we will copy the following letter from Captain Ganzauge, of the Prussian Lancers of the Guard, to Captain Nolan:

"'During great part of the last war against the French, I was attached to the Cossacks of the Don. These men were at that time but little accustomed to the use of firearms. Whilst advancing into western Europe the advantage of firearms became apparent, more particularly when acting on intersected

and difficult ground; and the Cossacks managed to arm themselves with French infantry muskets which they picked up on the field. Then originated amongst them the practice of dismounting by turns, where the ground was favorable, and thus engaging the enemy in skirmishing order. I have myself seen them in this way beat cavalry very superior to them in numbers, and infantry also, when either the cavalry or the infantry attempted to attack them singly. In such cases the infantry soldiers opposed to them were afraid of the mounted men, who stuck close to their dismounted comrades with the led horses; and these dismounted men were ready to jump into the saddle at any moment and rush upon the enemy if they gave way or were driven from their cover.

" 'To this manner of skirmishing I attribute entirely the success of these Cossacks during the campaign on the Elbe and the Rhine, and the decided superiority they acquired over the enemy's cavalry in all outpost work and detached warfare.' " [Denison, pp. 332–3–4.]

Although the rifled barrel was invented in the Seventeeth Century and the increased precision of fire so to be obtained was well known, the various difficulties, such as deforming of the bullet in loading from the muzzle, fouling, slowness in loading, etc., prevented the general adoption of this invention. Rifled firearms were favorites with the Americans in the Revolutionary War. In 1853 Captain Minié of the French service invented the elongated, cannelured, hollow base bullet that bears his name. This bullet gave increased range, penetration and precision to the rifle.

"This bullet which expanded after loading, by the force of the explosion, and so took the shape of the grooves, at once did away with the difficulty of loading, and gave to the infantry a weapon which, to greatly increases range and power of penetration, added much greater precision in aim.

"This was the second great blow that cavalry received through the introduction of gunpowder. In the first place the great power of penetration obtained by the use of firearms had soon caused the abolition of armor, and the revival of the infantry force. This second invention, which trebled the range and increased the accuracy of fire, could not fail to alter

materially the relations between the cavalry and infantry. This being soon followed by several effective and practical methods of loading the breech, the rapidity of fire has been increased fourfold, so that a body of cavalry charging upon a force of infantry would have to run the gauntlet of at least ten shots, well aimed, where in the time of Frederick the Great or Napoleon, one volley alone would be fired.

"It cannot be denied that these important inventions must materially effect the tactics and employment of the cavalry in modern wars, and it becomes important to consider carefully what changes should be made in the organization, armament, and employment of cavalry, in order to meet the difficulties that are day by day gathering around it.

"The best way to deal with the subject seems to be to trace c'osely the effect of rifled and breech-loading weapons upon the mounted service, in those wars which have lately taken place, and upon the experience thereby gained, to base our suggestions as to the future armament and use of cavalry in war.

"The first war in which the Minié rifle was used was that between Russia and the allied powers of Western Europe, in the Crimea, in 1854. In this war the operations were almost altogether confined to a protracted and closely contested siege, and there were very few opportunities for testing the value of the cavalry as against infantry. At the battle of the Alma, the allies had about 1,000 cavalry, a force totally inadequate to compete with the much superior numbers of the Russian horse. There were consequently no charges of cavalry during the action, and even after it, Lord Raglan, the English Commander, would not allow his horsemen to follow up his success, from fear of having them cut to pieces by the Russian cavalry and artillery." [Denison, pp. 348–9.]

The charge of the Light Brigade at Balaklava, undertaken through a misunderstanding, was senseless from a military standpoint, even though it is a favorite theme of the poet. In the various European wars that took place about this time there can be found instances in which cavalry made effective mounted charges and which rebounded to the credit and glory of those participating. But on the whole, it must be said that

the battlefield luster and usefulness of cavalry mounted charges was waning.

"The deadly effect of the new rifles, on account of their long range, at once created sort of panic in reference to the cavalry service, and the professional soldiers, fully appreciating the great effect of the new invention must have upon the mounted service, at once held that their sphere of usefulness was much diminished, and the opinion soon became general that the days of the cavalry were numbered, and that the force would have to be either abolished altogether, or else greatly reduced." [Denison, p. 353.]

THE AMERICAN CIVIL WAR.

The next war of importance is the American Civil War. Both sides were new to the business of war, on a large scale. Both had to create armies and to learn the A, B, C's of the profession. Neither side had long standing traditions nor prejudices and both were free to work out and develop principles according to the circumstances and means at hand. The result was a revolution in the entire theory of the tactical handling of cavalry.

"The exigencies of a new country, the absolute want of regularity and order, the necessity of adopting and arranging everything to suit circmstances, the continual habit of contriving and inventing methods of meeting difficulties of the most varried and complicated character, which were continually arising in the bush, had the natural result of making the American people use the power of reason to the highest possible extent. This developed their inventive faculties to the utmost, and it has resulted in producing the shrewdest and most self-reliant people in the world. The power of invention of the native Yankee is proverbial." [Denison, p. 351.]

"In the first great battle, that of Bull's Run, on the 21st July, 1861, the Federal Army, consisting of some 40,000 men, had only seven companies of cavalry, hardly one small regiment, while on the Southern side the proportion was not much greater. These shrewd people, who at the opening of the war, acted upon the ideas, at that time very prevalent, of the uselessness of cavalry as against the new infantry firearms, soon

discovered their mistake, and the mounted service increased rapidly, so much so that in the latter part of the war the Northern States, maintained no less than 80,000 cavalry, almost all mounted riflemen." [Denison, p. 359.]

"Another reason led to the introduction of mounted riflemen that will seem strange to the European reader, particularly to the European cavalry officer. There is no principle more firmly established among the professional writers on cavalry tactics than that the sword is the most deadly and effective weapon that can be placed in the hands of a horseman. The moral effect of horsemen charging sword in hand is very great in all European armies; and no principle is laid down more positively than the maxim that cavalry relying on fireams must certainly be beaten.

"In America strange to say, the exact reverse is the fact. There the people had the greatest contempt for the sword, their small forces of regular cavalry trained upon the European plan, alone placing implicit confidence in it. The habit of the individual citizen of being often armed with a revolver, and having almost always a rifle of his own, as well as the wonderful skill acquired in their use, gave them naturally a high opinion of their favorite weapons. At once a feeling of contempt for the sword sprang up in the Southern armies and although at the outset of the war the Northern cavalry, and particularly the regulars, used the saber, the Southern troops, both mounted and dismounted, so despised the weapon that nothing could make them give way to a charge of cavalry, saber in hand.

"A distinguished Southern general told the writer that this contempt of the Southern infantry for the sword was marvellous. He said he had seen lines of skirmishers and lines of battle of infantry charged by Northern regular cavalry, and when his men would see them coming the cry would be raised along the line, 'Here, boys, are those fools coming again with their sabers; give it to them; and they would laugh and joke at the idea as if it were the extremity of folly.'

"The writer has often heard officers of General Morgan's command speaking in the same way. In referring to actions with bodies of Federal cavalry they would say: 'They charged down upon us with their sabers, but when we saw that we knew

we had the fight all in our own hands, for it was simply silly for them to think they could do anything with us in that way.'

"So strong was this feeling in the west at the outset of the war, that the hastily raised and imperfectly equipped Southern cavalry, armed as they often were at first simply with double-barrelled fowling-pieces loaded with slugs, would charge at speed at a line of hostile cavalry, firing both barrels into the enemy's faces, and then would then dash through, striking with the butts of their guns.

"With this type of soldier to recruit from, and under these circumstances, Major General John H. Morgan revived and improved the principal of the dragoon organization, and applied it successfully to the fullest extent." [Denison, pp. 360–1.]

For the American military student it should be unnecessary here to go at length into the cavalry operations of the Civil War. All are more or less familiar with the operations of Stuart, Wilson, Morgan, Forrest, Sheridan, etc., and with the tactics they employed. Their forces were always ready to charge mounted when occasioned offered, using either sword or pistol. But they more frequently, almost universally, used their horses as a means of rapid transportation and then dismounted to fight on foot. These were the characteristics of all the great engagements in which they fought. These were the tactics that destroyed Hood's army after Nashville, made the campaign of Selma a success, won Five Forks, and at Appomattox put an end to the War.

"Sir Henry Havelock's comments on the affair (Appomattox Court House) are well worthy of consideration, as the views of an officer of high training and great experience in the field. He says: 'The mode of which Sheridan, from the special arming and training of his cavalry, was made to deal with the rear guard first, to overtake it in retreat, then to pass completely beyond it, to turn, face it, and take up at leisure a position strong enough to enable him to detain it, in spite of its naturally fierce and determined efforts to break through, is highly characteristic of the self-reliant, all-sufficing, efficiency, to which at this time the Northern horsemen had been brought. The practical experience of nearly four years of continual war, the entire and untrammeled confidence placed in good men amongst the

Northern leaders, when they proved themselves to be so, and the complete freedom left them of devising and executing the improvement their daily experience suggested, had enabled Sheridan, and one or two more of similar bent of mind, to shake themselves free of the unsound traditions of European cavalry theory, and to make their own horse, not the jingling, brilliant costly, but almost helpless unreality it is with us, but a force that was able, on all grounds, in all circumstances, to act freely and efficiently, without any support from infantry.

" 'Not only is there no European cavalry, with which the writer is acquainted, that could have acted the part now played by the force under Sheridan, but there is not on record, that he is aware of, an instance in the eventful wars of the last of the present century in Europe of a strong rear-guard having been thus effectually dealt with.' Again he says: 'Had it been any European cavalry, unarmed with 'repeaters' and untrained to fight on foot, that was barring the way, any cavalry whose only means of detention consisted in the absurd ineffectual fire of mounted skirmishers, or in repeated charges with lance or sabre, the Confederate game would have been simple and easy enough.' " [Denison, pp. 392–3.]

"The accounts of actions contained in the foregoing pages serve to show, that in the American Civil War the contending parties had certainly originated and improved a system of working cavalry that was capable of producing great results. No one can read the accounts of Morgan's raids, of Forrest's expeditions, of Stuart's great sweeping reconnaissance, of Grierson's operations in Mississippi, of Wilson's invading army of cavalry, of Sheridan's turning movement at Petersburg, of his fighting in line of battle, of his pursuits, etc., without feeling that the mounted rifle principle had been wonderfully effective, and that it is the proper method of using horsemen under the improved state of projectile weapons.

"The professional cavalry officer in Europe, wrapt up in the traditions of the wars of Frederick the Great and Napoleon, bearing in mind the failure of the dragoon principle in the seventeenth century, and holding it as a fixed principal that cavalry relying upon firearms are necessarily worthless; has

never given the proper weight to the teachings of the American Civil War.

"It has been argued that the country was not suited to the use of cavalry proper, that the raw levies had no opportunities of becoming sufficiently trained to make mounted charges on a great scale, and it has been held that although mounted riflemen had been so effective, it was no proof that well trained cavalry, upon the old principle, would not have done equally well, if not better. It seems to have been forgotten, that four long years of war, with constant drilling and fighting, must have produced as efficient troops as could be found. General Lee's Army at Chancellorsville was as effective and well disciplined an army as then existed in any part of the world and the battle of Chancellorsville is strong proof of the truth of the statement. [Denison, pp. 394–5.]

Cavalry used on the foregoing ennunicated principles has often been termed "mounted infantry," frequently in a spirit of contempt and with a view to discounting its value and achievements. Nevertheless, these are the principles in which the great majority of American cavalrymen firmly believe.

1866.

The Austro-Prussian War was fought one year after the American Civil War ended. The principles developed in the latter were not here given consideration. The great Von Moltke regarded our war with contempt, dismissing further consideration by saying that nothing was to be learned from the conflicts of armed mobs. In this war both the Prussian and Austrian cavalry were numerous, well horsed, and well drilled in the orthodox school of Frederick. According to European standards, which regarded all other with scorn and disdain as barbarian, there was no better cavalry than the Prussian and Austrian.

"In this war the cavalry did not exercise any important influence upon the results, nor did they render any valuable service in any army. We look in vain in the records of the war for great charges of cavalry in mass, such as were the striking features of the most of Frederick the Great's battles, and of Napoleon's. No action, save that of Nachod, was won by the

charges of the Prussian horse, while the Austrian light cavalry, the successor of those who had enshrouded the great Prussian monarch in an atmosphere of pandours, and shut him off from all information, had so fallen back from their former reputation that they not only did not conceal the movement of their own army from the enemy, but actually were so negligent in watching the foe as to permit the Prussian Guard Corps, at the battle of Königgrätz, to penetrate into the heart of the Austrian position, seize the key of it, and to secure the victory." [Denison, p. 397.]

"The little use made by Benedek of his light horse is a proof that he had not been much impressed by the struggle which had shortly before taken place in the New World. Although in its own country, among a friendly population, where every information might readily have been obtained, the Austrian cavalry had done but little service in acquiring knowledge of the enemy's movement. They had made no raids upon the Prussian flank or rear, had cut off no convoys, destroyed no railroad lines, cut no telegraphs, wearied and harrassed no outposts, and, in fact, had neglected a great many duties that the mounted riflemen of America were continually and successfully performing.

"The Prussian cavalry in their outpost work had not yet learned the proper and effective method of covering the advance of an invading army. Their cavalry in this war, regulated its movement by the march of the invading columns, and did not precede them to a very great distance; while the Austrian cavalry, as we have said, kept within a small radius, and without enterprise or dash only fought when they were attacked by the advancing Prussian horse. When the hostile cavalry did meet, when they did engage, no doubt they were well drilled, maneuvered steadily, and fought on both sides with the greatest gallantry, but can the reader compare the service of the horsemen on both sides with those performed in the United States, without admitting that the service rendered, and the results gained by the mounted riflemen in America, were not infinitely greater than those of the horsemen in Bohemia in 1866? Nor can any doubt that the American system was more suited to the improvement in the modern projectile weapons." [Denison, pp. 400–1.]

THE FRANCO-PRUSSIAN WAR, 1870-1.

The French had on a war footing 40,000 cavalry armed for and organized into the various classes then recognized, such as lancers, curiassiers, dragoons, chasseurs, hussars, etc. Some were designed solely for charging and were correspondingly armed, their chief weapon being the lance or sword. Some regiments, in addition to the charging weapon, were provided with carbines, although the views as to the proper use of the latter weapon were not well developed. The Germans had about 56,000 cavalry similarly armed and trained. Much should be expected, but let us see what happened.

"The experience of the Civil War in America had taught no lesson to the French, they considering, as the armies there were not originally formed of professional soldiers, that the teachings of the campaigns could be of no value."

"They seemed to forget that four years of continual fighting in the field with varying success would produce professional soldiers of the highest type, men whose practical knowledge of the business of war would be greater than if their whole lives had been devoted to peace training. The French, therefore, had gained no advantage from the example of the system of working cavalry that had been in use in America; and consequently from the very first their outpost service proved an utter failure, and their horsemen though brave and gallant soldiers, were so badly handled, and their employment so little understood, that they were uselessly sacrificed at Wörth and Sedan to no purpose." [Denison pp. 403–4.]

In this war there were some cavalry charges that have become historic, the first being that of Michel's cuirassier brigade at Wörth, of which the historian says:

" * * * Michel's brigade and the 6th French Lancers which charged with them, were almost detroyed; very few of them again reached the army. The Prussian hussars lost one man killed, twenty-three wounded, and thirty-five horses. The losses of the infantry were very inconsiderable.

"This sacrifice of the cavalry brigade served no other purpose than to gain time for the retreat of the French right wing. The charge was gallantly made, the men rode boldly on, there

was no hesitation, and yet the fire of the infantry, who, it will be remarked, relied solely on their needle-guns, and did not even form squares, was sufficient to defeat and destroy them. We shall find other examples in this war of the little chance cavalry have of successfully using the old system of cavalry tactics." [Denison pp. 405–6.]

The next noted charge of the wars was that of Von Bredow's brigade at Vionville.

" * * * General Bredow commanded the brigade, which consisted of three squadrons of the 7th Curiassiers and three of the 16th Lancers. He charged in one line, but from the delay of the 16th Lancers in deploying, the charges took place, unintentionally, in echelon. Under a heavy fire of artillery they rode onward, the guns were soon reached, the gunners cut down; and then on rushed the horsemen, at full speed, upon the lines of infantry in the rear, who received the charging squadrons with volleys of musketry. The lines were broken with a rush, saber and lance doing deadly execution. Excited by the success, carried away by the impetuous fury of their charge, they could neither be rallied nor reformed. A number of mitrailleuse were taken, when suddenly the scattered horsemen were pounced upon, in their disorder, by the French 7th Curiassiers, and some Sphais and Chasseurs. In their hurried retreat they were very badly handled, and suffered great losses; but the sacrifice was well repaid, as it checked the attack of the French 6th Corps, which would have otherwise been fatal. This was the boldest charge of the war, and the only one that was to a certain extent successful." [Denison p. 408.]

The last of the celebrated charges of the war was at Sedan.

"This was the prelude to the final disaster at Sedan. In this last action under the Empire the cavalry again proved that they did not lack the courage of which has always distinguished the French soldiery. Toward the close of the battle General Ducrot wished to make a last desperate effort to arrest the enemy by a grand cavalry charge, and following it up to break through his lines. General Margueritte, with the Reserve Cavalry division, was to have made the charge, and having broken through the enemy's position, was to wheel to the right and roll up their lines in that direction. The 2nd Reserve

Cavalry division, under Bonnemain, was to support this attack, while the several regiments of divisional cavalry of the 12th Corps were massed together and brought forward to act as a reserve.

"The whole force moved forward to attack; they swooped down like a whirlwind, threatening to overwhelm the Prussian infantry who were advancing to the attack. The charging horsemen soon burst through the skirmishers and pressed on toward the German battalion, which in deployed lines and steady formation received them with a perfect tempest of bullets from the swift-loading needle-guns. Every effort to bear up against such a fire failed. The horsemen, though bravely striving and gallantly returning to the attack, were mowed down is such numbers as to leave piles of dead and dying men and horses all along the front of the Prussian lines. The whole affair was a useless and terrible sacrifice of brave men.

"The writer received a letter shortly after the battle from a distinguished officer of much experience who took great pains to inquire into the facts of the attack. The details are well worth reproduction. He says:

" 'The question of cavalry charging infantry with breech-loaders is, I think settled conclusively by this campaign. Whenever it has been tried, by the 8th and 9th French Cuirassiers at Wörth, by the 7th Prussian Cuirassiers at Vionville on the 16th of August, or by the two French light cavalry brigades on their extreme left at Sedan, the result has been the same—a fearful loss of life with no result whatever.'

" 'General Sheridan was an attentive eye witness of the four charges made by the French light cavalry at Sedan, and gave me a most minute account of them. I examined the ground most carefully only thirty hours after, while the dead men and horses all lay there, so that I formed as correct an idea of it as if I had seen it. The first charge delivered by the 1st, French Husars was made under the most favorable circumstances possible. They were well handled. As the Prussian infantry skirmishers in advance of the main body came over the hill behind which they had been waiting, they were led round under cover of the brow till they got completely in rear of and on the right flank of the skirmishers. They thus got within 100 yards of them before they were seen, and then charged most gallantly, charging down the whole line. But even under these advantageous circumstances the charge had no result worth speaking of. The Germans ran into knots and opened fire; a very few who ran to the rear, say twenty-five or thirty, were cut down. On the other hand, the fire of these clumps and rallying squares completely destroyed the hussars. The two rear squadrons wisely swerved off and regained the shelter of the hill. Those who went down the line were all killed, wounded, or driven down on the Prussian side of the slope into a village and were captured. It did not delay the advance of the Prussian infantry five minutes. The succeeding charges made by the 1st, 3d, and 4th regiments of Chasseurs d'Afrique and the 6th Chasseurs came to nothing, though they were most gallantly and perseveringly made. The Prussians simply waited for them in line till they got to within 150 yards, and then just mowed them down with volleys—they were shot down before they could get within fifty yards. It was a useless, purposeless slaughter. 'It had practically, no result whatever. The hillside was litterly covered with their dead and the bodies of the little grey Arab horses. These two brigades of five regiments must have lost quite 350 killed, besides their wounded and prisoners. There can be no greater scandal than to say they did not charge home. General Sheridan assured me that they behaved most nobly, coming up again and again at the signal to charge.

" 'They were sheltered from fire till the last moment, were carefully handled, and skilfully and bravely led. The ground that they charged over was not more than 400 yards, yet the result was virtually their destruction as a military body without any effect whatever.

" 'I took great pains to ascertain the facts. A friend of mine whom I had known in Africa ten years before, was a major commanding two squadrons of one of these regiments. He showed me the roll of his two squadrons with each man's name marked off. The result was fifty-eight men of all ranks left effective out of 216 that went into action. The whole time that they were under musketry fire must have been less than a quarter of an hour.'

"After the battle of Sedan the war mainly centered in the two great seiges of Paris and Metz, the cavalry still doing good service in keeping up the communications and covering the operations in the provinces of France of successful actions of cavalry, but they were all on a small scale. At the battle of Amiens some German squadrons rode down a battalion of marines and captured several guns. The 4th German Hussars also captured a battery at the battle of Orleans and carried it off, while the 11th Prussian Lancers also took a French battery at Soigny. These successes won on the battlefield were not proportionate to the large mass of cavalry, nearly 70,000 strong, which the Germans brought into the field.

"Early in the seige of Paris the French had organized small partisan corps under the name of 'Franc tireur.' When these Franc tireurs became numerous the Uhlans could no longer move freely to great distances, but were almost always accompanied by battalions of infantry, who marched with them to clear villages and obstructed country of these volunteer riflemen, who fought with great bravery.

"This proves conclusively that the great successes of the Prussian horse in the early part of the war were to be attributed to the extraordinary inefficiency of the French cavalry, particularly in the way they were used, than to any wonderful superiority in arms or organization of the celebrated Uhlans.

"The system of attaching infantry to the cavalry necessarily deprived the horsemen of their speed, and clogged them so that the whole force in point of mobility was only equal to the same number of foot soldiers. In fact the great value of cavalry its speed, and far reaching power, was gone the moment it had to march under the protection of infantry.

"A careful study of the method of arming and employing cavalry in the American Civil War should have shown the Germans that if their horsemen had been armed with rifles or carbines they could have done equally well or better all that they performed in the early part of the war, and would have been fully capable of coping with the 'Franc tireurs' that they were likely to meet in detached warfare.

"In America the mounted riflemen were continually taking towns and villages, although well defended by infantry and

artillery.' The 'home guards,' which represented the same type of force as the 'Franc tireurs' never checked the onward and rapid progress of the Southern horse, who would have ridiculed the idea of being delayed and hampered by conforming to the march ot infantry in a raid or partisan operation.

"The experience of the Franco-German War is very remarkable on this point, for the brilliant exploits of the Prussian cavalry in the beginning of the campaign would lead one to expect that they would not have been much embarrased by the opposition of such undisciplined and irregular troops. This is the most striking lesson that the war after Sedan affords to the cavalry officer, and it requires very little thought to perceive the weak point and the remedy for it." [Denison, pp. 410–11–12–13.]

Notwithstanding the heroic sacrifices of Michel, Von Bredow, and Margueritte, and the immortal glory which is their just reward, their brave charges cannot bring cavalry back to the battlefield to operate with these tactics. Another eminent authority also stated as follows:

"After explaining how Cromwell's troopers 'were taught the value of coöperation,' and how 'Cromwell built up his cavalry on a foundation of high individual efficiency,' he (Henderson in "Science of War") goes on to show that, 'as time went on and armies became larger, and skill at arms, as a national characteristic, rarer, drill, discipline, maneuver in mass, and a high degree of mobility came to outweigh all other considerations; and when the necessity of arming the nation brought short service, the training of the individual, in any other branch of his business than that of riding boot-to-boot and of rendering instant obedience to the word or signal of his superior, fell more and more into abeyance. Shock tactics filled the entire bill, and the cavalry of Europe, admirably trained to maneuver and attack, whether by the squadron of 150 sabers, or the division of 3,000 or 4,000, was practically unfitted for any other duty. The climax of incompetency may be said to have been reached during the cycle of European warfare, which began with the Crimea and ended with the Russo-Turkish conflict of 1877–78. The old spirit of dash and daring under fire was still conspicuous; discipline and mobility were

never higher. The regiments maneuvered with admirable precision at the highest speed, and never had great masses of horsemen been more easily controlled. And yet, in the whole history of war, it may be doubted whether the record of the cavalry was ever more meager.

"Referring specially to the German cavalry during the War of 1870–71, Henderson says: 'The troopers knew nothing whatever of fighting on foot—their movements were impeded by their equipment—and a few Franc tireurs, armed with the chassepot, were enough to paralize a brigade * * * . In fact, to the student who followed out the operations of the cavalry of 1870–71 step by step, and who bears in mind its deficiencies in armament and training, it will appear doubtful whether a strong body of mounted riflemen of the same type as the Boers, or better still, of Sheridan's or Stuart's cavalry in the last years of the War of Secession, would not have held the German horsemen at bay from the first moment they crossed the frontier.

" 'Had the successes gained by shock-tactics been very numerous, it might possibly be argued that the sacrifice of efficiency in detached and dismounted duties, as well as the training of the individual, was fully justified. What are the facts? After enumerating the successes gained by shock-tactics from the days of the Crimea onwards, when anything larger than a regiment was engaged, Henderson adds: 'Such is the record: one great tactical success gained at Custozza: a retreating army saved from annihilation at Königgrätz, and five minor successes which may or may not have influenced the ultimate issue. Not one single instance of an effective and sustained pursuit; not one single instance except Custozza, and there the infantry was armed with muzzle-loaders, of a charge decisive of the battle; not one single instance of infantry being scattered and cut down in panic flight; not one single instance of a force larger than a brigade intervening at a critical moment. And how many failures? How often were the cavalry dashed vainly in reckless gallantry against the hail of a thin line of rifles. How often were great masses held back inactive, without drawing a saber or firing a shot, while the battle was decided by the infantry and the guns. How few the enterprises against the enemy's communication. How few men killed or disabled, even when cavalry met cavalry in the mêlée! Can it be said in face of these facts that the devotion to shock-tactics, the constant practice in massed movements, the discouragement of individualism, both in leaders and men, was repaid by results? Does it not rather appear that there was some factor present on the modern battlefield which prevented the cavalry, trained to a pitch hitherto unknown, from reaping the same harvest as the horsemen of previous eras? Was not the attempt to apply the principles to the battle of the breech-loader and the rifle cannon, as had been applied successfully to the battles of the smoothbore, a mistake from beginning to end; and should not the cavalry confronted by new and revolutionary conditions have sought new means of giving full effect to the mobility which makes it formidable.'" (Lord Roberts' Introduction to "War and the Arme Blanche," pp. 6-9.)

FROM 1871 TO DATE.

In the years subsequent to the Franco-Prussian War, the first incident of note was the Russo-Turkish War 1877–8 just referred to. The adoption of smokeless powder about 1890 and later is the next noteworthy occurence. This tended further to remove cavalry from mounted activities on the immediate field of battle. The pall of smoke formerly existent gave a certain amount of cover and the absence of this rendered mounted bodies all the more vulnerable. Europe still held to its old cavalry traditions. America maintained its own.

The Boer War 1899 to 1902, is a fertile field for the cavalry student. Some of the most prominent facts in this connection are these:

1. The war was fought between a powerful and highly organized military nation on the one hand and against a weak nation of plainsmen and farmers on the other.

2. Great Britian sent into South Africa a large army composed of all arms in the orthodox proportions. Later this was changed so that the mounted forces were one-fourth the entire army and equal in numbers to the entire army of the Boers. The Boers maintained an army practically never greater than

50,000 all of whom were mounted as long as they had mounts for them.

3. The greater part of the terrain was like our western plains country, which is supposed to favor the operation of mounted troops.

4. The British cavalry held the orthodox European views on mounted cavalry action and persisted in them until the lessons of the war forced them to adopt the principles used by their enemy. The Boers, untrammeled by traditions, adopted their own tactics, used their horses for transportation and fought always dismounted, except occasional mounted firing.

5. The British cavalry regiments that entered the war with swords and lances finally packed them up and relied solely on the rifle. The Boers never used swords or lances but always relied on the rifle.

6. This was more nearly a mounted war than any other of the modern times; yet never once was the decision in the least way iufluenced by the Arme Blanche, either sword or lance; the rifle always directed the form of action and forced the decision.

7. The British complained that the Boer tactics prevented mounted shock by the British and thereby confessed that mounted shock could not be used against mounted troops that resorted to the rifle.

The claim is frequently advanced that the Boer War was abnormal. A study of the war indicates that the abnormality consists in the above referred to points and in the rude shock given to European ideas as to the proper use of cavalry. Yet, notwithstanding the lesson of the Boer War, the scars were not yet healed before the British cavalry cast aside the principles therein enforced and returned to the orthodox principles of Frederick the Great.

From the cavalry standpoint the Russo-Japanese War was barren. Much was to have been expected. The Russians were supplied with a numerous cavalry of whose efficiency much was expected in theory and anticipation but whose failure to produce results led Kuropatkin to complain that he had too much cavalry. The Cossacks were trained for both mounted

and dismounted action. European writers make much of their dismounted training and to this training some writers ascribed their failure. The truth seems to be, not the fault of the training or the theory of its use, but in the practical application. No one from the commander in chief down knew how to use it. Leadership was deficient. The theories practiced by Platoff, Tchernicheff, and other Cossack leaders against Napoleon are of no value without masterly leadership and this leadership was not in evidence in Manchuria.

DEDUCTIONS.

This brings the review of cavalry operations down to the present time. We find in the main the cavalry of Europe still trained in the school of Frederick the Great, advocating the mounted charge as the first and last principle of cavalry action. European cavalry is generally supplied with some fire arm but with vague and indefinite ideas as to its use. So strong is the hold of the *Arme Blanche* theroies that Europe finds it almost impossible to cut the Gordian knot and adopt the principles as illustrated by the latest wars. With one or two notable exceptions, European writers on cavalry tactics either advocate the *Arme Blanche* theory in its entirety or else timidly and vaguely advocate mounted and dismounted combinations.

Comparing cavalry with the other arms we find that tradition with it has persisted more strongly than with any other. In the century and a half since Frederick the tactics and drill of infantry and field artillery have entirely changed. Armies have grown enormously in size. The cavalry tactics and drill of European nations have remained practically unchanged. The change in firearms has almost entirely eliminated mounted charges from the battlefield. The resolute obstinacy of cavalry enthusiasts and supporters of the old theories have, as a result, materially lessened the respect and consideration that should be given to cavalry.

On this subject Lord Roberts says:

"In some recently written books on cavalry great stress is laid on the necessity for inculcating the 'true cavalry spirit' and on the idea that 'shock action alone gives decisive results.' I can not call to mind one single instance during the last half-

century ever since, indeed, arms of precision have been brought into use, when shock action alone has produced decisive results, and I doubt whether shock action, or, in other words, the Arme Blanche alone, will ever again be able to bring about such results against a highly trained enemy armed with magazine rifles." ["War and the Arme Blanche," p. 14.]

General von Bernhardi is even stronger and states:

"The low estimation in which it is everywhere customary to hold this arm (cavalry) today is solely due to the fact that people insist upon wishing to use the cavalry as an arm of battle and for charging, while they do not understand how to use it strategically, nor have organized it at all with that object. But that it can be employed in this this sphere to the greatest advantage, and can also conduct a vigorous fire-fight without being unduly hampered by its horses or loosing them, is sufficiently proved by the American War of Secession and by the South African War." ["On War of Today," Vol. II, p. 452.]

We are continually having cited to us the magnificent appearance of the European cavalry and of its perfection in drill. None of these characteristics can be denied. Its culture and refinement are the highest. In the ballroom its officers are superb. On the parade ground its troops are invincible. But so long as it holds to the orthodox principles of Frederick the Great, the remarks of Jomini concerning the army of Frederick William in 1806, are of pertinent application:

" * * * The cavalry had not yet forgotten Seidlitz and his immortal lessons; the staff was well instructed, but instructed in detail, to neglect of principles; so that, in fact, this, army, so superb in appearance, was a body without a soul." [Jomini's Napoleon, Vol. 1, p. 447.]

It is conceded that the very idea presented by the term "cavalry" is mobility and action. The element of the horse signifies dash and motion. But if, without consulting facts and conditions, we allow that thought to prescribe the method in which both horse and man shall be used, we act purely on preconceived theory and prejudice and not on common sense.

In examining accounts of battles of the last half century in which cavalry has engaged, it is observed that the rifle,

whether in the hands of troops supplied with horses or not, has dictated the character of the action. Assuming opposing cavalry of equal strength, if one side has dismounted to fight on foot—presuming the initial distance to be 600 yards or more—the mounted attack of its opponent ends in failure if not complete disaster. Mobility is necessary to transport the force rapidly to the critical point, having arrived at which an equally aggressive fire action should be initiated. In the days of Frederick the Great mounted action, *i. e.*, the mounted charge, was the main rôle of the cavalry arm and its organization, armament, and instruction was with that end in view. But now mobility, dismounted fire, alertness to take prompt advantage of the results of fire action, using mounted action as a part of the combination if favorable opportunity presents, these are the leading elements in cavalry battlefield tactics. Cavalry must, therefore, be supplied with a rifle equal in ballistic qualities to that of the infantry and must be equally trained in musketry and fire discipline. It must be trained in mounted action and be ready to intervene mounted when the golden moment arrives. Aggressiveness must be the dominant element. A high quality of leadership is essential and only such leadership acting on these principles can insure success.

Cavalry has always been charged with reconnaissance, security, and all the other minor operations of war. These will of course continue to be an essential part of its duties.

With the increase in range and destructiveness of rifles and field guns, the growth of armies and battle fronts, and with the use of aeroplane reconnaissance and wireless communication, the strategic use of cavalry has increased in importance. Formerly it took days and even weeks to effect a change in the strategic situation. Now, due to improved means of reconnaissance and communication, it is necessary to have at hand an ample cavalry force so organized, equipped, and trained as to move so quickly that the strategic situation may be changed favorably over night. An ample cavalry, whose numbers are greater than the proportion heretofore existing, is necessary for this purpose. Cavalry is more and more the strategic wing of the army. Having been thus placed strategically, its drill and training must be such that it can successfully engage either

cavalry or infantry on equal terms. This training is intimately linked to organization, and organization should be such as to give fullest advantage to the chief method of fighting.

RESUMÉ.

The rifle now dictates the form of action.

In times since passed pure mounted action *i. e.*, the mounted charge, was the principal rôle of cavalry; but its principal rôle now is mounted or dismounted action, either singly or in conjunction, combined with mobility, aggressiveness, and alertness to take advantage of the changing features of the situation, all requiring the highest type of leadership.

Cavalry must be furnished with a rifle of the highest ballistic qualities and be skilled in musketry and fire discipline.

Cavalry must, as ever, be skilled in the minor operations of war.

Cavalry is the strategic wing of the army and its numbers must be ample for that service.

The organization, equipment, drill system, and training of cavalry must be that which will give fullest effect to its prinpal rôle.

It should be needless to add that the organization and drill system of a century and a half ago are wholly unsuited to the present true rôle of cavalry.

INSPECTION OF HORSEMANSHIP IN A GERMAN CAVALRY REGIMENT.

BY AN OFFICER ABROAD.

THE commanding officer of the First Guard Dragoon Regiment, invited me to witness the inspection of his regiment. To do so I had first to ask permission of the War Department which required some five days to get. However, on Saturday last I went to the garrison of the First Guard Dragoon Regiment where the major, second in command, was inspecting, the colonel having been called away that day. The inspection of cavalry troops at this time of the year is to see what they have accomplished in training recruits and remounts, and in general in horsemanship. For the purpose of instruction the squadrons are divided into a number of sections; certain ones of remounts ridden by old men selected for their superiority in horsemanship. Certain sections of recruits mounted on old and best trained horses, and then other sections forming the remainder of the squadron. This day I witnessed the inspection of four sections in the riding hall. The horses were from seven and one-half to eight and one-half years old and had been two and one-half to three and one-half years in the regiment. The work at the slow trot, that is the balance trot, and the middle trot, as they call it, and the fast trot, and the canter, the middle gallop and fast gallop, turning on the haunches, halting, two track work at the balance trot and the canter, all very good. The section would then be formed in line at one end of the hall and three or four men made to ride out singly to the other end of the hall where they would ride individually, making the horse trot and canter and gallop and halt and turn on the haunches, making figures of eight and small circles, as to show the individual training of the horse. All this was very well done. An attempt was made to put each section over a

small jump about thirty inches high consisting of a small brush hurdle and then a small bar placed close together. Some ten horses out of forty-five struck badly, three of them falling and turning over on their riders. There were about fifteen men in each section. The first two horses of one section having fallen, the rest of that section was not permitted to jump. This bad jumping was explained by saying that it was practically the first time it had been attempted by those particular sections.

Today I saw three sections of recruits of the same regiment at the inspection drill. This was in the open as the weather was good. Between the stables the ground is very good for outdoor riding, and it was here that the inspection was held. Before the lieutenant colonel appeared I watched one of the section warming up. There were about fifteen recruits on old horses; the recruits were all quite young, about eighteen or nineteen years of age.

The Guard Regiments are recruited from all over the Empire and by volunteering there is some advantage gained by the recruits which is, that among other things he can take his service a little bit earlier. It frequently happens that the sons and grandsons of many who have served in certain organizations are booked for service in the same organizations many years ahead.

It was interesting to see the good spirit and the keenness exhibited by the men and officers. After the warming up some old soldiers, who were standing around the stables, rushed out with cloths and brushed and polished up the horses that had been ridden about on the loamy soil, just before the arrival of the regimental commander. The recruits are armed with the lance and carried a saber and the carbine, hanging perpendicularly from the right and left side respectively of the cantle. The carbine, nearly as long as our rifle, was buttoned into the hoslter and, therefore, would be difficult to get out for use. The lance is very light and made of hollow steel and bears a pennant, many of the saddles were too far forward over the horses shoulders, but the blankets were heavy, folded six to eight thicknesses. The saddles had sheep skin under the bars, and thus the riders seat was quite a little above the horse. All saddles had breast straps, the horses were double-bitted, with heavy

curbs which were of different shapes, some having straight and others large, S-shaped lower branches. Although it was cold the soldiers were without gloves. They had large cavalry boots with sharp spurs which are curved and fixed to the heel of the boot. The horses were old, that is from ten years up, and were all of one type. After the section had been presented to the lieutenant colonel by the squadron commander, the lieutenant or sergeant who had instructed the section standing on foot at its right, the men were sent off so as to be separated about the open space. The lances were stuck into the ground by each recruit and each then rode individually in circles about his lance showing the control of the horse at the different gaits; he would halt, and turn on the haunches, etc. After this the lances were leaned against the stable and the recruits were made to ride in column in single file as on a track where they showed the slow trot, the middle trot and the fast trot, halting, turning on the haunches, the canter, the middle gallop and the fast gallop, changing leads, and were then made to jump over a log hurdle over thirty inches high and also over a good sized ditch. They were made to assemble quickly and to disperse and reassemble. In all of this the training was excellent. The various gaits were taken and kept by all of the men throughout the column and there was not one case where there was rushing or telescoping, neither was there one shout of "close up," something that should be prohibited in any well drilled cavalry. The sections seen today were of a different squadron from those of Saturday last. In every case after a section was inspected, the inspector gave his critique on the work done speaking directly to the men. This is the general rule in everything in Germany.

After watching the recruits I went to the Casino with the Lieut. Colonel and then went within to see his horses of which he had five excellent ones. Instead of having these in one of the squadron stable, he had converted an old shed into a private stable by covering it with tarred paper, and stuffing the cracks with straw. Thus he had an excellent and cheap place for his horses and did not take away any of the stable room of any squadron. His saddle equipments were kept in a small part of the same shed. His horses thus had good air and his

improvised stable was by no means so warm as the regular ones. We then went out to see two of his horses jump in the shute. Here about the middle of the shute he had all sorts of jumps that could be arranged so that the horse would never have to jump the same thing or combination of things twice; would never know what it was going to jump until it got to it and therefore would always be on the *qui vive* in making its jump. The Lieut. Colonel said that he never made the horses jump more than once or twice a day and thus they never became disgusted. Today the horses jumped over a couple of gates and a bar about four and a half to five feet high and about three feet apart. They were saddled with the stirrups brought well up to the top of the straps. The reins ran back to the stirrups and were caught up by the throat latch, thus there was no danger of their getting caught when the horse was running and jumping free.

After this we returned to the riding hall where the lieutenants of the regiment were put through an exhibition drill in preparation for the inspection by the Kaiser of their work with the chargers, which takes place next Saturday. A lot of soldiers with overcoats and helmets were brought into the riding hall and stood about to represent various generals and staff officers that will accompany the Kaiser on his inspection. For the first time I was given a definition of a charger. This in Germany means a troop horse, that is a government horse, which has been selected and assigned to a lieutenant for his use. He must train his horse and use it, and after four years service it becomes his property, and then he may do with it as he likes. Inspections are held annually for the purposes of seeing that he properly trains and uses his charger. The regimental commander instructs his lieutenants and the drill that I saw was a rehersal of what will be done before the Kaiser. The horses were perfectly turned out, were well groomed and very well set up, the equipment clean and handsome. The drill lasted for nearly an hour and consisted in excellent track work, the haltings, moving at the balanced trot, the middle trot, the fast trot, turning on the haunches, backing, two track work, the canter, the middle gallop and the gallop, changing leads, galloping false, jumping a four-foot pile of railroad ties

(this by the way is the usual way of making a good jump that is used, it seems, quite generally in Germany), jumping a hurdle and ditch and taking an in and out jump of two hurdles placed very close together, so that the horses could only land once between the hurdles and had to at once jump the second. Some of the jumping was done towards the end of the ride and a few of the horses struck, some fell, one threw its rider over its head. His foot stuck in the stirrup, the leather catching in front of the pommel, and when his horse rose, the officer was between the horses forelegs, his head to the rear and his foot still hanging from the stirrup. The lieutenant colonel then got on his horse and rode it over the same hurdle without trouble. After the work on the track, the section was formed on one end of the hall and four of the officers had to ride out to the other end of the hall, where they rode individually in circles, halting, backing, turning on the haunches, changing lead, about a stand on which were three rings placed on swinging arms and standing, about which were four soldiers with lances, who had placed heads and plates of straw in a circle in radius of about twenty or thirty feet in the stand. At a signal the soldiers stepped to the circle at the ends of perpendicular diameters and the lieutenants rode by and caught the lances as they were thrown up by the soldiers. The officers first brandished the lances, then picked up the heads and plates while constantly moving at a canter, and each in turn took a ring on his lance, all of them constantly moving at the canter. After taking the ring they returned to the other end of the hall by taking a hurdle and spearing a manikin lying on the ground on the far side of the hurdle. As they reformed their lances were caught by some orderlies standing in rear of the section. The same thing was repeated by the rest of the officers four at a time. All of this work showed an excellent degree of training. There was constant movement and no pause in passing from one exercise to another.

The young officers certainly earn their horses, and something of the kind might well be adapted for our service as one of the solutions of the horse question. In this way the government gets full return for its money. It is the cheapest way of providing a horse for the young officer, and it would have a

good effect in every way upon both officers and soldiers because the latter observe the work that is done by the young officers. This is supposing that a fixed policy could be carried out in our country and commanders trained as inspectors. Chargers are furnished only to subalterns in the cavalry. Captains and officers of higher grades must supply their own mounts.

The officer commanding the regiment is a Fleugeladjudant of the Kaiser and one of the best cavalry officers in Germany. He can well be proud of the excellent instruction of his regiment. Yesterday he did fourteen hours work. He gets up at 5 o'clock every morning. He rides five of his own horses, and keeps them in order, and they are all of them prize winners. He instructs his lieutenants in horsemanship and he spends most of the morning, in fact most of the day in out door work, and does the necessary paper work, of which there is a great deal, in the afternoons and evenings.

DUTIES OF CAVALRY WHEN IN THE ADVANCE.

(*Avant-postes de Cavalerie Légère.*)

Drawn from DeBrack's "Cavalry Outpost Duties" as translated by Major C. C. CARR, Eighth Cavalry and published by John Wiley & Sons, 1893.

IN the opinion of many, DeBrack's work remains the best cavalry book ever written. It contains much common sense information not obtainable elsewhere. Originally published in 1831, the book is "as true, as good and as useful as on the day of its first publication."

The translation made by Major, afterwards General Carr, was issued by the War Department to every troop of cavalry in the service in 1893. It is a pity this action could not be repeated now.

The following extracts are from Carr's translation, omitting for the sake of brevity, DeBrack's division into questions and answers.

JAMES PARKER,
Brigadier General.

WAR ALONE TEACHES WAR.

War multiplies situations, and almost instantaneously and in an unexpected manner. Especially for light cavalry, it presents the same events under a thousand aspects.

One must be born a light cavalryman. No other position requires so much natural apitude, such innate genius for war, as that of an officer of that arm. The qualities that make the superior man—*intelligence*, *will*, *force*—should be found united in him.

A habit of judging the health of men and horses, an acquaintance with the ready remedies applicable in certain cases, a daily and scrupulous inspection of the trappings, knowledge of the repairs that should be made, inspection of the equipments and of the repairs of which they need, supplying all that may be useful to man and beast without overloading the horses, packing well understood, regularity of gaits in the column on the march, good position of the bivouacs, continuous watchfulness in them of all that may affect the health of the horses, the art of eating and sleeping seasonably, a constant superintendence which will prevent the useless waste of the horses' strength, to set a personal example in every situation—all the more carefully as the conditions become more toilsome and difficult—to inspire the troops with entire confidence, devotion and enthusiasm—those are what the theoretical instructions of peace time do not teach; those are what joined to courage, the military camp *coup d'oeil*, to promptness of judgment on the field of battle, make the truly distinguished officer.

From the sense of proprietorship in the trooper's horse result the most useful and commendable effects; in time of war it is entire; nothing may offend or attack it. The trooper is the only master of what has been intrusted to him on his departure from the garrison. His horse and arms make a part of himself. Only death or an offense entailing a disgraceful punishment can deprive him of their possession.

Nowhere so much as in the light cavalry does one recognize the complete application of this saying: "Promptness is genius."

THE CHIEF IN CAMPAIGN.

The first qualities required of a chief of light cavalry on the day of battle are clear perception, and cool, mathematical estimation of his own strength and that of the enemy; quickness of decision and action, the dash which carries all before it; the firmness which despairs of nothing and retrieves the most desperate situation; the calmness which never changes countenance, and causes his subordinates to see only with his eyes.

Before the attack the chief should make an inspection of his regiment, riding from right to left at a distance of four paces from the line; should speak a few words to the officers and soldiers to cheer and encourage them, make an opportunity of calling the men by their names, and thus prove to them that he neither does nor will lose sight of them.

During an engagement at the moment of greatest danger, the chief ought to calmly single out the bravest of his men. After the battle he should not rest until he has rewarded them.

Under any circumstances never censure any one but the chief, for he is responsible for everything; to act otherwise would be to insult the command and commit an injustice. If a trooper is badly dressed, punish his captain; if poorly instructed, punish the instructor; if he is ignorant of what he should do at such and such a post, punish the chief of that post. Impulsion goes from the head, therefore it is the head that must be punished.

THE USE OF ARMS IN WAR.

The saber is the weapon in which you should repose the greatest confidence, for very rarely indeed will it, by breaking in your hand, fail to render good service. Its strokes are sure in proportion to the coolness with which you direct them, and control your weapon. Thrust! thrust! as often as you can. It is the points alone that kill; the others serve only to wound. You will overthrow all whom you touch, and demoralize those who escape your attack, and will add to those advantages that of being always at a parry and never uncovered.

In the first wars in Spain, French dragoons made, with their points, a reputation which demoralized the English and Spanish troops.

In war one should not attempt to use all the movements prescribed in the regulations. As a general rule never attempt to attack an enemy except when he is in front of you or at your side; whenever he gets in your rear parry with rapid moulinets.

The rules to be observed in making thrusts are:

1. Make sure of the hand;

2. Make good choice of the point of attack, the flank being most vulnerable;

3. If the attack be made at a higher point, hold the saber sidewise, so that it may penetrate between the ribs;

4. Drive the point home, and instantly draw back the elbow, especially if the adversary faces you. I have frequently seen troopers sprain the wrist and become disabled for a whole campaign through having made a thrust unskilfuly.

DISCIPLINE.

Discipline is the soul of armies. Without discipline there can be no army. The main spring of discipine in war is honor. Discipline is stimulated by praise and blame. If they do not suffice, then punishments, more severe than those inflicted in peace, must be imposed, for the reason that offenses committed in war differ from those that may be committed in garrison.

As a disciplinary force, rewards are much more powerful than punishments. The more prolonged the war is the more this force increases; because, hard service having relieved you first of the bad soldiers who take advantage of any pretext to leave, then of the mediocrities of no force, there will remain only the flower of your ranks, whom honor will control better than fear.

A complimentary word spoken in front of the regiment; marks of esteem, repeated as often as occasion offers; the choice of a confidential mission offering a chance for gaining distinction, approbation expressed in regimental orders; should a worthy soldier be dismounted, give to him instead of to any other a spare horse; the day of a review call this man out of the ranks and present him to the general; promotion; nomination for admission into the Legion of Honor.

Shirking is the one vice to be punished before all others; as soon as it shows itself smash it as you would a glass.

GUIDES.

Guides should be employed whenever one is not acquainted with the country in which he is operating, and especially when it is possible to mount the guides, so that the rate of travel will not be reduced to that of a pedestrian. So long as guides are familiar with the country they should be retained while the expedition lasts, especially if it is a delicate one. If, on an important expedition, your guide finds himself in a country which he does not know, take another, but keep the first one

until the end of the expedition, so that he may not betray the object of the march.

The strictness of the precautions which should be taken with a guide depends upon the greater or less importance of the expedition. The guide employed either in peace or war, for work in rear of the lines of operations, should be allowed to march freely, and at the head of your column. The guide who leads a reconnaissance should march near the commanding officer, under the special guard of a sergeant and a corporal of cavalry, who will watch him constantly. It must not be forgotten that, in a hostile country, especially, a guide will always try to escape from you if he can do so easily and without danger.

If the guide is dismounted, fasten to his left arm a long rope, the other end of which should be attached to the pommel of the corporal's saddle; the segeant, pistol in hand, marches by his side. If the guide is mounted, fasten one of his legs to the stirrup leather, so that in difficult ground he can not leap from the saddle and escape; then give his bridle rein to the corporal, who marches on his left and leads him thus while the expedition lasts. Should the face of the guide suddenly show excitement, warn him that if he proves treacherous he will be instantly shot. If it is feared that he is leading the command into an ambush, impress upon him the fact that in marching at the head of the column, if it should be attacked, he would be the first one to be killed.

Two men are necessary to guard a guide because the country traversed will often be difficult, and in marching in single file the guide should be both preceded and followed. Generally the guide should not be allowed to march on a path running beside the road traveled by the column, but he should be compelled to march with the column, especially if the country is broken, or the road leads along the edge of woods, ravines, large ditches, etc.

The charge of the guide should be entrusted to only the most intelligent non-commissioned officer, who must constantly observe the countenance of the guide. No one should be allowed to question the guide or answer his questions except those who are especially selected to communicate with him. These

should be selected from those best acquainted with the language of the country, and known to be discreet.

A guide should not be questioned in the presence of a detachment, but privately and very slowly, while keeping him under the closest scrutiny. If he does not fully understand the questions addressed to him, be patient, and change them so as to receive answers which will be of some use. A guide should be treated very kindly. Let him want for nothing; and if, on your return, you are satisfied with him, and can do him a service, or pay him, do not neglect to do so.

Often in the enemy's country, peasants, in order to avoid serving as guides, deny all knowledge of the roads. Be not deceived by this lying, but frighten and take along with you these pretended ignoramuses, and hold them until more useful guides can be procured.

SPIES.

Spies are employed by an officer of the advance guard, but, unfortunately, not as often as he should, for want of money with which to pay them suitably, and because, in a hostile country especially, a poorly paid spy whom you employ may become one acting for the enemy, as all his interests combine to induce him to betray you.

The employment of spies and the amount of confidence to be placed in them should be governed by the nature of the country in which you are operating, the interest the inhabitants have in serving you, and the opinion they entertain of your strength.

Great care and ingenuity must be exercised in making use of spies, otherwise it may happen that your secrets will be promptly disclosed to the enemy. When one is in a critical situation, the return of a spy should be attended with the same precautions observed in receiving a returning reconnaissance; for he may be immediately followed by the enemy, and bring on an attack as much more dangerous as it would be more intelligently and certainly made.

The first comer should not be employed in this business. Try first to become acquainted with the family of the one offering himself, his surroundings, and through them, his character;

what intercousre he may have with the enemy; after which endeavor to induce him to interest himself in our cause by good treatment, presents, pleasing prospects, and by impressing him with a belief in the certan success of our army. He should also be made to understand, without threatening him, however, that any treachery on his part will be revenged on his family, property, etc.

Before being sent on important and dangerous missions a spy should be first entrusted with trifling ones, and upon his return, promplty and exactly fufil every promise made him. When he has proved himself trustworthy and devoted in these small undertakings, he may be employed in more important ones.

When it is desired to make several investigations in regard to the enemy, it is not well to entrust them all to one spy. You should first clearly appreciate the degree of intelligence possessed by the men to whom you entrust a mission; if it is limited, the duty required of him should be restricted.

Again, it is dangerous to trust your entire business to any one man. It would be better, all things considered, to employ several spies whom you send out at different times, in different directions, so that there can be no communication between them.

A spy whom you distrust should not always be stopped. It is better to send him on a false mission, which will lead him to suspect the arrival of a large reinforcement at a point threatening the enemy, and the immediate execution of a strategical maneuver, which must compromise the enemy in the position occupied by him.

For a false mission written instructions may be given to a spy; and, in this case you write them in such a way that, falling into the hands of the enemy, his reading them will further your plans.

Only verbal instructions are given for a true mission.

As far as possible spies should be selected from those whom the enemy has the least reason to distrust; postmasters, postilions, drivers of public conveyances, and merchants, well known in the country may be useful, because they will naturally be

less open to suspicion than men, who, in case of arrest, could not justify their actions, or be vouched for by any one.

Spies sent by the enemy may be recognized by their way of looking about them; by the attention paid to everything passing in the bivouac; by the frivolous pretexts upon which they try to enter it; by their emotion if you try to halt them; by the vagueness of their answers when questioned; particularly if they think you recognize them; often by the money which they foolishly carry with them; and, finally, by the haste displayed in destroying any instruction they may be carrying upon their persons.

Any man suspected of being a spy should immediately be arrested and subjected to several cross examinations, severe and contradictory, to see whether he trips in his answers. Then send him under a strong guard with a report containing examination and your opinion in regard to the man to the commander of the advance guard.

QUESTIONS TO BE ASKED.

Too much care cannot be exercised in asking questions, for in many cases the answers they provoke may produce consequences. To learn everything, to separate the true from the false, the important from the useless, is a military talent—one of the most valuable an officer of the advance guard can possess.

The first thing to be done in conducting an examination is to judge correctly the moral characteristics of the man with whom you have to deal, because it determines the nature, form and style of the questions to be addressed to him.

The degree of intelligence he possesses should also be considered. This will assist in shaping the questions so as to bring out the most important information.

Generally the interrogation should begin in an easy manner, but so as to inspire the subject with the feeling that we are not to be deceived. Of course if we are operating in our own country the examination should not be conducted as though we were among enemies, and even if made in a hostile country distinction must still be made between such and such countries, such and such classes of individuals, according as they are more or less friendly to us.

In our examination we must not forget that what we have asked or said may be repeated, and carefully consider the impression, favorable or otherwise, it may produce in regard to our interests.

Often an unskilled examination has produced a very different effect from what was expected; the examiner having been placed, without suspecting it, upon the "culprit's stool," and his interrogations proving fatal to himself, because, having been repeated to the enemy, they served to reveal his plans and permit them to be thwarted.

On arriving in a village the first person to examine should be the mayor, or the one exercising his functions, the postmaster, the *curé* or pastor, the schoolmaster, the principal proprietor, and men known to have been employed as guides for the enemy.

Series of questions to be asked, always considering the intelligence of the person examined:

Where is the enemy?

What do you know about his march and military dispositions? Of his numerical force and morale? Has he infantry, cavalry and artillery?

What numbers, what uniforms, do the cavalry and infantry wear?

Are the horses thin, the men fatigued?

What language do the men speak?

Whence do they say they come?

Do they belong to the militia or the line?

Does the enemy bivouac or sleep in houses?

How does the enemy perform guard duty?

Does he make reconnaissances? Do these reconnaissances extend to this village? How have they appeared here? Were they in large numbers? What did they do? What did they say? Did they pillage? Were they insolent? How were the men dressed?

By what road did they come? By what did they return?

What enquiries did they make? Where did they go on leaving the village?

Where did they pass the night? How did they establish themselves?

Is the enemy near by? Does he send out regular reconnaissances?

Do they arrive at the same hour every day, in the same force and by the same roads?

How is the road leading towards the enemy? Are there any woods, ravines, bridges, villages, along the road? Where are they situated?

Can one reach these defiles by a detour? And, without passing over the road held by the enemy?

Is the enemy watchful? Does he guard himself well? Has he seized horses from the postmaster? Has he used the postilions or other men from the villages as guides? Where has he made them take him? What questions did he ask the guide? Has he abused them? Has he appeared to be uneasy and depressed?

What precautions did he take on the march?

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Questions relating to the topographical features of the places passed through, which may precede or entirely replace those just given, according to the position in which one finds himself and the orders he has received.

Where is such a city, town or village? What is the population, the extent of its resources?

How far is it from such a place, and how far from the place we are now?

How long would it take to walk there? Are the roads leading to it wide, good, metalled or paved? Are there any intermediate village, hamlets, farms?

Are they rich? How many families? In going there will one have to traverse woods, plains, rivers? Are there any fords, bridges? Of what kind are they?

Can one mistake the road? Which is the one to take? Are there any mountains? What kind of roads ascend them?

People questioned should be examined separately. Pay the greatest attention to their respective answers; if they appear to disagree, sift them thoroughly, with the greatest care and ingenuity possible, and if you have any suspicions, based upon

their falsity. arrest those who have made them and take them away with you under guard.

A deserter should be asked the number or name of his regiment; to what brigade it belongs, the name of the general commanding it; to what division it belongs and the name of the division commander, and where his headquarters are.

If the regiment, brigade or division is in camp, in cantonments, or bivouac.

If the corps is in position, ask whether it is protected by numerous outposts, whether it is strictly guarded, and, finally, whether it is entrenched; what army corps or divisions are on its right and left, and their distance apart.

When he left his regiment, brigade or division; whether detachments have been made from the corps; whether reinforcements are expected; whether orders have been given to make a movement soon; or any preparations made which would denote an advance.

What did the last order of the day contain?

What rumors are in circulation in the army?

Are provisions abundant? Where are the magazines, depots, intermediate depots?

Are there many sick? Where is the hospital? The field hospital?

If the deserter arrives in camp while his corps is moving, he must be asked:

What direction did the column take? Was its movement isolated or combined? How far was the column ordered to advance? Did the column consist of only one arm, or was it mixed troops?

If the deserter is from the cavalry:

How many horses in the regiment? How many had you at the beginning of the campaign? Are the horses in good condition? Are there many new ones?

Are there many recruits or young soldiers? (This last question is asked, because, as light cavalry allows no opportunity of injuring the enemy to pass, it should never neglect to attack any body of cavalry largely made up of recruits mounted on new horses.)

Are there many sick or disabled horses?

Is forage abundant? Can the country occupied furnish what is required, or does it have to be hauled from the base of the army? Does it arrive promptly?

Are foraging parties sent out? Do they have to go far?

Where are the magazines? How are they guarded?

Are the men abused by their officers?

Have there been many mutinies in the regiment? Would there be many desertions in case of our success?

What precautions are taken to prevent desertions?

Are the hospitals at some distance from the army?

Were many lost in the last affair?

Have the soldiers been demoralized by their losses?

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In addition to the preceding, an artillery soldier should be asked:

Where is the grand park? Is there any siege artillery? Where are the depots? Where is the corps park?

How many pieces has the division to which you belong?

What kind and caliber of guns? Are the caissons and limbers well filled?

What is the number of your regiment, company, battery?

Is there a bridge train? Are the draught horses in good condition?

A detailed report of the interrogatory should be sent to the general commanding the advance guard, adding thereto your own opinion in regard to the degree of confidence to be reposed in the statements of the prisoner or deserter.

Ask travelers:

1. For their passports and their names.

2. Where they come from and where they are going.

3. Whether they have met troops marching, their kind and about their number. (As to the strength of the column, one could himself estimate it better by asking the traveler how long it took him to walk along its length.)

4. How many hostile troops in the places they halted in or passed through.

5. Whether there were many sick; whether the troops were in good condition; whether they expected any recruits.

6. Whether the villages along their route were filled with troops; whether the enemy's outposts were close together.

7. Whether behind the advance line there were any cavalry or artillery to support it, and on which it could fall back in case of a retreat; finally, the distance, approximately, between the advanced chain and the supporting troops.

8. How are the roads, the bridges? If the enemy is engaged in repairing them; if he is fortifying or has already fortified any of the places through which they have passed.

9. Whether supplies are scarce, or dear in the country occupied by the enemy; whether the country has suffered; whether it has preserved its cattle; whether the enemy has not gathered them up.

10. What public rumors do the papers contain? What was the last paper read? What news did it give?

PRECAUTIONS TO BE TAKEN BY AN ISOLATED DETACHMENT IN CAMPING IN AN ENEMY'S COUNTRY.

To select a bivouac is to take up a military position. To sleep in it, to find one's self mounted in it after having rested and refreshed, prepared to undertake anything when the enemy advanced to the attack, is to know one's enemy thoroughly—to know him by heart. To oppose rested and refreshed troops to soldiers weakened and dispirited by privations and fatigues, is to possess the advantage over them and to have all the chances of success in one's favor. If you add to this talent—the fruit of innate aptness and of a sound experience—the dash which achieves and drives home a success, you are a remarkably well-equipped officer for advance-guard duty.

The first requisite of a good bivouac is its military position; its difficulty of access for the enemy; its facility of our exit from it. The second is the convenience of its location, and an abundance of supplies.

After having chosen the ground, form the squadrons in line facing the enemy, and in the order in which you wish them to be placed; then, set out yourself, mounted to reconnoiter

the position, leaving orders with the officer who replaces you in command of the regiment or detachment, to dismount the command and send out foraging parties as soon as he perceives that the outpost has halted upon the ground which it is to occupy. This signal having been given, the troops dismount, unbridle and fasten their horses.

FORAGE AND SUBSISTENCE.

In war it is necessary above all things that the few hours allowed the trooper for feeding his horse should be solely employed for that purpose; for the strength of the horse depends upon his proper nourishment, and upon that strength depend the proper performance of our duties and all our hopes of attaining distinction.

In war one cannot always choose the forage for his horse, but nevertheless there are certain precautions which may always be taken to guide in the selection or improve the quality of it. For instance it is better to feed green grass than new hay. The well grown grass from a meadow is the best, and rye grass is the next in order, as regards ease of digestion, but it contains less nutriment than alfalfa or clover. If you can obtain nothing but clover be careful in its use.

If no grass can be obtained the leaves of certain trees may take the place of it.

When possible to procure grass that has not been wet, take it in preference to that on which the rain has fallen. Should it rain upon the bivouac, pile the cut grass in heaps, and when the rain has ceased, use first that which has been kept dry.

If nothing but new hay can be obtained, choose that which has been most thoroughly aired, and is consequently the driest; feed only a little of it at a time, and after having moistened it slightly with salted water, if possible—which will prevent the generation of gas in the horse's stomach.

The hay usually found in barns is new; feed it only in small quantities.

Horses suffering from fatigue seldom have good appetites. If too much forage be placed before them at one time they will become disgusted and refuse to eat. Be careful then to give them their forage in small portions only. This precaution

is equally important in the contrary case of gross feeders If their forage is given them in large portions they will be likely to suffer from indigestion and even founder.

Should you find a field of growing oats, reap them, and thresh them upon a piece of smooth ground or upon a cloak. Then collect the grain and winnow it by shaking it and tossing it up in a current of air. This operation, repeated several times, will cleanse it thoroughly, and enable you to feed it without fear of the rough and pointed husks sticking in the horse's throat to make him cough and otherwise distressing him.

To prevent your horse losing his grain, put it into a nosebag and let him eat out of that.

As a rule horses should not be allowed to drink while warm; nevertheless if on the march, and they should become thirsty, when a stream is reached the commander should order them to be watered, but without the troopers dismounting or unbridling. The time thus lost may be regained by increasing the gait.

The distinction between "going foraging" and "going on a foraging expedition" is that the former is simply to seek for forage and subsistence in the vicinity of the bivouac, or close to the column, halted by the commander for that purpose. "Going on a foraging expedition" expresses quite a different thing. A body of troops having exhausted the resources of their bivouac or cantonments, they are obliged to seek at a distance, that which is no longer near by, and a foraging expedition is ordered. Numerous detachments of all arms are assembled and started out. On arriving at the designated place the cavalry is charged with performing the outpost duty. It posts vedettes and grand guards; it even drives back the enemy, if necessary, while the remainder of the troops seize the supplies contained in the village, load them upon the wagons, and take them to the camp, where a regular distribution is made.

The best method of foraging in a village is to assemble the authorities of the place at once, and make a requisition upon them. If the peasants fill the requisitions promptly everything is done regularly, nothing is wasted, and you have, in addition, your men all together, and in condition to meet an attack.

If there be no village, and object of the expedition is merely to bring in a supply of grass for the horses, the mowers, protected

by our chain of vedettes, make the grass up into trusses, tied securely with forage cords, fasten them securely upon their horses, and return to camp in an orderly manner. The supporting troops then perform the duties prescribed for the escorts of convoys.

A truss consists of two large bundles of long forage, of equal weight, held together by a cord passing over the back of the horse, so that one hanging on each side of him they will balance each other. On arrving at the bivouac the forage is all delivered at one place and thence distributed.

If the enemy attack the foraging party, it must be vigorously defended. The mowers abandon their work, mount their horses, and go to the assistance of their comrades. In case the trusses are already made, all, or a part of the troopers engaged in mowing, throw down their trusses and join the supporting troops. If the enemy be repulsed, the trusses are picked up again; but should we be outnumbered, although the trusses may be lost, the men will be saved.

All the troopers detailed on the foraging party, even the mowers, go armed. *As a general rule*, there is no duty to be performed in war which will permit the wearing of arms to be dispensed with. Whenever a trooper is mounted he should be fully armed, and leave nothing which he may have to return for.

OUTPOSTS, PICKETS, VEDETTES, PATROLS.

When infantry and cavalry bivouac together, the former furnish the sentinels, the latter the patrols.

If a partisan, harrassed and in danger, has retreated, and barricaded himself at a farm, from the tops of whose buildings he can see to a great distance, he posts no vedettes, but patrols the surrounding country. Good patrols, conducted intelligently, are generally much more efficient than vedettes. For the reason that the nature of the duty admits of no sleeping; it compels men to display all their resources of intelligence and courage; and the exploration of the country is made more thoroughly and to a greater distance.

The patrol should march without noise of any kind; carry on no conversation; keep the horses on the dirt roads, so that

no noise will be made by their shoes striking the stones of paved roads. In daytime the men must move along under cover of hedges, walls, sunken roads, and ravines. They must conceal themselves in woods and make their observations through openings. At night they must endeavor to see even in the darkness; halt frequently, follow sunken roads, and refrain from smoking, so as not to light up their faces. If the enemy is encountered they must not fire, but conceal themselves and one of the patrol must be sent, if possible without risk of discovery, to warn the outpost. The men of a cavalry patrol must not march side by side, but one behind the other, and far enough apart to enable them to see well, to afford protection to one another, and, in case of falling into an ambuscade, to prevent the whole patrol being cut off and captured at once.

The routes which patrols travel may be, relatively to our chain of outguards, either interior or exterior. In the latter case greater vigilance must be exercised, because the danger is greater. The exterior patrols should consider themselves flying vedettes who have the advantage of being able to reconnoiter everything which arouses their suspicions; of marching, halting, concealing themselves as long as they may think necessary. It is often useful to send patrols of one or two men to distant points, where they may remain in observation several hours at a time.

A patrol which has ventured too far, and which a hostile post challenges, must be careful not to reply, if they do not speak the enemy's language, or if, before going out they have not learned a few words of the language which, spoken in answer to the challange, may suspend the examination, and give them time to turn about without danger, and gain some ground to the rear.

If the enemy is advancing upon our outposts and is likely to arrive there before they are warned of his coming, the patrol should discharge their carbines and return skirmishing, by the road on which they went out.

A trooper on patrol may sometimes be surprised in spite of the greatest vigilance, especially if he has to traverse a broken and wooded country. He should halt frequently, and carefully watch his horse's ears. The direction in which they point may

give him valuable information. It is an indication he cannot afford to despise, as it is instinctive; and if the horse persists in his action, especially to the point of being frightened, the cause of it should be discovered, if possible.

Two patrols meeting outside of the chain of outposts, should recognize each other, if possible, without challenging, especially if the enemy is known to be in the vicinity. When patrols are sent out, the outposts should be informed in regard to their numbers, uniforms, etc., so that there may be no doubt or hestitation about admitting them when they return to their own lines.

THE MARCH OF A DETACHMENT.

At a distance from the enemy, when the column is en route, the commander, after having formed his advance and rear guard, starts the command on the road it is to follow. Then he halts to count his men, to make the inspection of which I have just spoken; assures himself that the officers and non-commissioned officers are in their proper places and attentive to their duties; that no one remains behind, that none of the horses are lame, that they are not wasting their strength uselessly, that the rear guard maintains its proper distance and brings up all the stragglers. After having marched some time in rear to see for himself that everything is as it should be, he takes his place at the head of the detachment. If marching over an undulating country, he halts at the top of every hill and looks back to judge of the regularity of the march. If the gait at head of column is too rapid he decreases it; if too slow, increases it. It is better to have it too rapid than too slow.

MORALE—MORAL EFFECT.

Morale is the instructive feeling of strength or weakness; that which at the very outset produces either confidence or terror. Surprise exercises the most unfovarable influence upon morale, which is modified by the greater or less firmness of mind with which it is encountered.

When this feeling takes the form of terror it produces, first, a complete paralysis of the moral and physical faculties, then hestitation, then a desire for self-preservation.

The morale, in its double sense, is never equally shown by two bodies of troops opposed to each other; one is always confident, the other timid, and the timidity of the one is exactly proportional to the confidence of the other.

Having the advantage of possessing the *morale* is three-fourths of the power of cavalry. Remember that, and always act vigorously and rapidly upon the terrain. In this way all hesitation will be made to disappear, and dangerous equilibrium will be destroyed, and your success will, in every case, by its weight bear down the balance in your favor.

This morale is often within the control of the chief, when he is what he should be; that is to say, when he possesses that entire and intimate confidence of his troops which gives him the right to see, think and act for them.

Should a night attack surprise us in our bivouacs, when the disorder has reached its height, let the commander's voice cry out, "Rally on me, Right Dress, Ready." This voice, recognized and obeyed, stops short confusion, removes all fear, and leads to the repulse of the enemy.

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The circulation of favorable news through the ranks should be allowed and its diffusion may even be promoted. Nevertheless, in certain cases, when it seems to you to be doubtful, you should comment upon it cooly and publicly, in order that the effects produced later by the discovery of its falsity may be less disastrous.

If bad news is circulated, send for the one who brought it, and question him closely. If you discover that he has circulated it maliciously, make an example of the scoundrel. If he is simply thoughtless, reprimand him sharply, and send him to the rear at the first opportunity.

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PRISONERS — DESERTERS.

So long as a man bears his arms he cannot be considered a prisoner. As soon as he throws them down, he belongs to you, and has a right to your protection, which should be as complete

and friendly as possible. To maltreat a prisoner is unpardonable cowardice. You should do him as you would wish to be done by under similar circumstances.

A captured trooper should be ordered to throw down his arms, then seize the reins of his horse, and lead him promptly to the rear of the battlefield, to present him immediately to the colonel. There the prisoner dismounts, is questioned by the commanding officer, then joined to the others taken in the affair, and sent under proper escort to the infantry.

A trooper may not honorably surrender so long as he is mounted, even if severely wounded. A mounted man should be able to go everywhere.

SURPRISES AND AMBUSCADES.

To surprise an enemy requires a combination of skill and dash.

The effect of a surprise is demoralization.

Outpost warfare is a succession of surprises.

An officer who, with inferior forces, frequently surprises his enemy, is sure of speedily ruining him.

Although the word *surprise* comprehends almost every offensive operation pertaining to outpost duty, we shall include under this title only that which is generally agreed to designate by that name.

A surprise is an unexpected attack. It is usually preceded by a rapid march or an ambush. It can not be too sudden or too determined.

An ambush consists of troops placed in a concealed position. The best is one which the enemy is least likely to suspect or discover. The less time required for pouncing upon the enemy, the better, but there are cases in which it would have to to be prepared at some distance from his route. For example, where it is desired to attack the rear or center of an enemy's convoy passing through a defile. It is probable that before traversing this dangerous place the enemy would scout its approaches; but when he has been marching for along time it is unlikely that his exploration will extend to a very great distance. In such cases the ambush should be laid well beyond the ground covered by his scouts.

Remember that troops in ambush are always in the air, in a critical position; that they are risking everything for the sake of success. A detachment of fifty men which, well directed, might have thrown into confusion a column ten times its strength and made a very important and decisive diversion, is, if discovered, lost. The place selected for an ambush should always be, so to speak, a fortification to be closed at our pleasure on the side toward the enemy, and open on the line of retreat. The ground which separates it from the enemy should be favorable for movements at the gallop, that to the rear well reconnoitered, and calculated for the front of the troops in case of a check.

Night is the most favorable time for arranging ambuscades, but it is not the only thing that favors such an operation. The weather is to be taken into consideration, and cold, snow, rain, or a high wind would be of great assistance.

In a night surprise, as a matter of precaution, the commander should wear, and make his men wear, something by which they can recognize one another, such as a white handkerchief, a small branch, etc. This sign should be visible in the darkest night. By taking this precaution, all the more useful if the enemy wears a dark uniform and of the same cut as ours, our troops will avoid sabering one another. That done, the chief explains, not only to the officers, but to the men, the plan of attack, and designates two routes of retreat; one by the road leading directly from the enemy to our army, on which his outposts will be posted, which are to be sabered and captured in passing; the other, the road by which the troops have marched to their present position. In addition, he agrees upon four trumpet signals, the shortest and the ones to which the men are most accustomed.

The first will mean, take no prisoners.

The second, make prisoners.

The third, retire by the direct road.

Fourth, retire by the road you came on.

At the last two signals the signs used for recognition will disappear; the troops will retreat quickly and assemble at the outlet of the village.

A surprise has always one special object, that of terrifying the enemy, destroying him, or both at the same time. If the surprise is effected by a small party and its object is to terrify the enemy, it should use its pistols, and its attack should be sudden. The men should shout, gallop about, make no prisoners, and retreat rapidly. If, on the contrary, the surprise is made by a large force, well supported, and it wishes to capture the enemy, it should move silently, maneuver, sieze, in regular order, the important points, such as the barrack or lodging of the colonel, the outlets of the village, bivouac, etc., and carry off at once the horses and the guards.

If the attack fails, withdraw the detachment quickly and without halting. Leave the best mounted men for a rear guard, and move them on a false route to throw off the right track those who may follow. These troopers should keep up a steady fire to conceal the noise made by the marching of the detachment, and when they think that their ruse has succeeded, and that those they are covering are out of danger, they will make a detour and rejoin the detachment.

If the enemy's bivouac has been well selected and entrance to it is difficult, special means for surprising it will have to be adopted. The principal thing to be done is to get the enemy on to ground less favorable to him than that he occupies. To do that, divide your force into two parts of unequal strength, place the stronger in concealment, and send the other to skirmish with the enemy's outposts. If this succeeds in drawing him out of his bivouac, he must be vigorously charged by the troops forming the ambuscade.

PRECAUTIONS TO PREVENT SURPRISE.

It is indispensable for an officer of the advance guard, who establishes himself in a bivouac and fears that the enemy may attempt to surprise him, to take certain precautions at the very moment of installing himself. The following are especially necessary if his force is small and distant from supports:

He should select a sheltered bivouac fortified, so to speak, by a ditch, fence, barricades, etc., so as not to be approached at a gallop, or attacked unexpectedly.

Moveable barricades should close all the approaches to the bivouac which are not naturally defended, and should be so placed as not to be discovered or carried away by the enemy.

The bivouac should be as much concentrated as possible.

Orders should be given that, in case of attack, the men are not to run to the horses but to defend themselves on foot.

Assign to each man the post he is to take at the first shot. Put out the fires or light them in a false position.

Keep a part of the horses bridled, and many of the men awake. Let every trooper have his bridle on his arm, his cartridge box on his person, and his carbine in his hand.

If the bivouac is in a farm house, close it, and the instant the attack begins, make a few of the men bridle the horses while the others fire through the windows, until the defences are about to be forced; then mount the whole command and execute a combined and vigorous sortie.

Should the bivouac be in an open plain and entirely unprotected, so arrange matters as to mount and assemble in the least possible time.

Should the enemy surprise a few isolated men, they should keep cool, not run to their horses, but grapple with the enemy hand to hand, fire on him at point blank range, point him, hamstring his horses, stoop down, get behind obstacles, such as a ditch, a tree, a post, etc., and make no prisoners. A dismounted man who preserves his coolness is not likely to suffer at the hands of a trooper who attacks him at night.

Night surprises are, as a general thing, more terrifying than dangerous. Eight times in nine their success depends on the moral effect produced. Meet them with great steadiness and coolness. Silence and steadiness on the part of the attacked often terrify the attacker so that the tables are turned, the moral effect reversed, and the attacker compelled to ingloriously retreat.

FLAGS OF TRUCE.

Officers and non-commssioned officers bearing a flag of truce are sometimes, through their own fault, sabered by the enemy. To avoid this danger, the nature and rights of this kind of duty should be throughly understood.

As the flag-bearer always has to present himself at the front line, that is to say to the men most excited by the conflict, whose agitation and exaltation harmonize but little with his cool and often provoking action, he must, in some way, see how matters stand before endangering his safety. This is the more necessary because the enemy often gives orders forbidding flags to be received, and he might very properly be made a prisoner of war.

The flag-bearer should therefor be chosen from among the officers or non-commissioned officers most accustomed to outpost duty, and having the most thorough acquaintance with the peculiarities of the enemy with whom he has to deal. He should be well mounted, and be preceded by a trumpeter as well mounted as himself, so that, if attacked after they have gone forward, they may be able to retire promptly.

Before sending out a flag, the commander of the advance party will stop the firing, "advance carbines," and halt the skirmishers. The flag-bearer will choose for his advance from the line the most conspicious place; one which, if possible, will be opposite to the commander of the enemy's skirmishers. He will thus be more quickly seen, and be sooner placed in communication with this officer who, understanding his object, will remove the dangers which might threaten him. The flag-bearer will move out in front of his own skirmish line at a walk. His deliberation will distinguish him from the combatants. He will cause the trumpter to precede him by twenty-five paces, will then halt, and halt the trumpeter, who will immediately sound a signal.

The flagbearer as soon as he discovers that he has been seen, will cause the trumpter to return saber, and will return his own with considerable display so that the action may be plainly understood. Then he will unfold his handkerchief and wave it with his right hand, his pistol holsters remaining uncovered. Sabers are returned in order to show plainly the nature of the mission. The enemy's troopers are allowed to approach only after being assured of their peaceful intentions, and seeing that they are acting by the orders of their chiefs. Being satisfied on these points, he will endeavor to communicate with an officer as soon as possible; will permit himself to be blindfolded, and

conduct himself with politeness and composure. A flag-bearer has almost always a double mission to perform, of which the secret part is generally more important than the ostensible one. A reconnaissance of the enemy's camp is often concealed under the frivolous pretext of a flag. For that reason, not every officer should be sent on such a mission, but only the most skilful and intelligent.

Almost always the cover is removed from the eyes of the flag-bearer when he arrives at headquarters, but sometimes people are too wise to make such a mistake. In the first case the flag-bearer should see every thing while apparently seeing nothing. In the second case, he should not allow a word of all that is spoken around him to escape his attention. Therefore it is absolutely necessary that he should speak the language of the enemy, without his suspecting the fact.

In sending out a flag, care should be exercised in selecting not only the officer, but also the trumpeter, for the latter will be invited to drink, and then be questioned. He should be both sober and silent, and this fact should be impressed upon him by giving him the necessary orders before starting.

When a flag from the enemy appears, the officer of the advance party will not stop the fire of his skirmishers because the enemy has ceased his, but will move slowly, and send immediately to warn the commander of the advance guard, and wait for his orders in the case. While waiting for them he will direct the skirmishers, on his wings especially, to see that the enemy does not attempt a flank movement, and that the sending of a flag does not cover a ruse de guerre to enable the enemy to attack or to gain valuable time.

If the general commanding the advance guard orders the fire to be ket up, the commander of the skirmishes will signal the bearer of the flags to retire, as it is not desired to receive him.

If the flag is ordered to be received, the officer of the advance party will halt his troops and stop the firing; then, returning his saber, and accompanied by two non-commissoned officers and two tropers, he will approach the flag and halt it, if possible in a hollow, in order that our lines may not be seen. He will then notify the flag that he will be received, and make him and his trumpeter face their on lines, and then bandage the eyes of

both so that they can see absolutely nothing. This having been done, he will have the flag-officer conducted to headquarters his horse being led by a trooper, and accompanied by a non-commissioned officer. The trumpeter will be guarded by the other non-commissioned officer and trooper.

REAR GUARDS.

Should the enemy send superior forces against the rear-guard, it must retire at the gait employed in attacking; halt if the enemy halts; follow him if he retires, and harass him continually. Should the detachment make a gap in his line, maneuver so as to assist the movement, and then rejoin as quickly as possible.

If the enemy has artillery, post the greatest possible number of men on the flank of the road, and make every effort to prevent its being abandoned. Hold fast to every turn of the road, to all the obstacles, to all the different heights which will give protection against artillery fire by preventing accurate aiming and raking the road directly. Threaten the pieces sometimes. Try to form ambuscades if is believed that they will meet with success. Make a great display of holding a wood that may be encountered, in order to deceive the enemy in regard to the forces occupying it.

If a village be met with, the rear-guard acts in a similar manner, and profits by the halt to barricade it with beams, carts with the wheels taken off, etc. To do that it masks its movements by a single platoon which occupies the road while the others pass to the rear of the barricade, in which only a small opening is left, for the successive retreat in single file of the troopers of the last platoon of the rear guard, as soon as it is threatened with a charge. If a charge should be made, it is awaited at the barricade and received with rifle fire.

In building barricades precaution should be taken to place them so that they can not be easily turned; for if they can be turned they will be more dangerous than useful to us.

If a bridge is encounterd, pass over rapidly and make a stand in rear of it. If built of wood so that it can be easily destroyed, protect with skirmishers those engaged in its destruction.

RIDING A POLO PONY.

By Captain JULIAN R. LINDSEY, U. S. Cavalry.

HOW to ride a pony in a polo game is of the greatest importance; on it depends the life of a pony for polo; on it hangs the kind of pony you will be loaned or rented; on it rests your ability to train ponies. Polo is expensive at best but hopelessly so for a poor man if he has to buy trained ponies and ruins them in a season. One should know quite a lot about riding before attempting to play polo; then piloting a pony through a game becomes a matter of applying properly a few important principles. These principles so far as they concern the handling of a pony are different from those used with saddle horses or chargers only in that response thereto must be more prompt and sudden as they are signals for a complete movement instead of indications which gradually and deliberately lead up to the end desired; they direct the pony's mind to a particular object which it should grasp and accomplish with little or no more assistance.

1. Proper riding will enable you to feel that your riding a pony has tended to improve rather than ruin him.

2. A pony that has to be controlled by sheer strength is not properly trained or has been ruined. The application of the different aids are signals which the pony should instantly obey. Endeavor to get the pony to work with you instead of against you.

3. Ponies have peculiarities and it is well to inquire about these before hand.

4. Look carefully to the adjustment of all equipment and inquire about any that appears unusual. With your own ponies you must know the proper adjustment especially of the bits and curb chain. The best grooms are careless at times, therefore, examine everything every time.

5. Make friends with the pony before mounting by a kind word and a gentle pat.

6. Let him know at once that you can ride without holding on by the reins. If you can't do this, better give up polo; you will never make a pony of your own, you will never be loaned a good pony more than once and you will never play a decent game.

7. Try him out a little before going into the game and thus establish mutual confidence while giving him a necessary warming up. See if he walks straight to the front, reins barely stretched, and halts at the slightest pressure—the lifting of the hand; changes direction, slightly slowing down, by pressure of the reins against the neck; turns on the haunches by reining in and to the right or left and by holding his haunches in place with the outside leg. Do the same with him at a trot and then at a canter. Begin a change of direction or turn, particularly at speed, with a slight slowing down and closing the outside leg harder and further to the rear, which enables the pony to change his lead and to collect his haunches under him for the turn. A pony that increases his speed at every slight change in direction, or that bears his weight on the forehand in a turn, gets out of hand in the former and is dangerous in the latter case. Change leads a few times first slowly then at a speed and note any special indications the pony requires.

8. Let him follow the ball a while on barely stretched reins encouraging him to go to the left of the ball when your stick is on the right and the reverse. This appeals to his intelligence which is so necessary and which is so often neglected. Make your back stroke quickly in order to discourage stopping. It is dangerous to stop while striking, for an opponent is generally close after you.

9. Ride with barely stretched reins leaving all the freedom possible for the extension necessary for a quick move. The one worst thing that can be done to a pony is to give him the signal with the whip or spur for a quick start or for a burst of speed and require him to receive the effect of his whole effort plus the weight of your whole body on his tender mouth. A well trained pony can be ruined by one such experience.

10. The proper effect of the reins is obtained not by a continual pulling against the mouth or bearing against the neck but by alternately taking and giving—thus sending a succession of signals. A dead pull develops into a tug of war between pony and rider in which the pony in the long run always wins. Likewise use the legs with a tapping effect instead of with a dull, lifeless application.

11. Close your legs and throw your weight back in stopping or turning in order to help get the haunches under. This will also break the effect on you of a sudden stop by planting the fore feet. Ponies will soon learn to stop from proper use of weight and legs and very little use of the hand.

12. Be more than careful not to give a tug on the reins while you are striking the ball. Its a good plan to hold your bridle hand on the withers when striking.

13. Don't stop your pony any more than you absolutely have to. Save his mouth always. When the ball has been knocked out or over let your pony gallop around to his place instead of stopping suddenly and turning. Even in fast games moments occur when there is nothing for you to do and which should be utilized in giving the pony a rest for which he will immediately reward you by better service. At best polo is rather hard on the pony.

14. It is better to work the edge off a fresh pony than to use a more severe bit. A work-out before a game is a wonderful help.

15. In riding off, the pony should do the leaning—not the rider—otherwise you push yourself away. Get a slight lead if possible. Don't drive your pony straight into a back hander. Pull out and crook or make a time stroke.

16. It is better not to strike at all than to hit your pony. The stroke under the pony must be finished with a sharp upward pull or by striking the ground to keep the mallet from going under. The former stroke is less dangerous when at speed. Protect your pony by fending with the mallet.

17. A properly trained pony will stay at the gait you set him—walk, trot, canter or run—on barely strecthed reins

18. Keep up with the pony so your body will not interfere with the haunches. Being well forward also facilitates striking the ball further to the front. Lean slightly back for back strokes so as to get the ball behind the hind legs.

19. Most ponies turn better to the left than to the right; this is because the reins are held in the left hand which moves better to the left and because the right rein works looser than the left. Try to overcome both tendencies.

20. A whip is necessary with most ponies but it should be used sparingly. The same applies to spurs. In fact as with human beings so with ponies—continued hammering destroys the effect of the hammer while on the other hand an occasional sharp reminder encourages obedience to less active measures. Avoid a jerk on the reins when using the whip. Though the whip is used principally to get a quick start or greater speed a tap at the right time even on the shoulder will divert the pony from a fixed intention of defeating your object.

21. Intentionally striking the pony with a mallet to make him go is unpardonable; it is too much to expect of a pony to go straight and true while the ball is being struck if at the next motion the pony is struck. "Leave it" to the whip, spur and cluck.

22. The pony being trained to do your bidding he depends on you to keep him out of trouble. By keeping an eye on the whole field—and not solely on the ball—you will be able to render more intelligent assistance to your side and save yourself and pony from dangerous collisions. Better lose a slight advantage than injure anybody or a pony.

23. If a pony falls get away from him as quickly as possible; the fall itself is not near so dangerous as getting caught under the pony.

24. While making a stroke or when riding off close the outside leg around the pony instead of sticking it out; this gives a surer seat and holds the pony up to the ball or the other pony.

GENERAL DE GALLIFFET.

Grand Master of the French Cavalry.

By M. F. de BARNEVILLE.

FOREWORD.

IT was at the close of the French Army maneuvers of 1894, in the plains of Beauce, two Army Corps, fifty thousand men, were passing in review before the President of the Republic. The afternoon was gray and chilly; low, heavy clouds rolled swiftly overhead like a flock of enormous sheep. During the morning a cold, drizzling rain had covered everything with moisture and left torn veils of mist hanging in festoons to the few scattered trees that were now fast losing their red and gold leaves swept away by a brisk September wind.

Brigade after brigade of infantry had passed by to the stirring notes of the "Sambre et Meuse" march; then the artillery came along at a fast trot, with the rumbling of distant thunder, horses straining at the collars, guns and caissons lined up in long, dark rows. And now, in the grand stands hastily erected by local carpenters, hundreds of people stood up, craning their necks and staring towards the western end of the vast rolling plain, from which, far off, in a long line, the cavalry was coming at a running gallop, two whole divisions, twelve regiments, dragoons, cuirassiers, hussars, and chasseurs. On they came, in column of squadrons, wave after wave of men and horses, sixty to each rank. Fast they approached till now one could discern the blue dolmas of the hussars, the glittering helmets of the dragoons and the dull steel armor of the cuirassiers.

A hundred feet ahead of the first regiment one man led the glorious cavalcade; erect in his saddle, tall, slim, perfectly at ease on his galloping thoroughbred, he compelled the admiration of the thousands of spectators. And, as he passed by the

reviewing platform where the President now stood up, the dashing cavalry leader saluted his chief with a superb gesture of the saber, and the spectacle was so inspiring that the crowd, electrified, shouted frantically: "*Vive Galliffet.*"

The man whom they thus acclaimed was General marquis de Galliffet, the hero of Sedan, the man of the hour.

Fifteen years later, in 1909, through the streets of Paris, a small crowd of veterans and personal friends followed a hearse. There was no pomp, no military display, just a few flowers on a plain coffin. Conspicuous among all others was a beautiful wreath of orchids and roses with a broad, white silk ribbon bearing the imperial arms of Germany and the monogram of the Kaiser. In the ranks of the mourners were the German Ambassador, Prince Radolin, and the representatives of the Russian, English and Spanish sovereigns. On the other hand, the President of the French Republic, not the one who had reviewed the troops in 1894, but an ex-farmer by the name of Fallieres, had chosen to stay away while the remains of General de Galliffet were being conducted to their last resting place. Neither had his socialist cabinet seen fit to honor the national hero.

"*Sic transit gloria mundi.*"

Now and then we hear of men who seem to have come into the world generations too early or too late to fulfill the destiny to which they were born; they are out of place, their rise is hampered by social, political, economical or scientific conditions; their genius is misunderstood and their ambition restricted. Such a man we find in the late General de Galliffet, Grand Master of the French Cavalry, battle-scarred hero of thirteen campaigns, four times mentioned in army orders for bravery in action, and whose fearlessness and patriotism made him the idol of the officers and men serving in his command.

Combining the devil-may-care recklessness of a d'Artagnan, the spectacular dash of a Murat and the soldierly abruptness of a Lasalle, General de Galliffet was a man of another age. As a cavalry leader in war his personal magnetism electrified those who fought under him. As the reorganizer of the French

cavalry after the disaster of the Franco-German tragedy of 1870–71, he instilled into that branch of the service a much needed stimulant, a spirit of daring aggressiveness combined with an admirable *esprit-de-corps*, which has transformed it into the best body of mounted troops in the world. While President of the Cavalry Board, he prepared in 1882 the drill and field service regulations which, with a few minor changes, are still in force in the French cavalry, and portions of which have been adopted by the United States Cavalry Board, when, after returning from its investigation trip abroad, it recommend certain changes in our own drill regulations.

The life of General de Galliffet reads like a romance of the Napoleonic era. It sparkles with acts of heroism as brilliant as the flash of a saber; it opens vistas upon the battlefields of Crimea, Italy, Mexico, Algeria and France, and, while reading his "Souvenirs," one can almost follow him and his galloping squadrons through the smoke of battle, through the hail of bullets and shells, into the jaws of death.

Gaston-Alexandre-Auguste de Galliffet was born in Paris on January 23, 1830. His father, the fourth marquis de Galliffet, was a retired cavalry colonel and the author of several literary works. The family was of very old nobility, its ancestry having been traced as far back as 1329, when it already had a distinguished record in the annals of Province and Dauphine, those two provinces of France which have produced so many celebrities. The lineage of the Galliffet family includes high officers of the army and navy as well as several prominent magistrates and jurists. One ancestor in particular, of whom our General was especially proud, was Count Joseph de Galliffet, a soldier of fortune, who came to the island of San Domingo in the latter part of the seventeenth century and established himself there, acquiring a considerable amount of land which he developed, becoming one of the richest planters of the island, then a French colony. At his death, his immense fortune reverted to his elder brother, Alexander, and a portion of it descended through the family into the hands of the General, who, however, lost no time in spending it during the rather wild years of his youth, when, as a dashing lieutenant, he was a favorite at the court of Napoleon the Third.

Of the General's boyhood days we know but little, as he was himself rather reticent on the subject. He was educated by his preceptor, a catholic priest; but study was not young Galliffet's strong point, and at eighteen he made a bonfire of his school books and enlisted in the 1st Regiment of Hussars on the 22d of April 1848, from this regiment he transferred in 1849 to the 10th Chasseurs where he soon became a non-commissioned officer.

In 1851, France was in a state of effervescence; the people had become dissatisfied with the republican regime and the army was ready to stand back of the first man who would restore to it its former prestige and to France its military grandeur. The man who was plotting the downfall of the Republic was the President himself, Prince Louis Napoleon, nephew of the great Emperor.

On the plateau of Satory, a few miles from Paris, one hundred thousand soldiers were encamped and the secret emissaries of the Prince-President had won over to the pretender's cause practically every officer, from second lieutenants to major generals. With the army and part of the population of Paris behind him, President Louis Napoleon would have no trouble to proclaim himself Emperor Napoleon. During this period of unrest, in 1851, a new regiment was organized as his personal body-guard and was known as the "Regiment des Guides." It was composed of those officers and men whose loyalty to the Prince was beyond doubt. Young de Galliffet was transferred to it, and after the successful "*coup d'etat*" the Emperor appointed him a second lieutenant in the regiment.

In his resplendent uniform, red breeches, short, tight-fitting green jacket embellished with orange-colored braid, and, on his head the fur-lined "kolback" of the Hungarian hussars surmounted by a white aigret, Lieutenant de Galliffet became the most fascinating as well as the most popular officer at the Imperial Court.

At his fathers death, which occurred about this time, he inherited a hundred thousand dollars and spent it generously right and left, betting on horse races, gambling at the fashionable Club de l'Union and giving champagne suppers in honor

of the prettiest actresses of the Parisian stage. His boon companions, who were mostly titled men of wealth, such as the Duke de Gramont-Caderousse, the Marquis de Massa, the Count de Mirabeau, liked him for his ready wit, his infectious gaiety, his independence of manner and the free and careless way in which he spent his money. The women adored him for his boyish enthusiasm, his gallantry and his daring. He had many affairs of the heart with ladies of the highest birth and one particular escapade gave rise to so much gossip that the Emperor himself heard about it. He immediately ordered the adventure-loving lieutenant to proceed to Crimea where France and England were engaged in fighting Russia. This was in 1855, while the attacking armies were besieging Sebastopol and de Galliffet, who had been attached to the staff of Marshal Bosquet, distinguished himself on June 15th by taking part in the assault upon the strong fortifications of the citadel, leading the way at the head of the infantry columns which captured the city.

In this fight, Lieutenant de Galliffet received a cut from a bayonet on his right wrist and a bullet grazed his left forearm. For his gallant conduct he was mentioned in army orders and received the cross of the Legion of Honor.

The war in Crimea being over, the young officer returned to France to his old regiment of Guides which was then stationed at Paris and at Melun, a small garrison town near the capital. This was the wildest period of his life; he delighted in making the most extravagant bets, such as the one described by his friend and brother-officer, the Marquis de Massa in his "Souvenirs and Impressions." On this occasion, Lieutenant de Galliffet bet five hundred cigars that he would dive in full-dress uniform and on horseback into the river Seine from a high platform erected on the bank. Needless to add that he won his wager.

Another time, he bet that he would eat a small wine-glass after crushing it, stem, base and all, into small fragments. This folly almost cost him his life. His frightful repast lasted over two hours after which he went to bed and fell asleep, but in the early morning he awoke with terrific pains in his lower regions; these lasted for about an hour, then ceased; he again

fell asleep after a dreadful agony and the next day he was walking around as good as new.

One night, while stationed at Melun and on leave of absence for the day in Paris, he missed the last train going back to his garrison. Not relishing the idea of being reported absent from early morning drill, he induced the station-master to run a special train which would get him in Melun, a distance of forty miles, by 5:00 A. M.; the cost of this special was to be $41.00. It was then only 11:00 o'clock at night, and, to kill a few hours, de Galliffet went back to his club where belated members were still gambling for heavy stakes. The officer took a hand in the game and at 3:00 in the morning he left the club with $2,400.00 in his pockets. He reached his garrison in time for drill and related to the colonel how he had been forced to charter a special train to arrive before reveille. As the colonel jokingly remarked that he could have saved himself this expense by arriving at the depot on time, de Galliffett reached in his pockets for his winnings and showed his commanding officer a fat bundle of bank-notes, the fruit of his tardiness.

In November, 1857, Lieutenant de Galliffet was transferred to the 2d Regiment of Spahis, a native regiment of Algeria commanded by French officers. He was assigned to the squadron stationed at a small fortified post called Sidi-Medjahed, on the Moroccan border, and while there took part in several expeditions against the Arab tribes which, now and then, proclaimed a "djehad" or holy war against the French conquerors.

At the beginning of the war of 1859 when France joined forces with Italy in the fight for the emancipation of the Italian provinces of Lombardy and Piedmont from Austrian rule, Lieutenant de Galliffet used the influence of his friends at the Imperial Court to have himself ordered to the front. The Empress, who liked his bravery and impetuosity, had him assigned as aide-de-camp to General Douay. De Galliffet arrived in Italy in time to witness the battle of Solfernio. In later years he related with humor how, one evening, bearing a message from the French Emperor to the King of Italy, he found this monarch lying down, completely nude, on a bed in a country inn. It was after a hard day's fighting, and the King was relaxing from

the effects of a strenuous ride in the heat and dust. Undaunted, Lieutenant de Galliffet saluted the naked king with the greatest respect and delivered his message.

After the war in Italy, de Galliffet returned to the 2d Spahis at Sidi-Medjahed where he was soon promoted to a captaincy. He was then thirty years old. The following year, 1860, saw him appointed aide-de-camp to the Emperor Napoleon III. He returned to Paris, to the Court at the Tuileries palace and to the gay social life of the capital. One evening, at a ball, his admiration for the pretty and youthful hostess emboldened him to press his lips to her beautiful bare shoulders; this audacity was punished by a light stroke of her fan on his cheek. With ready wit he bowed to the lady, saying: "Now that I know the price of that kiss, I can afford another one."

On another occasion, while walking in the park of the St. Cloud Chateau, the Empress admired the fresh beauty of a water-lily growing in the middle of a pond. The Marquis de Galliffet, overhearing the remark, jumped in full dress uniform in the water and brought back the flower to her gracious Majesty.

In 1862, France sent an army to Mexico to uphold the candidacy of the ill-fated Archduke Maximilian. As de Galliffet could not rest easy while somebody was fighting somewhere he managed to have himself attached to the staff of Marshal Forey, in command of the expeditionary army. He arrived in Mexico just before the attack on Puebla, and was assigned for duty in the trenches. One night under cover of darkness, Captain de Galliffet with a handful of infantrymen armed with picks and axes reached the wall of the citadel and soon a hole was made, large enough to permit the small detachment to crawl through and penetrate into the city. Having explored the narrow, deserted streets without meeting any resistance, Captain de Galliffet ordered his party back through the hole in the wall and reported to his superior officers how easy it was to enter the town. Immediately two companies of infantry were placed at his disposal and he led them through the aperature in the wall into the heart of Puebla; having reached a plaza, they encountered a party of Mexicans; the alarm was given and the French detachment was attacked, but reinforce-

ments soon reached it and the city was captured after a hard fight. The next day, the fortress of St. Xavier, on the edge of the town, was taken by the French after a desperate struggle, and here again we find the intrepid Galliffet leading his troops to the assault and climbing the ramparts where, under a hail of bullets, he planted the tricolor flag while the soldiers stormed the position. For this brilliant conduct under fire, captain de Galliffet was once more mentioned in army orders.

A few days later, in a fight against the retreating Mexican troops of Juarez, a fragment from an exploding shell struck de Galliffet in the abdomen, tearing him open. This dreadful wound almost ended his life, but his wonderful constitution and the skill of an army surgeon pulled him through after three months spent in the field hospital. Convalescent, he was sent back to France to recuperate; on the same ship went the flags and cannons captured from the Mexicans. Having landed in France, the crippled officer, together with the Mexican flags, was placed on board a special train and taken to Vichy, where the Emperor was staying. To his sovereign the young captain deliverd the keys of Mexico City and in return received a warm welcome and the cross of commander in the Legion of Honor. He then proceeded to Maisons-Laffitte to enjoy a much needed rest; his sister, the countess d'Imecourt, and his old friends, prince d'Arenberg, duke de Gramont-Caderousse and marquis de Massa, often came over to see him and help to make less tedious the long hours of his forced inactivity.

For his services in Mexico, de Galliffet was promoted to the rank of Major in the 1st regiment of Hussars, the same in which he had enlisted fifteen years before and which was now stationed in Algeria and engaged in fighting rebellious Arab tribes. Two years later, we find him Lieutenant Colonel of the 6th Hussars in France.

Still, in Mexico the French troops of occupation were being harassed by guerillas and the country was seething with rebellion against the Austrian Archduke Maximilian who had been made Emperor of Mexico. In 1866, Lieutenant Colonel de Galliffet was ordered back to Mexico to take charge of the troops detailed to locate, pursue and destroy the guerilla bands. This command exactly suited the adventurous disposition of our

hero; using his own initiative, independent of headquarters, he led the reprisals against the insurrectos in a manner that provoked the admiration of his superiors and filled the Mexicans with terror; he gave no quarter to the enemy and in every encounter attacked the guerillas with such vigor that his cavalrymen received from the natives the nickname of "los carniceros azules," the "blue butchers," owing to the light blue color of their coats and the fierceness of their charge when they slashed right and left with their sharp sabers. For the masterful way in which he repressed the guerillas, Lieutenant Colonel de Galliffet was for the third time mentioned in orders to the army.

He then returned to France where he received the colonelcy of the 8th Hussars, at Clermont-Ferrant. Here he fought a duel with a second lieutenant of his regiment, prince Achille Murat, who had spoken lightly of the Colonel's wife. For this affair, both officers were placed on the retired list by the Minister of War, Marshal Niel. But soon afterwards, Colonel de Galliffet was reinstated and was given the command of the 3d Chasseurs d'Afrique, at Constantine, in Algeria. He was then thirty-seven years old, and although still a young man, we find that, after sowing his wild oats, he had become a strict disciplinarian, a man of great force of character and, above all, a faithful and patriotic soldier for whom the love of country and the pride in his uniform took precedence over all other duties. The mold was then cast from which will emerge the great cavalry leader, the reorganizer of the mounted service and the drillmaster who could handle large bodies of men and make his authority felt from the last corporal to the division commander.

On July 15th, 1870, war was declared between France and Germany; Colonel de Galliffet's regiment, the 3d Chasseurs d'Afrique, arrived from Africa by August 10th and was at first attached to the independent cavalry division commanded by General baron du Barail. After the fight at Borny, the 1st and 3d Chasseurs d'Afrique, forming a brigade under General Margueritte, were assigned as escort to the Emporer who was then retreating from Metz, pursued by the victorious German army. On August 20th at Ste. Menehould, Brigadier General Margueritte took command of a cavalry division composed of

the 1st, 3d, and 4th Chasseurs d'Afrique, 1st Hussars and 6th Chasseurs. On the 28th, Napoleon III informed verbally Margueritte and Galliffet that they were promoted, Margueritte to be Major-General and Colonel de Galliffet to be Brigadier-General, in command of the three regiments of Chasseurs d'Afrique.

Three days later, the sun set on that bloody battlefield of Illy which saw the apotheosis of General de Galliffet and his gallant brigade and where the death-knell of the French Empire was sounded.

It was on this memorable date, September 1, 1887, that the decisive battle near Sedan was fought; under the frightful volleys of shot and shell poured into them by six hundred and fifty German cannons, the French troops, surrounded on the narrow plateau of Illy by overwhelming masses of infantry, gave way after an all day struggle and retreated in disorder into Sedan.

In the early morning of that fateful day, before the battle had begun, General de Galliffet assembled his officers, and, after giving them his orders, added these parting words: "Gentlemen, it is probable that we shall not all meet again; I bid you good bye."

After the French troops began to lose ground, General Margueritte's cavalry division was called upon to protect their retreat. A charge was ordered against the advancing German columns. General de Galliffet at the head of the 3d Chasseurs d'Afrique in the center, with the other two regiments of his brigade on either flank, starts off at a gallop down the slope of the plateau to meet the Germans; at the bottom of the incline a five-foot-deep roadway offers an impassable obstacle into which the leading platoons tumble and are crushed on top of each other; the following squadrons oblique to right and left where the roadbed is less deep, but the impetus of the charge is broken and the cavalrymen are mowed down by the volleys of the enemy who is firing from the hill beyond. General Margueritte orders his trumpeters to sound the assembly and the decimated regiments rally to their chief under a hail of bullets. It is then ten o'clock in the morning.

The division retires behind a wooded knoll where, under cover, horses and men take a rest and have a bite to eat. While they are thus partaking of what, for most of them, will be their last meal, staff officers arrive at a gallop from headquarters bearing orders from General Ducrot to General Margueritte. The German infantry of the Prince of Saxony was coming up toward Illy while the columns under the Prussian Crown Prince had already occupied Floing, threatening a flank movement. All the surrounding heights were covered with German cannons. To stop the advance of this rising tide of Prussian and Saxon infantrymen, General Ducrot, commander-in-chief of the French army of Sedan, sent word to General Margueritte to charge again with all his regiments. After receiv ng this order and while looking over the terrain ahead of him, before sending his men on this perilous mission, General Margueritte is struck in the face by a bullet which breaks his jaw and severs his tongue. Notwithstanding the excruciating pain and still remaining in his saddle, he rides back to where his divisionis waiting and extends his arm in the direction of the enemy.*

General de Galliffet being the next ranking officer takes at once command of the division and orders the charge; this order is transmitted by a staff officer to Colonel prince de Bauffremont commanding the other brigade on the right, since the death, earlier in the day, of General Tilliard. All five regiments start forward simultaneously, while on the left two more regiments under General de Salignac-Fenelon follow the lead. The whole length of the plateau is swept by charging masses of cavalry, hundreds of wild horsemen, shouting frantically, standing in their stirrups, brandishing their sabers and rushing to their doom as they face the murderous fire of thousands of rifles. But the onslaught is too great, even for these braves; mowed down like wheat in harvest time, dropping dead by the dozens with bullets in their breasts, they cannot reach the lines of the enemy. For half an hour they charge, they scatter, they rally, they charge again, like the ever-recurrent waves of the ocean and in that half hour thay have lived an eternity, until, almost annihilated, they must retreat toward the edge of the plateau in a ravine which gives them temporary shelter. They

*General Margueritte died two days later.

have left behind them a trail of lifeless bodies; upon the battlefield, in all directions, heaps of dead soldiers and horses can be seen. In this sublime sacrifice the cavalry division had lost sixty officers and nine hundred and eighty men, two-thirds of its strength.

Rallying around the admirable Galliffet who, impassible, sat upon his foam-covered charger, men of half a dozen regiments looked up to the chief for inspiration; fragments of squadrons, remains of platoons, lined up behind him as best they could; riderless horses, some streaming with blood, came up from the field of carnage and took their place in the ranks.

But still the tide of German infantry was closing upon the plateau and the order came for the remains of the French cavalry to charge again. General Ducrot himself rushes up to the shattered division and calls out: "Now, my little Galliffet, one more effort for the honor of our army!" And Galliffet, without hesitation, replies: "As many as you want, General, as long as I have a man left!"

And then, both he and Ducrot place themselves at the head of the handful of cavalrymen, barely five hundred, and once more they rush against the walls of death, panting, exhausted, mad, all hope gone, but with the tenacity of the wild beast which knows that the hallali has sounded and the end is near and then turns fiercely against the hounds which are holding it at bay. This sublime folly, this complete sacrifice entitle these heroes to the admiration of the whole world, for they lost all, except their honor.

On a distant hill, surrounded by a brilliantly uniformed staff of princes and officers, King William of Prussia was watching through his field glasses the repeated charges of the French cavalry against his own infantry, and, as wave after wave of gray horsed and blue soldiers was seen to break upon the deep, black masses of Prussian infantry, the King, wondering at the sublimity and uselessness of the sacrifice, exclaimed in sincere admiration: "Oh, what brave people!"

That night, Napoleon III surrendered at Sedan to the King of Prussia. His army, what was left of it, and himself were sent into captivity in Germany. Through sheer miracle, General de Galliffet had come out unscathed from the field where

death had reaped such a plentiful harvest. He was sent with other French officers to Ems where, for several months, he remained a prisoner, although on parole. On March 17, 1871 he returned to France.

The war against Prussia was over, but a worse peril was in store; a civil war, or rather a socialist revolution had spread its wings like a buzzard over the carcass of the dead Empire and the weak body of the new-born Republic; the Commune, with its dark days of blood, fire and murder had begun to terrorize the country which was still bleeding from the loss of two provinces and of thousands of its sons, not to speak of the war indemnity of one billion dollars.

To subdue the revolutionists, President Thiers had but a small and demoralized army at his disposal. To General de Galliffet he entrusted the command of a cavalry brigade stationed at St. Germain-en-Laye, near Paris. The capital was then in the hands of the "Communards." On April 8, 1871, this brigade had an encounter with 1,500 insurgents near Rueil and Chatou and after a short engagement the latter were forced to retreat. Three of their men were captured and executed at once, without trial, by order of General de Galliffet who then issued the following proclamation:

"War has been declared by the revolutionary hordes which occupy Paris. Yesterday and today they have murdered some of my soldiers. I declare upon them a war which will be without mercy and without quarter; this morning I had to make an example; I trust it will bear fruit, as I do not wish to have to resort to such extremities. Remember that Law, Right and the Nation are represented by the National Assembly at Versailles and not by the so-called Commune in Paris."

April 3, 1871.

The General commanding the brigade,
(Signed) GALLIFFET.

Four days later the insurgents turned out in force to defend the bridge over the Seine, at Neuilly; they had two pieces of artillery. Galliffet, besides his cavalry brigade of Chasseurs had that day a brigade of infantry. After a furious struggle the bridge was captured. Count Albert de Mun, who was

then on the General Staff, relates how, before the fight, de Galliffet stood on foot for over an hour in the middle of the road, deliberately exposing himself to rifle fire and watching through his field glasses the movements of the enemy, while bullets were flying all around him. His bravery thus incited those who fought under him to emulate his deeds of valor and be worthy of such a chief.

Finally, the Revolutionary Army of the Commune made its last stand against the well-disciplined cavalrymen of Galliffet who routed their adversaries in a sweeping victory, as they had in 1859 routed and wiped out the guerillas in Mexico. In the reprisals that followed a number of revolutionary leaders were captured, most of them being executed without trial, others sent to penal servitude for life. This necessary severity subsequently caused General de Galliffet to be made a target for the calumnies of vituperating socialist newspaper writers and notoriety-seeking politicians who accused him of being a wholesale murderer. But these attacks left him imperturbable; the man who had held his own life so cheap on the field of battle could only smile with contempt when his enemies tried to insult and vilify him in the press and in Parliament. He considered that he had done his duty in having the revolutionary leaders summarily executed, and he was right.

However, his persecutors in the socialist press kept on building lie upon lie until they persuaded some of the most credulous among their readers that Galliffet was a sort of ferocious and merciless butcher of inoffensive citizens. Those who knew him better can only smile at such idiocies, especially when emitted by such notorious characters as the revolutionary Marquis de Rochefort, better known as Henri Rochefort, editor of the "*Intransigeant*," and whose militant demagogy and participation in the Commune had caused him to spend several years in the penitentiary of New Caledonia.

In 1886, during the army maneuvers, a soldier, who in his weak mind had believed the tales of horror spread broadcast concerning Galliffet's harsh reprisals against the "Communards," fired a ball cartridge at the General; luckily his aim was bad. He was arrested and brought before the man he had sought to

kill and who, after hearing his tale, forgave him with the magnanimity of a noble soul.

Later on, when as Minister of War, he made his debut before Parliament, the socialist deputies rose to their feet and saluted his entrance in the Legislative Chamber with shouts of: "Assassin! Murderer!" Smiling, the General walked in, saying: "Here I am," and calmly took his seat.

To return to his military carrer, we find him in 1872 in Algeria, in command of the sub-division of Batna, in the province of Constantine. The great Arab insurrection was then sweeping throughout the breadth and length of the colony, fomented and fanned into flames by the Mohamedan priests who had for years been preaching the "djehad" or holy war against the French. Sedition was everywhere and a quick, energetic campaign was necessary. On January 25, 1873, General de Galliffet, leading a column of seven hundred men mounted on camels, occupied the oasis of El Goleah, on the edge of the Sahara desert, without firing a shot. Several other expeditions in the Provinces of Algiers and Oran (columns under Generals de Mairibel and de Colomb) soon reduced the insurgents and peace reigned once more in the colony.

In 1875, General de Galliffet was ordered back to France to take command of the 15th Infantry Division at Dijon. From now on he is changed from a fighter into a reorganizer, the strictest disciplinarian in the French Army, who sees to it personally that his orders are carried out by officers and soldiers alike. No matter how high the rank of an officer or what his family connections might be, there was no favoritism shown, no exception made by the stern, unflinching Galliffet when it came to the observance of orders. For instance he had decreed that his officers should wear no uniform but that prescribe by the regulations, and one day, meeting a major of cavalry whose neat, highly-polished boots bore every mark of having been made to order, the General stopped him, exclaiming: "What fine looking boots you are wearing, Major; who made them for you?" "So-and-So, General." "Well give him my compliments on his skill and consider yourself under arrest for eight days for not wearing regulation boots."

Active, untiring, severe but just, inquiring into the minutest details of his Quartermaster and Commissary Departments, he kept always posted as to what was going on in his division. If he heard that a regiment stationed twenty miles from his headquarters was due to make a practice march on the next day, he would get on his horse at four o'clock in the morning and ride out until he met the marching troops, inspected them, then rode back twenty or thirty miles the same day.

Often during the night he would appear, alone and unannounced at the military bakery where he verified the components of flour and yeast used by the bakers; or else he would, at two in the morning, sneak into some cavalry stable to see whether the stable guards were awake and the horses properly bedded. During the maneuvers, if he should happen to notice some fat colonel or major blowing and panting after a short ride, he would invite him to fall in behind him on the return trip to headquarters and then, leading at a fast trot or canter would bring in the unfortunate officer almost on the verge of apoplexy. Often a request for the retirement of the willing but short-winded colonel or major would go the War Department in the next mail with the motive: "Unfit for active service in the field." Galliffet knew know friendship, no sentimentality when the efficiency of the army was concerned, and this severity has led many to believe that he was heartless, but his heart was first and last with France and with the army.

His dream, until the last days of his career, was to win back from Germany the two Provinces lost in 1871, and, to make that end possible, he devoted all his energy and all his intelligence to his task. If his ambition was sometimes personal and made him aspire to the highest positions, it was because he knew himself to be a leader of men and that when the time came he must be the right man in the right place, and that place at the head of the army.

He only had one fear, and that was to get stout; he had no use for fat cavalry officers. He seemed to be impervious to cold, heat and loss of sleep; he ate sparingly and seldom drank wine during these later years of his life. During the coldest winter he never wore an overcoat and forbade his officers to wear any. One day during some maneuvers, it began to rain quite hard

and de Galliffet noticed one of his brigade commanders, General Duke de Reggio, who had stopped to throw a cape over his shoulders. Immediately he sends an aide-de-camp to the duke with this message: "General de Galliffet wishes me to inform you that he is not wearing any cape." The duke took his off.

In 1879, de Galliffet took command of the 9th Army Corps at Tours, and in 1882 was transferred at the head of the 12th Army Corps at Limoges. Here he risked his life to save a woman and child from being run over by a train. From 1882 to 1886 he was first a member, then President, of the Cavalry Board, and it was during this period that he took up and completed General du Barail's work of revising the Cavalry Drill and Field Service Regulations which are even today a model of the kind. It was General de Galliffet's firm belief that cavalry, to be successful, must be handled in masses. "To seek the enemy's cavalry, then lick it; afterwards we shall see," was his doctrine.

During the last years of his army career, de Galliffet was a member of the Superior Council of War, composed of Generals to whom has been assigned the command of field armies in time of war and at maneuvers. In this capacity he conducted the autumn maneuvers of two Army Corps in the Plains of Beauce, in 1894; this was his last service in the field as he retired on January 22, 1895, at the age of sixty-five.

In his rôle as a military educator, he had given the impulse which others were to follow; he had attained the highest rank in the French Army below that of "generalissimo" or commander in chief, to which he was entitled but which the jealousy and animosity of several Ministers of War and Cabinet Officers prevented him from reaching. He had received the great cross of the Legion of Honor, the highest decoration of that order, also the military medal of honor. Still he never realized his dream to lead a victorious French Army across the Rhine, and now, retired from active service, living in his small, modestly furnished house off the Avenue des Champs Elysées, he lived a bachelor's life, having, years before, become separated from his wife. He rode horseback every morning in the Bois de Boulogne or took long walks in any kind of weather. He spent much time at the Jockey Club or the Club de l'Union, enter-

taining his old friends with ancedotes of his wonderful career. The Prince of Wales, later Edward VII, was a particular friend of the General's whom he admired greatly.

During the last phase of the famous Dreyfus case which had caused so much disturbance in France, he emerged from his retreat to be made Minister of War, but resigned soon after, disgusted with the duplicity of his associates in the cabinet. His last order to the army is dated September 20, 1899, after Dreyfus, for the second time convicted of high treason by a Court Martial, had been pardoned by the President. This order reads as follows:

"The incident is closed. The military judges have rendered their verdict in all independence. We have acknowledged their decision. We will also acknowledge the act which a feeling of deep pity has dictated to the President of the Republic. There can be no more retaliation. Therefor, I repeat it: the incident is closed. I ask you, and if necessary, I command you to forget the past and think only of the future. With all my heart I join you all in saying: 'Long live France!' not the France of a political party, but the one that belongs to us all."

(Signed) GALLIFFET.

After his resignation from the cabinet, he went back to his quiet life, reading much, keeping up a voluminous correspondence and receiving the friends with whom he loved to chat; among these he counted famous authors, journalists of repute, members of the French Academy, diplomats, as well as army officers, and he entertained his company in the small library of his "hermitage" as he called it, amidst his relics, his books and the many tokens of friendship and esteem which has been presented to him by admirers, from reigning sovereigns to old companions of the battlefield.

He only had his retired pay to live on and it is a well-known fact that he had to live with economy to keep up his social obligations. When he left the active service he owned three splendid thoroughbred chargers, one of which was worth $2,500. But later on he could afford to keep only one horse on his small income so he shot the other two, remarking to a friend:

"The horses of General de Galliffet must not belong to anyone else."

In 1909 he had two strokes of paralysis; one June 27th, while he was working in his library, a third stroke left him without the use of his left arm, and then gradually the lower part of his body became dead. The end came on July 8th, at eleven o'clock at night; his son, Count Marquis de Galliffet, his daughter and son-in-law, Baroness and Baron Seilliere, and his faithful valet were at his bedside when the soul of this great soldier passed away.

Death on a battlefield, charging at the head of his regiments, the kind of death he had wished for, was denied this gallant officer, but the lessons taught by the Grand Master of the French Cavalry have not been forgotten; the inspiration of the victory to come as well as the sting of defeat to be avenged have borne their fruit, and today the French Cavalry is looking forward to the time when it may again cover itself with glory as it did when its beloved chief led it to the charge on the battlefield of Illy.

Reprints and Translations.

TRAINING A CAVALRY LEADER.*

By von BERNHARDI, General of Cavalry.

IT gives me pleasure to comply with the request of the editorial management of the "*Kavalleristische Monatshefte*" to discuss the above subject. For even though my views may meet with much opposition, I can hope to win more converts to my convictions.

It is exceedingly difficult for our cavalry to cut loose from the glorious traditions of the past, and to beat for itself new paths. But the great weight of evidence must finally convince. And the burning desire to accomplish great things in a future war, a desire which animates the entire arm, will finally cause us to adopt the new methods necessitated by the conditions of modern warfare, rather than forego the laurels which are won only by decisive deeds.

Concerning certain things there is unanimity of opinion, and I need not go deeply into those. All are agreed that the troops need the highest possible training in riding, and that the leaders, from the lowest ranking to the highest, must be not only good riding instructors, but must themselves be able, and absolutely fearless riders; especially so since the object of training is to train capable and obedient horses, and plucky cross-country riders. This forms the foundation of every activity on horseback. But the cavalryman must not be completely

*Translated from the *Kavalleristische Monatshefte* for January, 1914, by Lieutenant Otto E. Schultz, Second Cavalry, for the War College Division, General Staff.

engrossed in riding. He must not forget that riding is only a means to an end, and that in the final analysis it is his work as a soldier that is of supreme importance. Only he can become a superior cavalry leader who constantly keeps his eye on the goal of military training, for whom the horse is always but a means to an end, who attempts to recognize and accomplish his military tasks with due regard for the view point and traditions of the horseman, and with full consideration for the conditions of modern warfare.

In order to lay a foundation for the military training for superior cavalry leaders, one must, in my opinion, understand what demands a present-day, central European war is going to make upon the cavalry. I have, heretofore, discussed this at length. But it may be worth while to review, firstly, because it may bring out new view-points; and, secondly, in order to enable us to decide upon the necessary foundation for training one to solve military problems.

All are agreed that the cavalry will be required to obtain information, to screen its own army, to penetrate the enemy's lines of communication, and to take part in the battle and in the pursuit. Likewise, it is clear to every thinking person that these requirements can be fulfilled only by driving the hostile cavalry from the field of operations. The only difference of opinion is as to the means to be employed in solving these problems.

The idea still prevails in our cavalry that the hostile cavalry is to be disposed of by means of the charge; that in battle everything depends upon the manner of the execution of the charge; that penetration of the enemy's lines of communication is of minor importance, and difficult of accomplishment; and that dismounted fire action is to be regarded only as supplementary, and as a sort of necessary evil. Accordingly, the tactical training of leaders and troops is devoted principally to charging by complete cavalry divisions, and to reconnoitering by means of mounted reconnoitering squadrons and partols. Dismounted action is considered a side issue, and great confusion prevails concerning the disposition of the led horses. The fundamental requirement that in case of repulse one must be able to take cover and return

to the attack, is seldom considered. Generally the horses remain in the immediate vicinity of the dismounted men, ready to be seized and remounted, and the fact that in real warfare this is going to be impossible, is calmly overlooked.

It seems to me that too much stress is being laid upon marching ability, as though that in itself would enable one to accomplish miracles.

Concerning all these things I hold an entirely different opinion. I am under the impression, that especially at the beginning of a war, it is required that marches be greatly restricted. The horses, above all else, must be kept in fit condition. What is gained if the patrols cover 120 to 150 km. the very first day, and are unable to send back information? Or if the reconnoitering squadron rushes forward 100 km. the first day, and is then too completely exhausted to fulfill its further mission? The result is ignorance concerning the enemy, and defeat at the hands of a more sensible opponent. The greatest mistake of all is to advance immediately too great a distance with the mass of the cavalry, thereby losing one's freedom of action because of lack of knowledge concerning the enemy. On the contrary, at the beginning one should carefully feel one's way, until knowledge concerning the enemy is obtained, and then quickly concentrate and energetically rush to the attack. This makes it possible to attack with an unimpaired force, to win a victory, to obtain results. At first one should advance in separated columns, in order to leave the enemy in doubt as to where the main attack is to take place. The concentration should be made by means of night marches, in order to conceal one's self from the scouting air craft of the enemy.

Air craft scouting is a factor which must always be reckoned with in the future. Only by working in conjunction with air craft will cavalry be able to accomplish its full mission in the future. The hostile cavalry will be much more quickly located by means of air craft scouting than by the advance patrols of the reconnoitering squadron. This will make unnecessary the too hurried advance of cavalry reconnoitering organizations, and will furnish a reliable foundation for the cavalry's own proper operations. Likewise will the strategical

reconnaissance of the enemy's movements be substantially aided by air craft scouting.

Because of the great extension of modern armies, and their long, closely knit fronts, it will become more and more difficult for even victorious cavalry to obtain much knowledge concerning the plans of the enemy. It will always, especially at the beginning of a war, be encountering the advance forces of the enemy, and will seldom be in position to break through a flank in order to obtain information. Except when operating on the wings of an army, it will as a rule confine itself to locating the front of the enemy, and observing his daily advances. Just at this critical period, before the first big blow is struck, the information brought in by cavalry will be comparatively meager.

This is the opportunity for the air fleet. It can sail over the advance forces of the enemy even before they reach the field of battle, and obtain insight into his strategic grouping, thereby furnishing the foundation for the plans of its own commander, and indicating the direction for the advance of its own cavalry.

Of course, the air craft will have to reckon with opposition from the hostile air fleet, and can maneuver freely and obtain its greatest results only after having defeated it. It therefore becomes of supreme importance to make this conquest of the air. An unlooked for assembly of a superior air squadron in a predetermined direction, will do most toward assuring victory. But cavalry can do much toward assisting its air fleet by use of air craft guns of its own. Cavalry must work in harmony with its air fleet, and should be equipped with light, easily carried air craft guns. Even in the later development of the war, when the armies have been broken up, and distinct fields of operations have sprung up, the best results will be obtained by a harmonious working together of the two arms.

As for the cavalry contest, it is decidedly justifiable to endeavor to conquer the hostile cavalry in one decisive charge. That will bring the quickest results. And at the opening of hostilities time is of supreme importance. It is most essential that information concerning the enemy be obtained as soon as possible. The enemy may also endeavor to obtain the initial

ascendency by means of the charge. Nevertheless, it may be assumed that he will try to supplement the charge with fire action, especially if he should feel himself to be the weaker, or if he has not completed his concentration for battle, or if he has discovered by test his superiority of the enemy in the use of the arme blanche. All these possibilities must be reckoned with, all the more so because most modern armies have supplemented their cavalry not only with artillery and machine guns, but also with cyclists, and even, with infantry. Even Germany has decided to organize bicycle troops, and I assume that they will be added to cavalry, to strengthen its fire action.

I would consider it the greatest possible error, tactically, for the cavalry to engage the hostile cavalry immediately upon contact. To do so might cause it to run unawares into annihilating infantry fire, as was the case with a cavalry division during the imperial maneuvers of 1912. In the advance to the attack, one should carefully feel one's way, so as to define the position of the enemy. It is only after having done that that one can wisely decide whether to use mounted action or dismounted fire action.

The contest will commence with the bicycle troops, dismounted cavalrymen, and artillery, and will be carried on by bringing reënforcements to the firing line, until the arrival of the decisive moment, which, when it comes, must be taken advantage of with rapid decision.

The immediate charge is mandatory only when the position of the enemy is clearly understood, and it is clear that the enemy is neither willing nor able to resort to fire action.

I do not hold the view that one can force hostile cavalry to combat by going around its flank, even though it be dismounted. Flanking the enemy is not so easy as some, always eager to attack, would have us believe, especially when considering the great range of artillery fire. A flank attack tends to expose the front of one's own army, and to endanger the lines of communication. Besides, on account of the circuitous route the cavalry must take in order to avoid hostile artillery fire, the enemy has time to make such dispositions as to avoid being attacked in flank. Of course, a flank attack is sometimes successful. But it cannot be regarded as an infallible means of bringing on battle. And we must always count on the probability that the fight will have to be concluded with fire action, or a combination of mounted action and fire action. Above all else, one must be careful not to make a frontal attack against machine guns or infantry in line of battle, or, while charging, to run into a flanking fire from the enemy. The effect of modern fire arms makes the risk too great. Remember how the French cuirassiers were shot up by the Prussian infantry at Wörth and Mars-la-Tour, and the chasseurs d'Afrique at Sedan, though the Prussians had only the needle guns. One can imagine the probable effect of modern firearms. At maneuvers such things can be done, and the umpires decide light-heartedly in favor of the charging cavalry. But in actual conflict it would be very different. The charge of the maneuver field would end in the utter annihilation of the charging cavalry. The cavalry has something better to do than to allow itself to be shot up to no purpose.

Cavalry in battle must be considered a failure if, while the battle is in progress, it always waits for the opportunity to charge. Where such opportunities offer themselves, it must be promptly and decisively be taken advantage of. But a continuous waiting for it, results in the failure to make use of powerful forces. Cavalry's place in battle is not behind the center. Nor may it remain glued to the wings. It must endeavor to reach the flanks and rear of the enemy, to confuse and frighten him by means of fire action, and to charge whenever the opportunity offers itself. Whenever this is impossible, it is best to hold the cavalry in reserve, rather than risk it in a charge, the result of which, because of the size of modern armies, cannot be worth while. Then it is best to reserve it for the pursuit.

The pursuit by the cavalry is more effective when made parallel to that of the infantry than when at the head of the pursuing infantry, unless the fleeing enemy has been completely demoralized. Otherwise the rear guard of the fleeing columns will soon bring it to a halt.

The parallel pursuit will have to be made with the rifle, and the charge can be made use of only when the tactical and psychological circumstances will render it fruitful of results.

Concerning the lines of communication of a hostile army, it is self-evident that they cannot be totally destroyed when protected by a front extended several hundred kilometers. But those of a wing of the hostile army are accessible to the cavalry, and especially so when it endeavors to make a flanking movement on one of our wings. Therefore, the communications of flanking troops are continually endangered, and if the flanking troops are headed for the reserves of their enemy, the entire movement can be paralyzed by a resolute cavalry. During the progress of the war there will be many opportunities where cavalry can accomplish very much against the lines of communications of isolated armies, or against railroads that are needed for the transportation of hostile troops.

In all undertakings of this nature, a far-reaching reconnaissance made by air craft, will be of great importance. On the one hand, they will be able to guard the cavalry against surprise, through furnishing timely information concerning the enemy. On the other hand, they will make it possible for the cavalry to proceed with a less number of security patrols, and thereby conserve its strength for possible conflict.

II.

In the foregoing the basic principles for the training of cavalry leaders, are indirectly given. Uppermost stands the need for first-class training in equitation. Without that, a cavalryman is unimaginable. Hunting and cross-country riding are the best means for promoting military horsemanship. Steeple-chasing is aslo good. Modern instruction in riding gives a splendid foundation for this kind of work.

But as concerns the military training, it is in many respects necessary to beat new paths. First of all, the young officer must rid himself of the illusion that cavalry combat and the cavalry charge are always identical. To become efficient, is the young cavalry officer's aim. How to become so, depends on circumstances. Fire action must not become a farce, as it sometimes does in engagements between hostile patrols. The latter should usually be attacked with the arme blanche. Troops should be trained to this in times of peace.

It should ever be borne in mind that in the practice of the combined arms, even at the largest maneuvers, such as the imperial maneuvers, the cavalry arm is always much too large in proportion to the other arms, but especially so in proportion to the infantry. The accomplishment of cavalry charges will always be overrated. In actual warfare—and this cannot be stated too impressively—the result would most often be the annihilation of the charging cavalry, and an easy victory for the enemy.

It must be finally understood that the speed of the horse, formally of service principally in the charge, and, therefore, made use of principally in a tactical way, must today be made use of in the first line. The horse, however, unpoetical the remark may sound—is primarily a means of transportation, and only in combat with opposing cavalry will it be used tactically. Charging against fire arms, is only very exceptionally admissible, under unusually favorable circumstances. Always even in the minor maneuvers, cavalry should constantly endeavor to gain the flanks and rear of the opposing army, and in that manner to participate in the combat. Even the moral effect, particularly in actual warfare, would be considerable. Clinging to the side of, or behind, infantry is always wrong, and is incompatible with the cavalry spirit of do and dare.

The training of the cavalry leader, in the lower ranks, up to the regimental commander, is almost wholly confined, to theoretical study, since it is impossible in garrison, or even at all except the largest maneuvers, to find situations even remotely resembling those of actual warfare. Of primary importance is the study of military history. The great Napoleonic wars in Germany, the events of 1870 and 1871, as well as the Russo-Japanese War, are the most easily accesible, and, in many respects, instructive, even though largely in a negative sense. They must be studied critically. But the study of the American Civil War is undoubtedly of great value. 'Tis true that a modern middle European war would be fought with ordnance, and on a terrain, vastly different. Nevertheless, a study of that war is most instructive regarding the spirit and method of cavalry leading. There we see cavalry work, natural and unhampered by tradition, guided only by the idea of expedi-

ency, and yet in a manner thoroughly becoming a cavalryman. Every cavalry heart must beat faster when reading, for example, of the gallant deeds of Stuart.

The study of military history must be supplemented by war games, practice rides, as well as by theoretical study. But these must be carried on systematically, and in the spirit of present day warfare. I do not think much of the unsystematic winter work and the occasional lectures. Very little is accomplished thereby. War must be earnestly and systematically studied.

It is to be wished that the foundation for a thorough military training be laid even at the small riding schools, and at the military riding school at Hanover. A beginning has already been made, in that hereafter an officer of the General Staff will always be ordered to Hanover to conduct the practice rides and the war games. But that isn't half enough. Because even the youngest officers must often conduct patrols of great strategic importance, and must pass judgment concerning circumstances of great weight, does not imply that they are properly educated for the purpose, or that they have a clear grasp of important operative circumstances. That which they learn in garrison, and in ordinary maneuvers, often misleads them, since it deals with tactical situations on a very small scale, and which in modern warfare are of minor importance. The officer must learn the significance of isolated tactical facts, and plan his course, and send back his message, accordingly. Therefore, the training of a cavalry officer, from his youth on up, must be done with a constant view on the larger things. Concerning the practical training of a cavalry leader, we can consider, besides the scientific studies, which must be incessantly pursued, only the larger cavalry exercises. But the full benefits thereof can be attained only when the higher leaders are thoroughly grounded in the fundamentals, and when the exercises can take place annually for the entire cavalry. It is indeed a strange anomaly that the artillery, which never fights alone, annually engages in great field exercises by itself. But cavalry, which must always operate as though alone, and disunited from the mass of the army, is brought together but once every few years for exercises of importance. That does not seem

logical to me. It would be advantageous if at the ordinary maneuvers of the combined arms each side were given only as much cavalry as it would have at its disposal in modern warfare. The leaders, especially those of the other arms, would learn to economize their force. This they do not know how to do.

The larger cavalry exercises serve the double purpose of training the troops for combat and for training them for their own problems of operation. Since victory in battle is decided by the last line, the greatest weight should be laid on training for battle. Nevertheless, it must be recognized that cavalry acting alone, is beset by unusual difficulties, on the one hand because of various rates of march being required of it; and on the other, because of the great extent of territory to be covered, the difficulty of conveying messages from the most advanced lines, and the difficulty of keeping itself supplied in hostile territory. It is too much to ask of cavalry leaders who have never led cavalry under such circumstances, and who have, therefore, had no practical experience along those lines, that they shall "make good" the first time they find themselves in the presence of the enemy. And we cannot rely on cavalry geniuses. Even though we have them, it is hardly possible that they will be found in the leading places at the very beginning of a war. The genius of Seidlitz was not recognized until after the battle of Koln, and a Frederick the Great was needed to dicsover it. As a rule, one must count on just average ability, and the average leader needs the practice all the more, since the decisive cavalry actions will take place at the very beginning of a war.

It is, therefore, most urgently necessary to have, as often as possible, great strategic exercises for the entire cavalry together —at any rate, much oftener than we now have them. At these exercises the principal aim should be to lead separated columns in unison, to concentrate or combine them rapidly for battle, even on broad fronts, and to make use of every possible means for conveying information. So far as possible, the troops should be supplied and maintained as in actual warfare. In order to screen properly, and because it cannot be known in advance where the mass of the enemy is going to be located, it is usually necessary for cavalry to march in separated columns and to strike united. This method of advance should also be

employed at maneuvers, because it presents greater difficulties than does the concentrated advance, and the difficult requires more practice than the simple.

Strategic exercises on a large scale are needed, because they present problems of warfare that those on a smaller scale never do.

Bicycle troops are to be added to the independent cavalry. Likewise air craft in greater numbers. Under modern circumstances they are indispensable for reconnaissance. They spare the cavalry the necessity of dissipating its strength in reconnoitering patrols. In these we have new weapons put into the hands of the cavalry, that were not formerly at its disposal. It is absolutely necessary that it learn to use them. And that requires practice.

Since the bicycle troops are confined to the roads, and can go but short distances cross-country, their utility for reconnaissance is very limited, and, in general, they must be kept *en masse* for battle. At night they may be made use of in the service of security.

Since the cavalry division will ordinarily have but one or two companies of bicycle troops at its disposal, they will in general, according to the presumed strength of the enemy, be used either in the advance guard, to open the battle, or in the reserves, to push the battle to its final conclusion, whenever it is evident that this must be done by dismounted action. These things must be kept in mind in training the cavalry leader. This training can be had, especially as concerns the use of bicycle troops in the advance guard, as a screen, only in exercises on a large scale.

Incidentally, because of the lamentable smallness of our cavalry divisions, it is desirable, or rather mandatory, that a battalion of bicycle troops be added to each division, not only to increase its combat strength (which is the important consideration), but also that single companies may be detached when circumstances require it.

Maneuvers on a large scale, over a great extent of country, are necessary for the proper training of cavalry leaders, not only in the use they are to make of cyclists, but also to work in harmony with the air fleet.

The air fleet is charged not only with reconnaissance, but also with screening, in that it must prevent reconnaissance by the hostile air craft. How this can best be accomplished, has been discussed above. But it is evident that such a new auxiliary to warfare can be discussed only theoretically, and that practical exercises are needed to solve its problems, and to insure the harmonious working together of the two arms.

A wide field is here opened up for the higher cavalry leader, and with it the number of problems presented for his proper training, is greatly increased. The problems are not easy to solve.

The training for combat, of the larger bodies of cavalry, has to be carried on on the drill grounds. Space being very limited, the leader's training in making separated columns work in harmony, can be carried on only to a limited degree. Therefore, the work with separated columns must be pushed into the foreground at the larger strategical exercises. But even the combat exercises on the drill grounds must be conducted so far as possible with the ideas of modern warfare in mind.

It is absolutely necessary that the strength of the opposing parties be not always the same, and that the operations be not always conducted with massed cavalry divisions. Other—a harmful schematism will be the result, and neither party will feel itself the weaker, and, therefore, neither party will bave opportunity to resort to the carbine, as it will be sure to do at times in actual warfare. Furthermore, the instruction must be so conducted that neither party will be oriented concerning the strength and position of his opponent, and will, therefore, be compelled to exercise caution in going into battle. Only in this manner will it be possible to train real leaders of troops, who will measure up to the needs of actual warfare, instead of training mere tacticians, who, under the demands of modern warfare, are worthless, and under certain circumstances worse than worthless.

The cyclists should be attacked to the cavalry dicisions, even at maneuvers, does not require discussion. It would also be advantageous if they were present with an indicated enemy.

The cavalry's work in the battle can be properly practiced only at the imperial maneuvers. Even there one must learn to

desist from charge action, and to employ the troops in the modern way. It cannot be demanded of even the divisional cavalry that it work direct with the infantry. One must be content when it do that which would be possible, and which would be fruitful of results, in actual warfare.

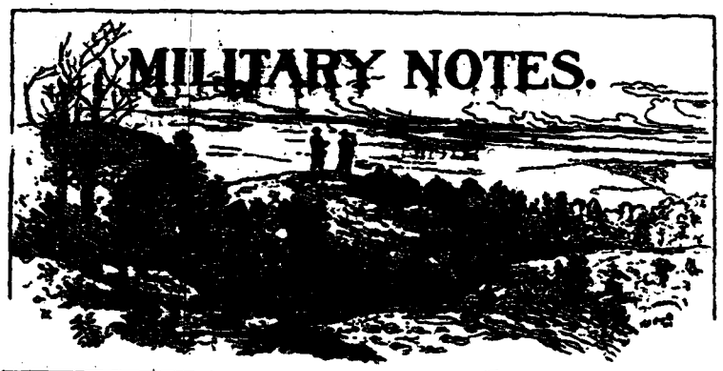
Everything considered, it is unusually hard to give a cavalry leader systematic training. That is true because it is practically impossible in times of peace to set up conditions such as the cavalryman must face in time of war. And also because the leading of cavalry, more so than the leading of any other arm, is dependent upon imponderable moments, upon traits of character, and upon instincts—things which develop within a leader, but which can never be imparted to him by education. It demands a sum of traits which are rarely found combined in one person: daring, and restless enterprise; quick apprehension, and rapid decision; but at the same time calmness and a careful looking about, that never allows itself to be blindly guided by impulse, and never remains indebted to the demands of the hour. The leader must have a sure, instinctive judgment concerning the moral condition of his enemy; an enchanting and spirited influence over his subordinates; and with all this he must be complete master of the horse, be a bold and sure rider, and possess the self-confidence that compels the confidence of his subordinates, and which bars out all faint-heartedness. If a man combines all these attributes within himself, is master of the technique of modern warfare, correctly guages the abilities of his own troops, is gifted with the faculty of giving short and clear orders, and understands to utilize properly the characteristics of his subordinate leaders, then he is a cavalry leader in the best sense of the word.

I know of but two persons in the history of warfare who fit this ideal; namely, Seidlitz and Stuart. It will be given to but few to become their equals. But if everyone who has a cavalryman's heart in his breast; whose pulse beats more rapidly when the horse under him speeds over the ground, and he is reaching for the saber, when squadrons in solid ranks dash forth in a rushing gallop, or convert themselves with lightning rapidity into a dismounted firing line; that one can at least come nearer such an ideal if he studies unintermittently the

attributes of such men, and endeavors to develop in himself those attributes of his which resemble theirs. The army heads must do everything in their power to make possible, and less difficult, the training of cavalry leaders. But each individual must himself do most, through earnest study, and continued self-education, borne by spirited enthusiasm. One cannot become a cavalryman, or more especially a cavalry leader, who does not give his whole heart to it; who does not aim at the fixed goal with all the strength of his soul and spirit. He must be able, throughout his career, to maintain in himself the eagerness and perception of his younger days.

He who would lead mounted troops to victory, needs, under all circumstances, the spirit of youth.

It is something imponderable that stamps a soldier a true cavalryman.



INSTRUCTION AND TRAINING.*

1. An order covering the subject of training of the troops of this command as directed by General Orders No. 17, War Department, 1913, has been issued to the command. While no system of training and instruction could hope to meet with the complete approval of all, orders should be given a fair trial, say for one year at least, after which we will be in a better position to recommend modifications which experience may demonstrate to be desirable. We should cheerfully comply with the spirit of all orders, and refrain from criticising them until able to recommend something better. In order intelligently to conduct training and instruction as contemplated by the War Department, it is necessary that all be familiar with General Orders 17 and I hope that all officers will make a thorough analytical study of this Order so as to insure a clear understanding of the principles enunciated therein.

*Summary of remarks by Major General J. Franklin Bell to the officers assembled in the Y. M. C. A. building at Texas City, Texas, July 11, 1914.

2. In applying these principles it will be observed that certain duties and functions are assigned to the commander of each tactical unit from the company to the division. There is work enough for each commander in his own field without interferring unnecessarily with the legitimate functions of subordinates. Higher commanders are required to allot the time and should prescribe the standard of efficiency desired, but should let subordinate commanders reach this standard in their own way. They should not undertake to prescribe in detail methods of training subordinates must employ during the time allotted to them. They may not go about the work in the same way higher commanders might prefer, but that is of little importance so long as they accomplish satisfactory results. The average man will get better results if told what is wanted and allowed to do it in his own way than if required to follow a detailed method prescribed by some one else. Company commanders should in like manner encourage initiative in their lieutenants and non-commissioned officers. Unless officers and non-commissioned officers are given an opportunity to cultivate initiative in their daily work they can not be expected to exercise it when thrown on their own resources. Brigade, regimental and battalion commanders can, by close observation, determine whether or not subordinate commanders are making the progress they should. If they are not making proper progress, or are not complying with instructions relating to the subjects to be covered, it is the duty of higher commanders to bring about necessary correction. No initiative is taken away from brigade, regimental or battalion commanders by the War Department scheme, but the method of regulating training is reversed. In our service there prevails the custom of higher commanders directing the details of drills and instruction for each day. The present War Department plan contemplates that these higher commanders shall set the standard or degree of proficiency desired and allot the time, leaving the means of attaining it to subordinate commanders of tactical units. But higher commanders are required to exercise constant supervision over the training and when at any time, from the preparation of the program to the end of the period, a commander of a tactical unit shows that he does not understand

the system, or is not able to use the initiative given him, or is not making the progress he should, it becomes the duty of these higher commanders to take such steps as may be necessary to correct deficiencies going so far when necessary as to prescribe the character of training and the time to be devoted thereto each day. In other words, commanders of tactical units are given an opportunity to train their commands in their own way, but if they fail to attain satisfactory results, higher commanders must step in and do it for them.

3. War Department Orders cover in a general way all subjects in which troops should be trained. Most organizations are farther advanced in some subjects than in others, and the organization commanders should, of course, devote most time to those subjects in which the organization is least efficient. If an organization is reasonably proficient in any subject, further training therein should be limited to the minimum necessary to maintain proficiency. Organizations should, however, be tested in all subjects prescribed for a period. That is, during the time assigned for field training, for instance, to each tactical unit, the next higher commander should test the organization in all subjects prescribed in paragraph 5, General Orders, No. 17. The test should be thorough and complete and should be of such character as to really determine the efficiency of the command. In order that these tests may meet such requirements, officers conducting them should exercise special care and thought in their preparation.

4. The preparation of programs and schedules providing for logical, systematic and progressive instruction, covering all subjects in the time allotted, is no easy task, but the good results of well prepared schemes will justify the labor and thought required to prepare them.

Programs and schedules prepared in a perfunctory or indifferent manner are worse than none at all.

5. Weekly schedules should conform to the general plan announced in the program and should be sufficiently in detail to indicate clearly to all concerned just what is to be done each day. As rain or other unforseen contingencies may interfere with the schedule, alternative schedules for at least one day each week should be provided, such as the substitution in case of

rain of indoor work for outdoor work. If proper thought be exercised, it is not difficult to make provision for a change of work, in case unforseen conditions make such a change necessary I am aware that some officers object to the use of programs and schedules, but ample experience has convinced me that there is no other way in which training can be carried out in a systematic, progressive and logical manner. Without them training is bound to be more or less uncertain, haphazard and illogical. Graduates of the Service Schools know the value of schedules. The courses at the Service Schools cover as great a variety of indoor and outdoor instruction as the training of a command. Without schedules it is doubtful if more than half of the work that is now accomplished could be covered in the same time, and it is certain that the instruction would not be as systematic or accomplished with as little confusion.

6. Each company commander should decide upon a standard of proficiency in each subject for company, squad and individual training and all should understand that when this standard is reached only such training will thereafter be required in that subject as may be necessary to maintain the standard. In order to get enthusiastic work there must be an objective, and an incentive to reach the objective. Nothing is more discouraging than working around a circle without any hope of ever really reaching the end of anything.

7. Unless excused on account of proficiency every man, except those absolutely necessary to leave in camp and stables, should attend all instructions. Five hours' training a day with the whole command will get much better results than ten hours' a day with half of it.

8. While there are a good many subjects to be covered in the short period of time that can be assigned each tactical unit, it is believed that, by judicious and skillful use of the time so assigned, each unit can obtain a *reasonable* degree of efficiency in all of them by working an average of five hours a day. I am confident that if we devote five hour a day for five days each week for fifty-two weeks each year, less holidays, to training and instruction, following a well-thoughtout, systematic, logical progressive program, the results will exceed anything we have accomplished heretofore. With the exception of days assigned

to field exercises, all should plan to terminate the day's work, except necessary fatigue, by twelve noon for enlisted men and not later than one o'clock in the afternoon for officers. From an early breakfast immediately following reveille, until the work for the day is over, every minute of the time should be systematically employed; that is, there should be no lost time. When the day's work is over all officers, and all men, except those detained for disciplinary purposes, should understand that the remainder of the day is theirs to do with as they please. Arrange work so it will be unnecessary, save in exceptional cases, to call on officers and men for any work, even though it requires but a few moments, after the scheduled work is completed. No man can make any headway with his work, accomplish much at study, or get any pleasure out of play, if he is subject to be called on to do something at any hour during that portion of the day which is supposed to be his own. Officers' call at stated hours each day may be very convenient for the adjutants' office, but it usually results in considerable loss of time and much inconvenience for officers of the regiment as they must necessarily work so as to be present at the call without regard to the effect it has on their allotted time. It is thought that the plan of putting all orders and instructions in pigeon-holes and holding officers responsible for getting them between stated hours, signing receipts in a book provided for the purpose, will be found more satisfactory to the majority of officers concerned, and harmonize in greater degree with the requirements of other duties. Should it become necessary to confer with certain officers or deal with them verbally in administrative work, as required by War Department Orders, let them be notified to attend at such an hour as will least interfere with their prescribed duties.

9. I am delighted to learn that the *conduct* classification of enlisted men has been adopted in some regiments in this command. It is an excellent idea, and I am in hearty sympathy with it and hope that the regiments that have not adopted it will do so. So far as discipline and training are concerned there is nothing to gain by requiring good men to attend retreat or to be present in their tents for check roll call. Most good men appreciate being excused from attending unnecessary

formations and will show their appreciation by increased effort at really important work. Briefly, require of officers and men all legitimate work necessary to attain and maintain a high degree of efficiency for field service, but nothing more. Remove all restrictions not necessary to obtain results and grant all the privileges consistent therewith. Never require work just for the purpose of keeping busy.

10. A certain amount of diversion is necessary to contentment, and contentment is necessary to efficiency. "All work and no play makes Jack a dull boy." This is especially true in a camp located as is this one where opportunities for interesting and healthful amusement are not great, especially for enlisted men. Therefore, all should do what is in their power to encourage proper amusement and entertainment for enlisted men and should be ready to assist in providing healthful recreation and diversion for brother officers and their families.

11. Experience has demonstrated that one difficulty in adhering to a prepared program is that higher commanders interfere with it by ordering other duties. While unforeseen and unexpected contingencies may arise, such as reviews for distinguished visitors, escorts for civil officials and high-ranking military officers, which make it necessary for higher commanders, occasionally, to break programs and schedules, it should only be done when impracticable to avoid it. All should make a conscientious effort to adhere to the prepared program and weekly schedules.

12. No more men should be detailed on guard than are necessary to perform the duties expected of them. Some form of provost guard or military police will be organized to take the place of all guards in this camp other than regimental. A guard organized along the lines of the watchman system, generally decreases the number of men required for guard duty and gives much better results. This system can be worked in regiments just as well as elsewhere. Generally speaking, "No. 1," does nothing more than walk in front of the guard tent and turn out the guard for those entitled to the compliment. He is a perfectly useless, time-honored military institution which should long ago have been placed in the same category as tattoo roll

call. The number of men necessary to protect property and maintain order in camp should be detailed, and no more.

13. Reduce the number of men on special duty to the minimum (see par. 3, G. O. 6, Hq. 2nd Div.).

14. Likewise reduce the number of men detailed for police duties and fatigue to the minimum required to police the camp and do the necessary work. Don't detail ten men when five could do the work.

THE BASKETWORK BOAT.

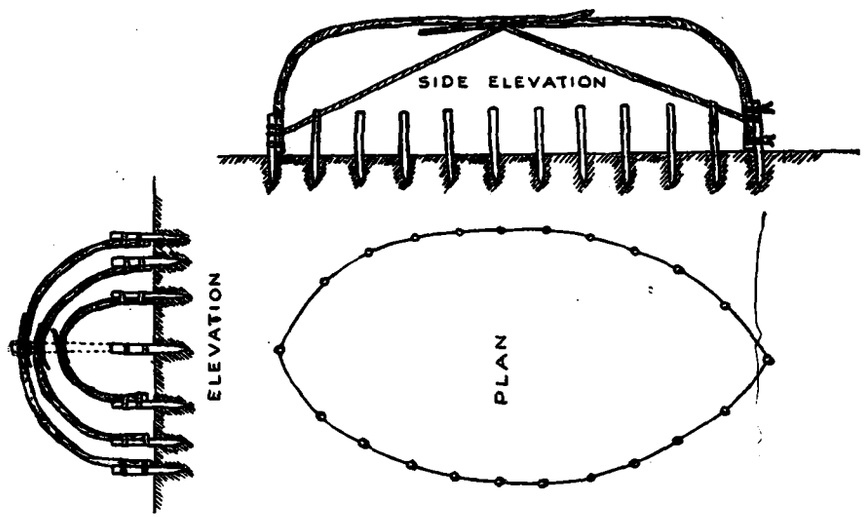
IN foreign regiments of cavalry a canvas pontoon is part of the equipment. No such provision having been made for our cavalry, it behooves us to discover how we can improvise such a boat when it becomes necessary to use one in crossing a river. The boat which I am about to describe can be constructed by the use of a wagon sheet, willows, rope, cord, and tent pins. It will require one hour in the making and will hold over 1,000 pounds.

Most rivers of the southwest and in Mexico are bordered with willows and cottonwoods. For the ribs and keel of this boat cottonwood branches are better than willows, being heavier

Process: The boat is built upsidedown. Mark out on the ground the outline of a boat, sharp at both ends, eleven feet long and five or six feet wide. At the bow and stern drive tent pins to which the keel is to be attached. At intervals along the sides drive tent pins to which the ribs are to be attached, as shown in the cut. Lash flexible sticks of cottonwood to the tent pins at the bow and stern; bend them together and lash them to each other to form the keel. To prevent them from straightening out, tie a rope as a hog chain from bow to keel and thence to the stern, as shown. Fasten the flexible sticks used for ribs to the tent pins on the sides; bend them together and lash them together and lash them to the keel. Form the gunwale of flexible sticks lashed along the ends of the ribs, inside and out.

Next take smaller willows and weave them in between the ribs, forming a basketwork. We now have a basket the shape of a boat. It is upsidedown. Cut it loose from the tent pins.

Take a wagon sheet (see that there are no holes in it), place it over the bottom and tie the edges inside the boat. If the sides tend to spring out, fasten a rope from one side to the other.



Such a boat will carry a thousands pounds and still draw but a few inches of water. One was constructed by the writer in 1880 and used on the Unconpahgre River with success. It is a rough and ready temporary expedient.

JAMES PARKER,
Brigadier General, U. S. A.

ENDURANCE RIDE.

IT will perhaps interest those who have read the report by Lieutenant R. M. Parker in your issue of November, 1913, on the Endurance Ride in Vermont last fall, to hear of a later test of the three-quarter bred Arab mare that won that contest.

It will be remembered the Halcyon, carrying 180 lbs., covered 154 miles of hilly road in Vermont in 30 hours and 41 minutes. That time included all stops, one at 2:30 A. M., when she had to be reshod while the other horses went forward, so losing 55 minutes, which she was able to make up, and came in with the others, having caught them 17 miles before the end.

At Madison Square Garden, she was the only horse ridden by an American officer, that got in the ribbons in the broad jump, thirty-eight others, including all the English, Canadian, and American horses were behind her. Never before having jumped under artificial lights, Halcyon covered 18 ft. 6 in.

On Memorial Day, May 30, 1914, sent over the road from her home at Fall River to North Grafton, Mass., she competed for the broad jump against a large field of the best jumpers, at the Invitation Show of Hunters at Mr. Harry Worcester Smith's estate, Lordvale.

Though the class was a very choice collection of cracks, including the hitherto unbeaten Natty Bumpo, Halcyon won the blue in great form, jumping twenty feet and five inches, without having to extend herself. In practice the mare has covered thirty-two feet from take off to landing.

After a rest over Sunday, Halcyon came from Lordvale to her own stall, sixty-five miles, in ten hours, including the time of two stops, one of thirty minutes at Blackstone, and another of one hour at Pawtucket, the road being hard macadam all the way.

SPENCER BORDEN.

FIELD MESSAGES.*

THE following rules in connection with instruction in field messages have been found useful and are printed for the information of all concerned:

A field message is a brief communication which passes from one person or part to another of an army on service.

A message may be transmitted verbally, in writing, by a messenger, or by wire, flag, etc. We are here chiefly concerned with the message transmitted by messenger.

Verbal messages are to be habitually avoided whenever practicable to do so. When one must be sent, it should contain only a single statement or instruction, as: "Go to UNION BRIDGE and there halt." The messenger should be required to repeat the message before starting.

A messenger should be required to repeat instructions given him in order to determine that he understands what is required of him. A messenger on return to the detachment from which dispatched should report to the person who sent him out and report concerning the delivery of the message.

Messages should habitually be written. Messages blank have been printed in various shapes and forms. The printed headings are all practically the same and indicate what is to be filled in under each.

The following form contains all the essential subheads for a field message:

Communicated By Buzzer, Wireless, Foot Messenger, Mounted Messenger, etc. Underscore means used.	From..... Name of sending detachment At..... Location of sending detachment. Date..... Hour..... No.....
To.....	
.....	
.....	
.....	
Received.....	

* From G. O. No. 1, Headquarters Fifteenth Cavalry, June 1, 1914.

Each of the sub-headings are essential: first, to the person receiving the message in order to give him complete information; and second, for preservation in order to give a true history of the narrated events and to clear up mooted points.

Use the abbreviations and nomenclature as given in Field Service Regulations.

The address should be simple, as:

Comdg. Officer,
2d Sq. 15th Cav.

The name of the sending detachment is that of the body of troops with which the writer is on duty, as, "Post No. 1, Support No. 1, Tr. A, 15th Cav.," "Patrol No. 1, Tr. L, 15th Cav.," etc.

The exact location from which sent should be stated, as: "At TOBIN," "At SOCORRO." If the point indicated is not well known, then indicate by reference to some well known point, as: "At HITTS RANCH, 12 miles north of FORT BLISS."

In writing the date, the day of the month is first expressed in figures, this is followed by the month and then by the year, thus: 12 June 1914.

The hour is the exact time at which the message is dispatched. Hence, this is the last element filled in. The terms A. M. and P. M. and Noon and Midnight are used, thus: 10:27 A. M., 12:00 Mdgt.

If several messages are sent the same day from the same source to the same person, each is numbered consecutively, in the heading "No."

The method of transmission on the printed form is underscored. When the writer has no printed blank but has to write his form, the method of transmission is stated; as: "By Pvt. Jones, Mtd."

The signature should be simply the writer's surname and rank, as: "BROWN, Corpl."

The person receiving the message should fill in the hour and date of receipt and should add his initials. The messenger should be given a receipt for his message.

When one is available, the message will be placed in an envelope, addressed to the person to whom to be delivered.

The gait or speed at which the messenger is directed to travel should be indicated on the envelope. The person to whom delivered should receipt for the message on the face of the envelope and give the envelope back to the messenger. Unless the message is confidential it will not ordinarily be sealed and messages not confidential will ordinarily be shown to all friendly troops encountered by the messenger enroute to his destination.

In the field the printed blank form will frequently not be available, but the general form should be followed and this may be done by using a pencil and any convenient piece of paper. With a little practice, it will be easy to remember the things that the printed part of the blank calls for.

The writing should be legible. Cultivate the upright style for writing messages.

A message should be written in the telegraphic style, free of all formalities, brief and clear, but brevity must not sacrifice clearness.

All proper names of places should be printed in full Roman capital letters, thus: ARLINGTON, LEAVENWORTH, EL PASO.

Distinguish between that which you know of your own knowledge and that which has been reported to you, stating in the latter case your source of information.

Always state the exact time (hour and minute) when the referred to event took place.

When the enemy is first discovered by a patrol or similar detachment a message should be sent.

In reporting about the enemy, state the kind of troops or the arm to which they belong, whether they are mounted or dismounted, at a halt or in motion; if marching, the road they were on and the direction they were going, and, for mounted troops, the gait. Also state the numbers seen, as: so many individuals, or as so many troops, batteries, or companies, etc.

Messages sent by a leader of a patrol or similar detachment should state what he intends to do next.

The messenger should preferably be a man who personally saw the things recorded in the message. He should be told the route to take, the gait at which he should travel and in case

he gets captured to destroy the message. For possible use should the message become lost or destroyed, he should commit to memory the facts stated in the message.

The following is an example of a message as conforming with the foregoing instructions:

Communicated by Pvt. Jones, Mtd.	From: Patrol No. 2, Tr. E, 15th Cav. At: Hancock Hill. Date: 1 June 1914, 11:00 A. M. No. 1.

To Comdg. Officer,
Tr. E, 15th Cav.

Marching west on MILLWOOD ROAD as patrol approached SALT CREEK BRIDGE was fired on by hostile dismounted concealed detachment probably ten men. Pvt. Jones was slightly wounded. My patrol fell back here. No enemy visible. Will move via FRENCHMAN toward CROOK POINT.

SMITH, Sgt.

Received 11:15 A. M., 6—1—14, P. Q. R.

CAVALRY FOR MEXICO.

IN the *Outlook* for June 20, 1914, the magazine's brilliant correspondent, Gregory Mason, accompanying General Villa in the field, has this to say of the latter's troops:

"In Hipolito, Villa parked a dozen trains holding 8,000 cavalry and 4,000 infantry, while the remainder of his army, all cavalry, went on to the point where the torn-up rails forced them to take out their horses for the march on Paredon, a Federal-filled town. * * * Villa holds a slight opinion of infantry, using it only for garrisoning towns and protecting his rear; and indeed, a dismounted soldier is the Mexican desert, where water-holes are few and far between, is helpless.

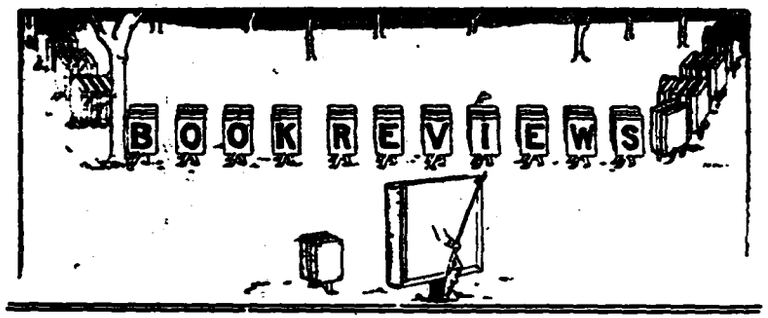
* * * *

"The railway is an important factor in all modern warfare; but nowhere is its possession so necessary to an army as in northern Mexico, where travel over the waterless desert is impossible for infantry and difficult and dangerous for cavalry."

Without depreciating the splendid qualities of our infantry and its inestimable value in an initial advance on the city of Mexico, it is just as well for our War Department to appreciate that after occupation of the three or four leading Mexican cities, the bulk of the work of pacification will have to be performed by cavalry. It was so in South Africa, it was so in the Philippine Insurrection, and it was even so in the later period of our Civil War. In fact, wherever a foreign people resort to serious guerrilla operations against an invader, history shows that large bodies of cavalry of superior quality are absolutely necessary to cope with the situation.

If the United States decides on the invasion of Mexican territory our small cavalry force will undoubtedly have to be augmented either from volunteers at home, or by the ultimate enlistment of mounted *rurales* in the United States service. The mounting of infantry, tried out from time to time in our Indian Wars, and on a more extensive scale in the guerrilla operations of the Philippine Insurrection, has always proved a wasteful and extravagant policy—to say nothing of the inefficiency of such troops until constant training has practically converted them into cavalry.

DRAGOON.



Night Movements.* The increased vogue of night operations in the latest wars and the frequency with which they are now being used by the contending Mexican factions, makes the appearance of this volume timely. It was evidently written by a keen observer who had good opportunities to learn about such movements during service in the Manchurian War, and who is writing for the instruction of Japanese students and younger officers.

The tactical principles enunciated seem to me to be sound and are elaborated in detail.

The work is a monograph or essay rather than a study.

Anyone who carefully reads this book will not be misled by the easy success of the Constitutionalists in some of their recent night attacks but will realize that they were won because the defenders were undisciplined and demoralized.

Any officer who carefully studies this book will feel amply repaid by the knowledge gained.

It is to be regretted that the Japanese author followed distinguished precedents by wasting time and printer's ink in numerous divisions into sub-heads.

Lieutenant Burnett is to be congratulated on having added this work to our numerous available military translations.

ELTINGE.

*"TRAINING IN NIGHT MOVEMENTS." Based on Actual Experiences in War. Translated from the Japanese by First Lieutenant C. Burnett, Fourth Cavalry. U. S. Cavalry Association, Fort Leavenworth, Kansas, 1914. Price $1.00, postpaid.

Tactical Schemes.* Compiled and placed in shape for publication by a Colonel of the French Cavalry, translated into English by a Lieutenant of the Eleventh British Hussars, introduced by a General of the English Service, and prefaced by some ten pages of remarks from the pen of a member of Parliament, this work enters the field well recommended.

The problems given in the text presumably have been worked out by Colonel Monsenergue, as terrain exercises for the officers of his regiment, on the ground itself.

The book possesses much merit. The reviewer will call attention to defects and errors first.

The sketches to illustrate the problems are not always clear. Probably they were easily understood by the Colonel and his officers, because they were worked out on the ground itself, but for one who has the maps and the text to go by only, there are many points that are not as apparent to the student as they seem to be to the writer.

In some cases, there is not enough given to show why a particular course recommended by the author, is the best one to follow or even a thoroughly practical one. Perhaps if the map furnished with the text had been enlarged by photography, the problems might have been more easily understood.

This difficulty of following details on military maps is one that nearly always confronts us in the study of French and German military works. It is a constant stumbling block to a thorough understanding of what is intended to be taught. In this connection, it is well to call the attention of the officers of our army to the advantages which our military students enjoy in the way of maps. The Department of Field Engineering at Fort Leavenworth has given us not only the war-game map of the Gettysburg-Antietam terrain but also a photographic reduction of same on a scale of three-inch to a mile and an ac-

*"CAVALRY TACTICAL SCHEMES." A Series of Practical Exercises for Cavalry. By Colonel Monsenergue, French Cavalry. Translated by E. Louis Spiers, Eleventh Hussars, British Army. With an Introduction by Brigadier General H. de la Poer Gough, C. B., etc., and a Preface by F. Bennett-Goldney, F. S. A., M. P. Hugh Rees, Ltd., London. Price six shillings, net.

curate map of Fort Leavenworth and vicinity on the same scale. Also a war-game map of the latter region.

Should one of our cavalry officers decide to produce a work like Colonel Monsenergue's he could work up his problems in the country represented by either or both of these three-inch maps mentioned above.

These maps are already in the possession of many of our officers and the others can get them at reasonable cost if they want them. Such a book could be sold with or without maps, as those officers already having maps would not want to purchase them again.

A few errors may be pointed out in Colonel Monsenergue's work. Some of these are doubtless typographical:

Sketch, page 81. The aqueduct is not properly indicated. The sketch does not agree with the map.

Problem Q, page 110. The *Maintenon Gate* is not shown on the sketch.

Page 118. "Fifth Bound to the *Crossroads of Maurepas.*" The detachment does not go through *Maurepas.*

Page 117. The machine guns are called artillery on the sketch.

Page 132–133. The *Chevalier Woods* are east not north of *Daigny.*

Page 147, next to last line. "The Emperor is just about to debauch" (debouch). Napoleon's worst enemies have never before accused him of this.

Page 150. "First Bound, *Crossroads of Givonne.*" The sketch does not indicate any crossroads at point where the incident is supposed to take place.

Pages 168 and 175. Maps 29 and 30 are supposed to represent the same country. On one, the distance from *Vouziers* to *Monthois* is thirteen kilometers; on the other is it nine and one-half kilometers, only.

Page 215. Some heights are mentioned about the middle of the page. The sketch on page 211 neither shows these heights nor their relative position.

Page 228. Sketch poor and not drawn to scale.

Page 243, near bottom. It is not apparent how the commander of the troops in *Fleigneau* could have made a mounted

charge in the dark against dismounted men and wiped them out of existence. Perhaps the author does not agree with the Director's Criticism in this case. If not then he should have said so.

Page 275, footnote. *Trautenau*, of 1866 fame, is referred to as *Trantenan.*

A number of other errors might be sighted but these are enough to indicate carelessness in editing the work. As the reviewer has not access to the French edition of the work, he is unable to tell who is responsible for these errors.

The following criticisms are believed to be appropriate:

Appendices I and III. These appendices are of little value without maps to accompany them. It is presumed that all French officers have these maps but American officers have not. These two appendices comprise less than twenty pages of the work, which has a total of 337 pages.

In Colonel Monsenergue's book, the problems of troop schemes (one fourth of a squadron) are excellent. Those of a squadron are very good also. Those of the half regiment are harder to understand, while those of regiment and the mixed detachment are not so well explained nor so easily followed as those of the simpler organizations. The sketches are on such a small scale that they do not show the fine points of the problems.

The maps furnished with the book appear to be on a scale of 1:75000.

The scales of the sketches are not all the same but hardly any of them are on a large enough scale to show all of the topographical details mentioned in the text.

To have made the sketches to a larger scale and to have shown more details would have added much to the expense of getting out the work. The author could hardly have hoped under such circumstances to have the book clear expenses.

Pages 278–280. According to our teachings at the Army Service Schools, the force of two battalions of infantry (2,000 men), which takes part in this problem, extends itself over entirely too much ground.

At one time a distance of about two miles separated the two battalions. According to our ideas this is usually considered too far to extend in the presence of an active enemy.

Notwithstanding these criticisms and the errors to which attention has been invited, the reviewer considers the work an instructive one to the cavalry officer.

On almost every page, the Colonel emphasizes the value of offensive mounted action for cavalry and he never fails to recommend a charge if there seems to be the slightest chance of creating a diversion or of winning the fight.

The Colonel also gives us some good pointers on the use of cyclists and machine guns in strengthening cavalry.

I believe that the book would be a useful addition to any officer's military library.

N. F. M.

Editor's Table.

BI-MONTHLY OR QUARTERLY.

Since the announcement was made in the last number of the CAVALRY JOURNAL that, commencing with the July, 1914, number the JOURNAL would be published quarterly, we have received several protests against making this change. The writers of these protests are among those who have a decided and peculiar right to be heard on this question as they are and have been for years consistent and energetic workers for the JOURNAL and not a few of the most valuable contributions for it are from their pens. That their voice in this matter should bear great weight goes without saying.

One of these objectors writes as follows:

"I am very sorry that you have gone back to the publication of the JOURNAL as a quarterly. In my opinion, your recent numbers of the JOURNAL have been quite as full in point of contents as any. I am hoping that you will reconsider."

In one of our cavalry regiments a vote was taken, or partially taken as but fourteen votes were received, on this proposition and with the following result: For continuing the JOURNAL as a bi-monthly, 8; for publishing it quarterly, 5; and one vote "immaterial." One of those voting for the publication being bi-monthly, added: "And at Washington, D. C." This last proposition would require a change in the Constitution of the Association, whereas the frequency of publication is in the hands of the Executive Council.

Inasmuch as the change from a bi-monthly to a quarterly was decided upon by the Council in April last and it has practi-

cally gone into effect, in that the Post Office Department has been so notified and a request made for a fresh permit for the JOURNAL to be entered as such under the Act of Congress of March 3, 1897, it is believed that it is not practicable to reconsider the question at this time. Especially is this true as there are but two members of the Executive Council now at Fort Leavenworth, whereas every member was present when the question was considered in April last.

On the other hand, several of our members have written commending the change, two of whom have been regular contributors for several years. They stated, in effect, that few cavalry officers have the time, especially in these troublesome times of threatened war, to read aud study, much less to write for publication.

Futhermore, when this question was being discussed here at Fort Leavenworth in April last, it was the almost unanimous opinion of those cavalry officers who were on duty at the Army Service Schools that it would be wise to return to the old time plan of publishing the JOURNAL as a quarterly.

However, as the deed has been done and it is not believed that it is practicable to reconsider the matter at present, it might be well for our members to discuss the question and be prepared to vote for or against the proposition in case it should come to the front after the return of our cavalry troops to their home stations. In the meantime, we would be pleased to hear from others of our members as to their views on the question.

Our thanks are due to the several contributors who, in response to the recent personal appeal made to many of our cavalry officers have rushed articles to us for publication. The result has been that we have had plenty of material for this number and a fair start for the next one, a status of affairs that has not obtained for many moons.

CAVALRY INSTRUCTION.

Not a few of our members have taken your Editor to task for republishing Bulletin No. 18 so frequently in recent numbers of the CAVALRY JOURNAL, they claiming that all cavalry officers who were students of their profession knew all the principles contained therein by heart and that it was a waste of space and money to continue its republication.

As the footnote under this article showed, this was republished at the request of the then Chief of Staff of the Army. When such requests are received, they are invariably laid before the Executive Council of the Association for instructions. In this case, it was ordered that this request that this article be given a standing page in the JOURNAL be complied with *"for the present."*

As a fact, it was the intention to discontinue its republication in the May number of the JOURNAL, but, through some misunderstanding, the instruction to *"kill it"* was not carried out.

Under this head of Cavalry Instruction, there is much meat to be found in at least two articles in this number of the JOURNAL. The first is the one giving extracts from De Brack and the second is the translation by von Bernhardi.

There is also much under the head of general instruction in the summary of the remarks made by General Bell to the assembled officers at Texas City that should be taken to heart by all officers, especially by those in the higher grades.

There has been so much in our army, in the cavalry particularly, of the half hearted, disconnected, haphazard system, or lack of system, in instruction that the time was frittered away and each year's work showed but little progress in practical, useful cavalry instruction.

Perhaps the above statement should be modified to a certain extent and make it apply to the time when the writer was a cavalry soldier, as it is believed that some advancement in this respect has been made in recent years. However, it

was the writer's experience of many years service as a troop officer, that there were but two periods when any sensible or practical scheme of instruction was followed in the command to which he belonged. The first was a year's service under the late Major Moylan, who, by the way, was one of the very best troop commanders our service has ever known, where the troop was the only one in a large infantry garrison and its instruction was left entirely in the hands of its then captain, (Moylan). With practically every man present, except the sick and one man in quarters and one at the stables, every forenoon, for five days of each week, was occupied with systematic mounted instruction. It was not confined to the usual garrison drill ground, as was usually the case, but frequently was extended to several miles from it when engaged in outpost, or advance and rear-guard instruction. It is true that this instruction was confined to that of the drill book, but in those days no one ever heard of any other instruction.

The other period was one of several years at Fort Riley under General Forsyth, then Colonel of the Seventh Cavalry, who was aided and abetted by his adjutant, the present Major General Bell. In this case the instruction was progressive and systematic each year from the winter drill in the riding hall to the closing field excercises in the late fall. Here also were the troop commanders given much latitude, within limits, of course, in instructing their troops but they were expected to produce results and they did it.

Barring these two above mentioned periods, the writer spent many of the years of his service as a subaltern executing close order movements, such as "*Column of fours, break from the right, to march to the left,*" or some such fool exercise, and as a rule, his field officers played the part of troop commanders and even First Sergeants as well as commanders of a squadron.

JOURNAL OF THE U. S. CAVALRY ASSOCIATION

October, 1914.

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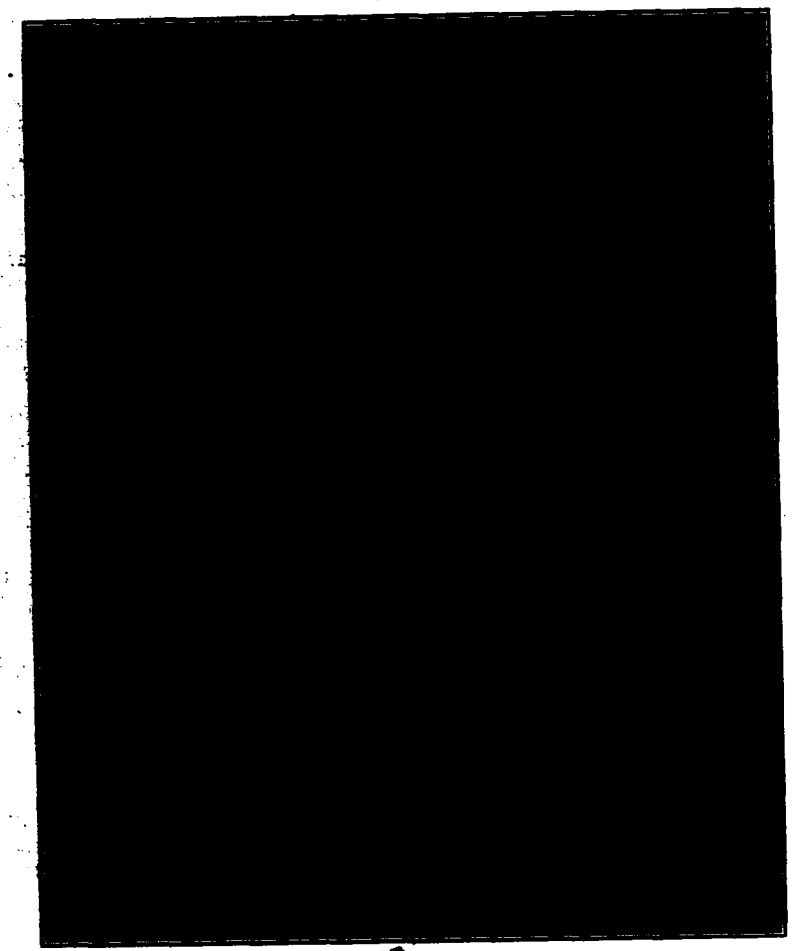

CAMILLO C. C. CARR,
BRIGADIER GENERAL U. S. ARMY.
BORN MARCH 3, 1843. DIED JULY 24, 1914.

JOURNAL
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THE GREATER LEAVENWORTH.

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

TWENTY years ago there were assembled at Fort Leavenworth a splendid group of young instructors and student officers endeavoring to create professional standards of theoretical and practical knowledge which would remove for all time the Infantry and Cavalry School beyond the border land of the kindergarten. The foundations then laid have been builded upon consistently and progressively with results that are creditable alike to the army and the nation which has made possible such great opportunities for the acquisition and distribution of professional knowledge. The vast array of manuals on military and allied subjects which confront the student of today illy qualify him to comprehend the difficulties encountered by those who took up the mantle then falling from the shoulders of the courageous generation which had borne the brunt of the Civil and Indian Wars. A large part of the army had recently returned from the Pine Ridge campaign convinced that the end of the area of Indian Wars was at hand. The time seemed propitious for establishing the instruction of officers upon a more progressive basis and at the same time to make provision in the way of practical application as a substitute for that which was

then being lost through cessation of Indian hostilities and consequent active service, hitherto a splendid school of minor warfare.

It was my fortune to be associated with some of this work and to observe the difficulties arising from lack of facilities and paucity of funds. This knowledge, gained in actual contact with the situation, was of much value, when at a later date, being on duty in the War Department, I was constantly called upon for detailed information concerning the military establishment. The service schools, prior to the war with Spain, had received recognition, but not in such generous measure as has followed in the wake of large appropriations and increased facilities. The one serious disappointment to those who had given, without stint, their time and labors in upbuilding the schools arose from the failure to carry out the recommendations made by the school staff from year to year as to the best employment of the graduates in war. These recommendations had been carded and filed in the War Department efficiency records of which I then had immediate charge as Assistant Adjutant General and at the outbreak of the war with Spain I appealed in vain for consideration of them in the order of merit as arranged by the school staff. Expediency, as usual, won in the contest with military policy. The graduates, however, went about their war duties uncomplainingly and with such efficiency that I was enabled to call the attention of some high in authority to the fact that in Cuba, Porto Rico and the Philippines not an instance had been observed where any graduate of the Infantry and Cavalry School had been found wanting in knowledge of all the details of practical service. Certainly no body of officers ever took the field with better technical knowledge of minor warfare than the regulars who were so widely dispersed in Cuba and the Philippine Islands and that they would have rendered an equally good account of themselves in campaigns of greater magnitude is beyond question.

In pondering over the matter it appeared to me that the propitious time for preparing for the greater establishment at Fort Leavenworth was while the troops were absent on foreign service, and on December 30, 1899, I submitted the following to the Adjutant General:

"*Memorandum for General Corbin*:

"In view of the resumption of the Artillery School next summer and the probability that the Infantry and Cavalry School at Fort Leavenworth may be resumed a year later, I would recommend that *the Secretary of War order a carefully selected board of officers to visit these two establishments without delay and make a thorough investigation of the two posts with a view to repairs of the old and construction of the new buildings, in order to put these two establishments in first class shape for larger classes than have heretofore attended them.* If anything has been proven at all during the recent war, it has been the great value of having the young officers of the army thoroughly instructed in their duties. There is no doubt in my mind that the success which has attended almost every movement of troops, has been largely due to the thorough instruction imparted to the young officers of the army during the past ten years, in which these schools have played a most important part. They should be encouraged in every manner possible.

YES

"So few of the young graduates were selected for advancement that some little discouragement may attend the re-opening of these establishments, but it is believed that the good sense of the army would enable the officers to stand firm in resuming the work which has counted so much for the benefit of the service as a whole. I earnestly recommend that you interest the Secretary of War in increasing the value of these schools *by adding thereto a training class for non-commissioned officers*, with a view to having on file at the War Department a list of those whom the school staff regard as available for appointment in time of war or an emergency of any kind.

YES

"No one knows better than the Adjutant General the harassing conditions which have come to us through the promotion and detail of officers away from the regular regiments. This is no new condition, for I have noticed in the records of our office continuous complaints by letter during the Civil War on this subject of absenteeism from

the regular regiments. There is no question that many of these officers detailed away, both during the Civil War and the war with Spain, performed duties of a high order which justifies from every view of the case a continuance of the practice. What we need badly for such emergencies as arose during the Civil War and the war with Spain is a well adjusted plan for determining the relative merits and qualifications of the young non-commissioned officers of the regular army in order that they may be promoted as additional second lieutenants for the war, for service with the regular troops to insure these organizations not being deprived of officers as has happened so frequently of late.

Yes

"A very simple statute in the new bill would provide for this. Again, the organization of the so-called immune regiments and more recently the national volunteer regiments, which have gone to the Philippines, shows the great value of having regular officers at the heads of these organizations and giving to each regiment an experienced staff. It should not be expected that the small regular army should provide lieutenants and staff officers of volunteer regiments. The material which has come into the ranks of the regular army during the past ten years contains any number of young men capable of being developed by the service schools, so that a very large percentage of them would be fully competent to perform the duties of Adjutant, Quartermaster and Commissary, or in fact, any commissioned position in a volunteer regiment.

"The question of apprentice battalion has been before the Department frequently, but has always been discouraged. The proposed classes at these schools are in no wise connected with the apprentice project.

"It would be a simple matter to have a record card for each non-commissioned officer, certified by the school staff as qualified for such positions as previously mentioned. By having the age inserted upon the card it could be determined in any year just what men on this list were fitted for promotion, whether they still remain in service or not. This would always eliminate the vast amount of discouraging work in the Department arising from so much political influence.

Respectfully,

WM. H. CARTER,

Assistant Adjutant General."

12-30-99.

The memorandum was approved by the Secretary of War, Elihu Root, by indorsement.

The italicizing and marginal notes indicate the parts especially approved by the Secretary.

A Board was convened by Special Orders, No. 48, Adjutant General's Office, February 27, 1900, and their recommendations were approved with a few exceptions. To make certain that the reconstruction of Fort Leavenworth should proceed along lines of well defined policy, it was ordered that should any modification of the approved scheme be deemed advisable in future a board should be convened and all previous records and proceedings considered by it in order to have continuity of purpose and harmonious development.

On the eve of leaving Washington on an official journey, the Secretary of War being absent, the following memorandum was left by me:

"*Memorandum for the Secretary of War:*

"I have been hoping to have an opportunity to get out the report of the board and the plans for the officer's school at Fort Leavenworth, to show you what has been accomplished and what remains to be done under your authority given last year. From conversations with the Quartermasters who handle these matters, I am afraid that our well planned scheme may not receive the attention due it unless it is borne in mind by you. I feel justified in saying that the accomplishment of the full purpose as set forth in the instructions to and proceedings of the boards sent under orders to Fort Leavenworth, will together with the eventual establishment of the War College, be one of the most lasting benefits to the Army as a whole that has been accomplished since the Civil War. Since the passage of the

Act of February 2, 1901, the enlargement and improvements at Fort Leavenworth have become an absolute necessity to the new Army, which will contain so many young officers without sufficient technical training.

"The appropriation for barracks and quarters will not be sufficiently large to distribute very widely over the country, and I earnestly hope that when the necessities of the seacoast artillery garrisons have been duly considered, that as much of this fund as possible will be devoted to continuing the work at Fort Leavenworth. By all means a barrack for four companies of infantry should be constructed out of this year's appropriation.

"I hope, if the Secretary can find time when the spring has fully opened to make a trip west, that he will take in Fort Leavenworth, when he will see for himself the great good that this school has accomplished and the greater good it will accomplish in the future, if the improvements are not allowed to go by default.

W. H. CARTER,
Assistant Adjutant General."

3-18-01.

Upon my return, the memorandum was handed me with instructions, dated April 13, 1901, that: "The Secretary of War desires the attached brought to his attention upon Colonel Carter's return to Washington. (Sgd.) P. C. Squires, Confidential Clerk."

This paper bears indorsements in my handwriting, dated May 28, 1901: "Secretary of War states today that Q. M. G. to be informed the Secretary authorizes $500,000 spent on Leavenworth if necessary and available. W. H. C."

As the matter approached definite shape, Secretary Root directed me to arrange for a personal inspection by him of Forts Leavenworth and Riley before approving the large allotments of funds necessary to initiate the greater establishments. On account of a recommendation made by me that one company of engineers with pontoon train, and one battery of light, one of siege and one of mountain field artillery should be included in the new garrison, the Chief of Engineers, General George L. Gillespie, and the Chief of Artillery, General Wallace F. Randolph, were directed to accompany the Secretary. The warm support given to the project at Fort Leavenworth by those two officials resulted in arrangements being made for four companies of engineers and the three batteries of field artillery. Since subsequent policy amended the plan as to field artillery, I will explain that my arguments were all based on the great value of having assembled at the service college proposed at Fort Leavenworth, a war strength organization of each branch of the army, so that our officers who go there in great numbers would be made familiar with units as they would appear in war and which could not be seen elsewhere in peace.

Many years of experience since that period have made plain to me that one of the serious needs of the service so difficult to provide for under the existing dispersion of the army, is a knowledge of modern field artillery, its fighting capacity and its relations to the infantry and cavalry in campaign and battle, and I have not lost any faith as to the correctness of the original recommendation made by me for the garrison of Fort Leavenworth. A knowledge of modern field artillery, its methods and effectiveness of fire, is almost a sealed book to our infantry, and it would be the same with the cavalry if it were not for the opportunities afforded through association with the regiment of horse artillery at Fort Riley.

Modifications of the plans recommended by the board were made by the Secretary of War. A memorandum of July 22, 1901, addressed to the Quartermaster General, is of special interest because of the last paragraph:

"WAR DEPARTMENT, ADJUTANT GENERAL'S OFFICE.

WASHINGTON, July 22, 1901.

"*Memorandum for the Quartermaster General:*

"In the reconstruction of Fort Leavenworth, the following modifications are ordered by the Secretary of War in the plan laid down by the Board of Officers and heretofore approved by him:

"1st. The Administration building will not be built in the small park opposite the Post Chapel, near the Grant Monument.

If the Administration building is constructed another site will be selected.

"2d. The cavalry barracks, next to the gurad house, recommended by the board to be altered to accomodate a mountain battery, will be repaired for a troop of cavalry by adding a wing similar to those now being placed upon the remaining three cavalry barracks.

"3d. Barracks, stables and gun sheds for the siege, and mountain batteries, will be constructed in the 'west end' near those already constructed for one field battery.

"4th. The eight company barracks, heretofore used by the infantry and built to accomodate fifty men each, will be altered and placed in repair for the occupancy of four companies of engineers.

"5th. The infantry barracks for one regiment of infantry and band, will be built upon the site heretofore recommended by the board. The work on the cavalry barracks extension should be pushed rapidly in order that the cavalry troops now occupying the infantry barracks can vacate the same. As soon as vacated, the infantry barracks intended for four companies will be at once modified to accomodate two companies of engineers. The remaining infantry barracks will be occupied by two companies of infantry temporarily, their presence being required at that post to assist in guarding general prisoners.

"As soon as possible one of the new barracks for a battalion of infantry, should be completed. The Secretary of War desires that any funds available for barracks and quarters be used to complete, first, Fort Leavenworth, 2d, Fort Riley, 3d, Fort Sheridan to carry out the instructions contained in the various memoranda of this date. Specific allotments will be authorized immediately upon completion of the estimates and plans.

WM. H. CARTER,

E. R. *Assistant Adjutant General.*"

The initials "E. R." were signed in approval of the memorandum by the Secretary of War, Elihu Root.

The various memorandum mentioned referred to specific construction at the several posts. The mention of Fort Sheridan involves another story. It should be remembered that there was no General Staff at that time and that studies of questions usually considered by such a corps were entrusted in our service to officers of the Adjutant General's Department and sometimes individual officers or boards detailed on approval of the Commanding General of the Army and the Secretary of War. I laid a map before the Secretary of War showing the grouping of military posts as approved by Generals Sherman and Sheridan in and near the great basin of the Mississippi, and explained the desirability of maintaining an infantry division, with a proper contingent of cavalry, field artillery, engineers, signal and other troops in that area. The Secretary of War visited Jefferson Barracks, Forts Riley, Leavenworth, Crook and Sheridan and decided that it was best to concentrate new construction, in the then immediate future, at the posts named in the memorandum, with intention to regard the grouping of regimental posts in the area mentioned as a fixed policy. The new post near Indianapolis, Fort Benjamin Harrison, was established in harmony with that policy.

In view of the recent creation of tactical divisions and brigades in the mobile army, it may not be amiss to insert here a memorandum prepared by General George Andrews, then serving in the War Department as one of the assistants to the Adjutant General:

"For
Colonel Carter:

"WAR DEPARTMENT, ADJUTANTS GENERAL'S OFFICE.
WASHINGTON.

"*Memorandum for the Adjutant General:*

"SUBJECT:—Selection of Military Posts and Camp Sites.

"Our system of small military posts, which originated in the necessity of protecting the advance of settlements westward into the Indian country, has probably culminated; the number of garrisoned posts, exclusive of Alaska and sea-coast forts, being about fifty the largest of which accommodate one ten company regiment of about 700 men.

"Probably no more expensive method of maintaining troops could be devised, but experience since 1898, when the bulk of the troops were withdrawn for other service, proves that but few of these posts are necessary for keeping the peace in the Indian country, and that but few of these require garrisons of the strength of a battalion.

"Due to this system, however, our army took the field in 1898 with but little instruction beyond the school of the battalion.

"The post system not only limits training to the elementary schools, through forcing the army into indefinite sub-divisions, but it substitutes the post as the administrative unit for the regiment and the brigade and condemns all general officers and most staff officers to office chairs, entailing almost permanent separation from the troops. No system of service schools, or war colleges, can make good this loss to general officers of the loss of habitual personal command, or remove the baneful results to officers of whatever grade or corps, which arises from the want of contact and service with the troops. Under this system it is rare that even a colonel commands his regiment, while a brigade commander does not exist, and the department commander cannot summon troops enough at one place to warrant him in exercising personal command.

"This sytem also requires the great amount of official correspondence and each post, being as completely equipped as a small town, the Quartermaster's Department is required to furnish an infinite variety of tools, implements and materials.

"To remedy the existing conditions, troops should be organized into divisions of from 10,000 to 15,000 men, and each division located in one vicinity so that it could be assembled within an hour; the stations of a division would naturally be near a strategic point and in selecting the precise location, there are two leading considerations; the availability of suitable sites for barracks, stables and other necessary buildings for so large a command, within reach of connection with a city water, sewer and lighting systems; the availability of a tract of land within an hour's march of the station, suitable for the maneuvers of at least two divisions of troops, with target ranges for small arms

and field artillery and sites for camps, or temporary barracks, as contemplated in the Act of February 2, 1901.

"The proximity to the city would enable officers and others, not required to live in barracks, to rent houses in the city, and the government would only maintain the baracks and their adjuncts, repairs being done by contract. There would be merely a parade ground at the barracks and the troops would march daily for their drills and maneuvers to the reservation, or encamp there by brigade at certain seasons for target practice, etc.

"Recruits would be trained in the barrack yard. This, in short, is, I believe, the European System.

"The reduction in expense and increase in efficiency would be enormous and troops would always be avaiiable in complete units for service anywhere; the difficulty of finding suitable stations for troops would be solved until an increase in the army made the selection of another "divisional station" necessary. The Quartermaster's Department would have to handle military stores only and administration and command would be, as nearly as practicable, on a war basis; generals would command their troops to their mutual benefit, and duty at such detached stations as it might be necessary to maintain would be performed in rotation by detachments from the nearest division headquarters.

"In view of the probable selection of camp sites under the Act of February 2, 1901, and the recent increase in the army which makes necessary increased accomodations for troops, it is believed the present is the time to inaugurate this system and that the permanent camp sites should be selected with this end in view.

"As regards the political aspects, is it not probable that the interests of sections, which would derive benefit from the proposed system, might off-set those which would lose something? Would not the sale of abandoned posts contribute largely to the purchases and constructions made necessary?

"It is believed that the continuance, or extension of the present post system has nothing to recommend it except the comparative ease with which appropriations are obtained, through the interest of localities to have public money dis-

bursed for their benefit, and that the extravagance of it will, when the reaction comes, tend to cause a reduction in the army even as the system itself now reduces its efficiency.

Respectfully submitted,

G. A.,

Assistant Adjutant General."

"Miscellaneous Division, A. G. O.,
November 26th, 1901."

It became apparent that owing to the wide dispersion of the army and the limited number of regiments available, it would be impracticable to create tactical divisions except as paper organizations. More than ten years later the scheme was put in effect in orders, but the same obstacles yet exist and will continue to exist until a sufficient number of infantry regiments are added to the army to complete the divisions without dependence upon coast artillery and marine corps organizations to serve as infantry in the field.

The reorganization of the army under the Act of February 2, 1901, was proceeding as fast as the widely dispersed force permitted. About twelve hundred vacancies had been created under the several statutes enacted subsequent to the outbreak of war with Spain. It was clearly necessary that immediate provision should be made for filling the vacancies at the same time and affording the new officers fair opportunity to acquire a knowledge of their duties. It should be remembered that aside from the service schools the army had only the very defective system of lyceum instruction at each post, which in general depended upon the personal quantities of the commanding officer and with but few exceptions had fallen into disrepute. Abolition of the lyceum was recommended by me, and the preparation of a substitute system fell to my lot. It was decided to embrace in the scheme a comprehensive system of service education which was published later as General Orders, No. 155, November 27, 1901, which stated that:

"With a view to maintaining the high standard of instruction and general training of the officers of the army and for the establishment of a coherent plan by which the work may be made progressive, the Secretary of War directs that the following general scheme be announced for the information and guidance of all concerned:

THE SYSTEM OF INSTRUCTION.

"There shall be besides the Military Academy at West Point the following schools for the instruction of officers of the army:

1. At each military post an officer's school for elementary instruction in theory and practice.

2. Special service schools—

(a) The Artillery School at Fort Monroe, Virginia.

(b) The Engineer School of Application, Washington Barracks, District of Columbia.

(c) The School of Submarine Defense, Fort Totten, New York.

(d) The School of Application for Cavalry and Field Artillery at Fort Riley, Kansas.

(e) The Army Medical School, Washington, District of Columbia.

3. A General Service and Staff College at Fort Leavenworth, Kansas,

4. A War College for the most advanced instruction at Washington Barracks, District of Columbia.

"I took much pride in the preparation of this order and have always felt a distinct sense of loss that many of its provisions were ignored at the War Department as well as in the service. Former Secretary of War, Elihu Root, took a deep personal interest in the matter and I wish to record here that when I handed him the printed copy of the order in which I had written that the Infantry and Cavalry School at Fort Leavenworth, Kansas, *is hereby abolished* and substituted for it the greater college, the Secretary remarked that when Hamilton College was created it was erected upon the good foundation of the academy which preceded it. He thereupon modified the phraseology to read: "The Infantry and Cavalry School at

Fort Leavenworth, Kansas, *shall be enlarged and developed into* a General Staff college," in recognition of the good work previously accomplished by the Infantry and Cavalry School.

"In the preparation of this order it was borne in mind that accomodations at the service schools would not permit of a large number of student officers and that it was necessary to provide immediately for instruction of all the junior officers in service manuals. This resulted in the provision for garrison schools. Out of the system of instruction has come infinite good, but there was a period when, because of some young officers with diplomas from the staff College taking themselves seriously as compared with their comrades who had not yet had opportunity to pursue the course, a feeling of resentment was aroused. The language of the original order should be always borne in mind: "It should be kept constantly in mind that the object and ultimate aim of all this preparatory work is to train officers to command men in war. Theory must not, therefore, be allowed to displace practical application."

While this order was undergoing final preparation it was decided to resume the instruction at Fort Leavenworth, Kansas, and the following communication was sent to the commanding officer, with a view to having everything in readiness for the inauguration of the new General Service and Staff College:

"September 6, 1901.

"The Commanding Officer,
Fort Leavenworth, Kansas,
Through the Commanding General,
Department of Missouri.

"Sir:

"The Acting Secretary of War directs that the following information be communicated to you, in order that you may have a full understanding and appreciation of the work and conditions which will prevail at the post of Fort Leavenworth during its rehabilitation for the purpose of accomodating its largely increased garrison.

"The plan originally approved by the Secretary of War for the reconstruction of Fort Leavenworth recommended by the

board of which Major Knight was President centemplated but one company of Engineers. That number has been increased to four companies, and the future garrison of the post will be as follows:

4 companies of Engineers	416	Enlisted Men.
4 troops of Cavalry	400	" "
3 batteries of Artillery	480	" "
12 companies of Infantry (130 men each)	1560	" "
Signal Corps detachment, Band, Hospital Corps, and non-comissioned staff, estimated	150	" "
Making a total of	3006	" "

"It is proposed to reopen the school in 1902, and an effort will be made to complete as much of the building as possible during the coming year.

"The four companies of Engineers will be quartered in the barracks No. 45, formerly accomodating six companies of infantry. It will be necessary to remodel the interior of these barracks, and construct wings for company kitchens and mess rooms, similar to those being added to the Cavalry barracks. As soon as plans can be prepared, contracts will be let and the work pushed with as much vigor as possible. One company of engineers has been ordered to proceed from Willets Point, and three companies from Manila, to Fort Leavenworth. Until such time as their quarters can be made ready for occupancy the battalion will be placed in camp.

"A battery of Field Artillery has been ordered to take station at Fort Leavenworth, and this battery will, upon its arrival, be divided, under orders recently issued, constituting two batteries of Field Artillery. The organization of the new battery will require some time, but it is probable that it will be completed before the new barracks can be built. The new battery can be quartered in barracks No. 46 on the main parade, pending the completion of their own barracks, the construction of which will be authorized in the near future. It is

possible that the old frame cavalry stable in the rear of the west end may be utilized for the horses of the second battery until such time as their stables are ready.

"It is probable that the double infantry barracks on the main parade referred to will be eventually utilized for the Signal Corps Detachment, or as the Secretary of War may hereafter determine.

"The barracks for the infantry regiment are to be constructed on the site selected by the "Knight Board" under plans which have already received the approval of the Secretary of War.

"If necessary to begin work on the Engineer barracks before the Cavalry barracks are completed, the cavalry troops can be placed in camp temorarily.

"There will be a considerable period of disorder incident to these changes. Every effort should be made to make the commands ordered there comfortable, but at the same time the work as designed should not be unreasonably delayed.

Very respectfully,

Your obedient servant,

WM. H. CARTER,

Assistant Adjutant General."

The title given the greater school was adopted simply as an expression to show the wider scope of the new establishment and it was with surprise that I learned from one of our senior general officers of criticism because the old title of "Infantry and Cavalry School" had been eliminated. Several years later, 1904, the title Infantry and Cavalry School was restored and the Staff College created as a separate institution. This violated the policy had in mind as the purpose of the greater establishment at Fort Leavenworth, which has now been recognized in Army Regulations by the creation of a group comprising:

The Army Staff College, Fort Leavenworth, Kansas.

The Army Signal School, Fort Leavenworth, Kansas.

The Army School of the Line, Fort Leavenworth, Kansas.

The Army Field Engineer School, Fort Leavenworth, Kansas.

The Army Field Service and Correspondence School for Medical Officers, Fort Leavenworth, Kansas, with the Army Staff College as the crown to the educational arch erected there—the whole well deserving the title of university, but for the limited attendance of students.

Opportunity to make a deep, personal impression upon the affairs of his generation may not come to every officer, but it behooves each one to so direct his acquisition of knowledge that he may not be found wanting when the opportunity does come. The purely practical soldier may erroneously deduce principles from isolated examples. A study of history alone may be relied upon for the avoidance of the errors consequent upon such a course. Those who happily combine a thorough knowledge of theory and military history with practical application may be best counted upon to render the state service of a high order. The scheme of instruction beginning with the garrison schools and continuing through the War College affords opportunities for the present generation undreamed of by their forebears.

During the period when I was preparing the course in hippology for the Infantry and Cavalry School and, subsequently, as Editor of the CAVALRY JOURNAL, I received so much kindly assistance and encouragement from comrades of all branches of the service that a lasting impression was made upon me as to the valuable opportunities afforded at Leavenworth. I began collecting material concerning the history of the post and of the school. Among other things, I secured a practically complete set of printed essays and translations by student officers. These I laid before Secretary Root and in the midst of world wide duties of a high order, he examined all and read some. His interest in the Service Schools was immediate and continued throughout his service in the War Department in the most practical and helpful manner. It was a source of sincere gratification to me to be so situated and possessed of the information necessary to forward the arguments for and upbuilding of a Greater Leavenworth.

THE CAVALRY COMBAT AT BRANDY STATION, VA., ON JUNE 9, 1863.

By Major General GEORGE B. DAVIS, U. S. Army.

IN the period intervening between the accession of General Burnside to the command of the Army of the Potomac and the opening of the Gettysburg Campaign, that army had contributed much to military history. The battle of Fredericksburg had been fought—and lost. Later the elements had been defied in the midwinter "mud march," and the elements had prevailed; under another commander, the army had crossed to the south bank of the Rappahannock and delivered battle at Chancellorsville, and here the commander, and not the army, had suffered defeat. Not much satisfaction was to be gleaned from the winter's work, but, with the steadfastness which ever characterized the officers and men of that army, they maintained at least a show of cheerfulness and were hopeful that under another commander, of greater soldierly ability and a better quality of moral courage, an opportunity would be afforded them to meet their old enemy under circumstances of equal advantage.

In the interval between the return of the cavalry corps from the Stoneman Raid, General Stoneman had given place to General Pleasanton as corps commander. It is by no means certain that this change of commanders was altogether for the better. Stoneman was an officer of greater experience, better skilled in the handling of mounted troops, and thoroughly familiar with his brigade and division commanders; but his health had been impaired by hard and continuous service and he felt that, in the larger field of work that was opening out before the cavalry of the Army of the Potomac, he lacked the physical strength that was necessary to the exercise of active military command. Just what the service of the cavalry was to be, no one could at the instant formulate—*that* was to be discovered in the work of the

next few weeks, and the discovery was to be one of the first importance in the conduct of military operations; it is probable that men like Buford and Gregg saw with great clearness of vision what they were to undertake in the campaign which was about to begin but, being wise men, they kept their opinions to themselves until they could be subjected to the test of practical experience. Buford and Gregg continued in command of their divisions, strongly supported by able and experienced brigade and regimental commanders. A small division under General Duffié, that generally operated under the supervision of General Gregg, was merged in his command soon after the campaign was well under way.

The initiative in the movements that resulted in the decisive battle of Gettysburg was taken by General Lee who, on June 3d, transferred Longstreet's Corps and Stuart's Cavalry to Culpeper. Ewell moved in the same direction, leaving A. P. Hill to confront the main body of the Federal infantry in its old lines opposite Fredericksburg. That the movement was an important one became apparent to General Hooker early in June, and the appearance of some fractions of the Condfederate Army in the upper waters of the Rappahanock a few days later led him to suspect that it was General Lee's purpose to make his annual movement in the direction of Pennsylvania. In this view Hooker was entirely correct.

If such were General Lee's intention, two routes of invasion were possible; he might move to the west, by Culpeper and Front Royal, to the upper valley of the Shenandoah and follow that stream to its junction with the Potomac. While this route had the advantage of placing the Blue Ridge between himself and the enemy, it was possible for Hooker to break through the passes and cut his column in two somewhere in the Valley of Virginia. As President Lincoln shrewdly said, a few days before, in advising Hooker to keep between Lee and Washington: "If the head of Lee's army is at Martinsburg and the tail of it on the Plank Road between Fredericksburg and Chancellorsville, the animal must be very slim somewhere. Could you not break him?"

Another course, and the one actually pursued by the Confederate commander, was to menace Hooker east of the Blue

Ridge before the northward march of the Army of Northern Virginia was finally entered upon. Such an undertaking would cause the Union commander to form up for the defense of the capitol, and thus give great concern to the President, and serious alarm to Secretary Stanton and General Halleck. When some progress had been made in that direction, the troops engaged could be withdrawn through the passes of the Blue Ridge and the march down the Shenandoah could be resumed, with but little danger of further interruption. And such, in fact, was the plan adopted by General Lee for his invasion of Pennsylvania in 1863. The task of beating up Hooker was assigned to Longstreet who, preceded by Stuart's cavalry, was to march up the east side of the Blue Ridge in the general direction of Fairfax and Centerville. On June 8th Longstreet succeeded in concentrating his corps at Culpeper, where Stuart had already established himself.

As soon as the intention of the enemy became apparent, by the withdrawal of the Confederate infantry from Fredericksburg toward the upper reaches of the Rappahannock, General Hooker discovered that his knowledge of conditions in the vicinity of Culpeper and Stevensburg was less full than was necessary to enable him to conform intelligently to the movements of his adversary in that region. He therefore determined to send the entire cavalry corps to the south side of the river in the direction of Culpeper, supported by two strong brigades of infantry.

General Pleasantons' headquarters were at Warrenton Junction, and he was able to mass the several divisions in the vicinity of the fords on the evening of June 8th. At six o'clock on the morning of the 9th Pleasanton with Buford's division and Ames brigade of infantry succeeded in crossing to the south bank of the river at Beverly Ford, but not without serious opposition. The presence and cordial coöperation of Ames' brigade enabled Buford to overcome the resistance offered by the enemy, and a foothold was gained on the farther shore as the result of a saber charge by Davis's brigade in which that gallant officer was mortally wounded. A brave and resolute leader, rising daily in the esteem of his companions, quick to adjust himself to the changed conditions of cavalry employment, equal to any situation that had ever confronted him, more than equal to any command with which he had ever been entrusted, he fell, as he would have liked to fall, while leading his brigade in a saber charge against the enemy. The loss to the cavalry and the army was a great one—to his comrades of a lifetime in the regular cavalry, who loved him as a man and appreciated his rare qualities as a cavalry leader, it was well nigh irreparable.

Buford's objective was Brandy Station, an unimportant station on the Orange and Alexandria Railway, a short distance west of the Rappahannock Bridge. A short distance from the station is a small elevation known as Fleetwood Hill and, in another direction on the road to Beverly Ford, is Saint James Church—names that figure in the reports of the battle. As the greater part of Stuart's command was in the vicinity of Fleewood, Buford found that the work cut out for him was rather more than he could handle unaided. Not deterred by the enemy's superiority in numbers and position, Buford formed his brigades and charged with sabers—not once, but repeatedly, putting up a stubborn fight and striking hard blows with the excellent brigades that made up his command.

In his orders for the movement General Gregg, with his own and General Duffié's divisions and Russel's brigade of infantry had been directed to cross at Kelly's Ford. Approaching the ford on the evening of the 8th, Gregg arranged to cross at half past three on the following morning, as it was necessary that his attack should be as nearly as possible contemporaneous with that of Buford's, but Duffié encountered some obstacles which operated to prevent the crossing of the main command until six o'clock on the morning of the 9th. Gregg had been instructed to establish his left at Stevensburg and, assuming that point as his objective, he ordered Duffié to move there with his division; while Russell with his infantry brigade was to move in the direction of Brandy Station. Gregg himself set out for the same destination, taking a road considerably to the left of that used by General Russell. The sound of Buford's guns was enough to furnish a line of direction to Gregg, and the repeated messages from Pleasanton kept him advised of the urgency of the situation at Brandy.

Duffié had approached Stevensburg, but found it unoccupied by the enemy, whereupon Gregg directed him to march with all speed to Brandy Station. Duffié succeeded in getting into communication with Gregg who ordered him to follow on the road taken by his own command. It is to be regretted that General Duffié was unable to reach the field and form his division in time to assist Gregg when the need of support was greatest, for a little expedition would have naturally affected the fortune of the day. The brilliant and efficient services rendered by General Gregg on this occasion are modestly but clearly described in his official report:

"The country about Brandy Station is open, and on the south side extensive level fields, particularly suitable for a cavalry engagement. Coming thus upon the enemy, and having at hand only the Third Division, (total strength 2,400), I either had to decline the fight in the face of the enemy or throw upon him at once the entire division. Not doubting but that the Second Division was near, and delay not being admissible, I directed the commanders of my advance brigade to charge the enemy formed in columns about Brandy House. The whole brigade charged with drawn sabers, fell upon the masses of the enemy and, after a brief but severe contest, drove them back, killing and wounding many and taking a large number of prisoners. Other columns of the enemy coming up, charged this brigade before it could reform, and it was driven back. Seeing this, I ordered the first brigade to charge the enemy upon the right. This brigade came forward gallantly through the open fields, dashed upon the enemy, drove him away, and occupied the hill, (Fleetwood). Now that my entire division was engaged the fight was everywhere most fierce. Fresh columns of the enemy arriving upon the ground received the vigorous charges of my regiments and, under the heavy blows of our sabers, were in every instance driven back. Martin's battery of Horse Artillery, divided between the two brigades, poured load after load of canister upon the rebel regiments. Assailed on all sides, the men stood to the guns nobly. Thus for an hour and a half was the contest continued, not in skirmishing but in determined charges. The contest was too unequal to be longer continued. The Second Division had not

come up; there was no support at hand, and the enemy's numbers were three times my own. I ordered the withdrawal of my brigades; in good order they left the field, the enemy not choosing to follow."

But Gregg was not through yet. It would be reasonable to suppose that, after more than an hour of obstinate fighting with sabers, it would have been in order to retire and to take some account of stock. By no means, for General Gregg goes on to say: "Retiring about one mile south of the station, I again formed my brigades, and discovered the Second Division some distance in the rear. Hearing that General Russell had gotten up to Buford's left with his infantry, I moved my command in the direction of Rappahannock Bridge, and soon united with General Buford's left. On the hills near Brandy Station the enemy had artillery posted, the force of which they directed upon my line in this new position. A few guns well served were sufficient to prevent any advance in that direction. When engaged with the enemy at Brandy Station, cars loaded with infantry were brought there from Culpeper. Before they could quite get to the staion, I sent a party to obstruct the rails. Finding a switch above the station, they reversed it and thus prevented the cars from running into my command.

"The field having been well contested and the enemy being reinforced with infantry, which could be thrown in any force upon us from Culpeper, I received orders from Brigadier General Pleasanton to recross my command at Rappahannock Ford. The Second Brigade, Second Division covered my crossing. I got my command entirely over without being molested by the enemy. When the last man had crossed, the enemy displayed a regiment in front of the ford; I directed a regiment of the Second Brigade, Second Division to recross and offer them fight; this they declined, and the regiment quietly returned to this side."

General Stuart handled his command with all the skill and alacrity which ever characterized him as a leader of cavalry. The first accounts of the approach of the enemy, appearing as they did from several different directions, must have been somewhat disconcerting and, at the beginning of the day, there was too great an effort to meet every movement that appeared to

menace the security of his position. As the engagement progressed, Stuart rose to the occasion and seemed to realize that he was not appointed to defend a particular place, or to dispute the passage of the river at two widely separated fords. The entire body of the enemy's cavalry had crossed the river with a view to give him battle and, if possible, to encompass his defeat. Thence forward he opposed his cavalry to that of the enemy and taking advantage of his superior numbers, and better knowledge of the ground, succeeded in checking the force of their attacks and in compelling them to withdraw to the north bank of the river. His own statement as to the change in his plan of battle is very illuminating.

"On a field geographically so extensive, and much of it wooded, presenting to the enemy so many avenues of approach, I deemed it highly injudicious to separate my command into detachments to guard all the approaches, as in such case the enemy could concentrate upon any one and, overwhelming it, take the others in detail; especially as I was aware that the entire cavalry force of the enemy had crossed the river, with a large proportion of artillery, and supported by nine regiments of infantry on the road to Kelly's and seven on the road to Beverly Ford. I conceived it to be my policy to keep my command concentrated, excepting sufficient to watch and delay the enemy as to his real move, and then strike him with my whole force."

General Stuart's report is an interesting and instructive document and discusses with great fullness the several phases of the battle. He minimizes none of the obstacles that confronted him during the progress of the battle, some of which were met and overcome with the greatest difficulty; he speaks in generous terms of the skillful handling of the enemy, and makes a generous allusion to the death of Colonel Grimes Davis, who was killed at the head of his brigade while forcing a crossing at Beverly Ford. His illusions to his own subordinates are generous and kindly, although it is apparent that some of them had failed to meet his expectations. Although somewhat badly handled, Stuart was able to accompany Longstreet in his march along the eastern slopes of the Blue Ridge, and to screen General Lee's army during its progress down the Shenandoah Valley. Later his service to the Army of Northern Virginia, in protecting its right flank on the march to Pennsylvania are too well known to be discussed here. That the cavalry of the Army of the Potomac proved itself to be better skilled in the service of security and information in that memorable march in no way diminishes the reputation for skill and ability which is now cheerfully accorded to the great Confederate cavalry commander in those epoch making operations.

In the operations which I have attempted to describe the preponderance of force was with General Stuart, who had about 10,000 mounted men, cavalry and horse artillery, under his command. To get such a number on the Federal side, 3,000 infantry must be added, who acted largely as supports in crossing the fords and who had no part in the peculiarly cavalry phases of the battle. Stuart was attacked in a position of his own choosing and, after a combat which lasted through the greater part of a day, remained in undisputed possession of the field. It may be said, I think with great truth, that this was General Stuart's greatest success during his brilliant career as a commander of cavalry. As General Gregg well says, the fighting was largely with the saber, in which the Union cavalry, with better and heavier horses and more complete equipment, was generally the winner. Averell's battle at Kelly's Ford in March had been fought largely with carbines, and had some of the aspects of a saberless combat with pistols, of which some cavalry officers hope so much; there was much noise and the "shouting of the the captains" must have been an impressive part of the encounter, but the casuality lists were comparitively barren of testimony in support of that form of warlike endeavor. The fighting at Brandy Station was a succession of saber charges—a form of combat in which both parties proved themselves to be apt and willing pupils. The losses were unusually heavy, especially in killed and wounded, some of which were probably due to the fire of the infantry which was actually engaged on both sides. Pleasanton's loss was 907, of which 473—a little more than one half are reported as "missing." Stuart's loss is given by him in his report as 480. It would be interesting to know how many of the wounds on both sides, were due to saber, or to the injuries which attend combat

with that arm, from falling horses and the like; it is safe to conclude, however, that the officers and men had learned how to make attacks with the saber with the least danger to themselves—an art carried to a high degree of perfection in both armies.

THE QUESTION OF ORGANIZATION.

BY A CAVALRY OFFICER ABROAD.

THE subject of organization for our cavalry is now under consideration by a cavalry board. We all have read published opinions on the subject but these opinions have too often been based more on prejudice one way or the other, or a desire for promotion, or a fear of Congress and the other arms of the service than on thoughtful reasoning based upon purely military information. Nevertheless, we find many thoughtful and high-minded officers directly opposed in their views. The effect on promotion and politics must ultimately be considered, but we must first be able to understand amongst ourselves what the organization of a cavalry regiment should be, leaving promotion out of the question. When we have determined this matter we shall have to work out a system of promotion to fit it. Neither promotion nor politics can be considered in a purely technical discussion of the subject from a purely military standpoint.

Even after much thought there is room for difference of opinion and the best we can do is to make our arguments logical, impassioned, and fair, and to arrive at conclusions which at least have something to back them. It is perfectly useless to give an opinion on organization unless our reasons for such opinion are clearly stated and therefore clearly understood by ourselves.

I think that many arguments on this subject start at the wrong end, at the top instead of at the bottom. We decide how large our regiment should be, usually by a merely capricious assumption and then reason down for the smaller units. We should, on the contrary, decide the strength of our smallest units and reason up. In reasoning down there is always some-

thing left over, so to speak. In reasoning up this is of course, not so.

THE PLATOON.

We must therefore start with the smallest unit and this is naturally the smallest force led by an officer. The officers are the leaders. In the cavalry the smallest fighting unit is the platoon. All larger units are merely combinations of platoons for tactical and administrative purposes.

In the infantry most authorities consider the battalion as the tactical unit. This is merely for convenience of command and discussion. Whatever we consider as the cavalry tactical unit, the fact remains that the *platoon* is the fighting unit. It is the unit containing the greatest number of men controlled by one leader, subject to the influence of his voice and signals and who at all times are under his very personal direction, always within his sight or hearing, and held as within his hand. The men look for signals and commands to the platoon leader, not to the captain, nor to the squad leader; that is, neither to the leader of the next higher unit nor to the leader of the next lower unit. Our troops have always been so small that the captain is nothing but a platoon leader, everybody watching him, and our platoons are therefore seldom properly drilled. The squad leader is merely an assistant to the platoon leader, part of the internal machinery. He leads, in cavalry work, only under exceptional circumstances or in cases of wide and most unusual dispersion. In cavalry combat the fighting unit must be actually led into action. What we call following in trace is the only method of conducting these units efficiently and we must have such a unit of the size convenient for one officer to lead in such a manner.

We must therefore decide first of all what the strength of this unit should be. Experience has led most of us to the opinion that from twenty-four to thirty-two men is the largest number of mounted men that one officer can control in the intimate manner described. More than this number would not always be in control of the voice or even signals. This is also about the largest number that can be launched rapidly

to the right or left or rear. In other words, it is the most convenient size to maneuver in the combat either singly or in groups of two or more. In single rank, twenty-four men in line, six sets of fours, is probably better than thirty-two men. In double rank we must admit that the platoon leader can control a few more men. But even with double ranks attacks must be made sometimes as foragers and wide dispersion may occur often in other ways. The platoon must still be, every man of it, under the control of the platoon leader. However, with double ranks it is undoubtedly admissible to have a few more men in the platoon and therefore in the troop. Before we can go on with our discussion, we must therefore consider this question of single or double rank.

SINGLE OR DOUBLE RANKS.

The double rank has the advantage that in close order, *but only in close order*, the platoon leader and the captain can control more men. In Europe the double rank is universal. This seems to be on account of the belief that in the combat against cavalry a rear rank is necessary to obtain weight and mass for the shock. But personally, I cannot help but believe that this is an error and that the rear rank is a decided disadvantage.

In watching cavalry both in Germany and in France the rear rank always appeared to me a constant menace to the front rank. In charging an enemy I felt that I should dislike very much to be in the front rank to be crushed between the enemy and my own rear rank. The rear ranks were armed with lances as well as the front ranks. How they could use them I could not see. I have heard suggestions that the rear ranks should carry sabers and not lances. But by doing this we would have a very inflexible organization in which we would have two kinds of men, *lancers* and *saber men*, and we would not be able to substitute one for the other since all are not armed alike. In the German cavalry the rear rank men carry their lances at the charge in the same manner as do the front rank men. At the moment of shock the rear rank would certainly add to the confusion and would be liable to spoil any success that the front

rank might have gained. It is a waste of material. How much more powerful the attack would be if the front rank made it separately and the rear rank made another distinct attack following up that of the front rank at sufficient distance to give the effect of two separate shocks. In other words, may not two lines in single rank be better than one line in double rank? The Editor's Table of the Cavalry Journal for May, 1913, contains some opinions on this subject which are very interesting. The opinion of Lord Wellington is very pertinent, very strongly expressed, and very convincing.

Any unprejudiced and thoughtful observer must, however, admit that in a violent shock occuring from two masses of cavalry coming into contact at the gallop, the group which has the greatest mass will give the greatest blow and be the most solid and irresistible of the two. The old-fashioned wedge in football illustrated this. Also a stampeded herd of horses or cattle in an unorganized mass would probably by sheer weight cleave its way through any single line of animals moving towards them. But this implies that the single line has only about half the number of the larger group. If we form the same number of animals in several successive lines, the effect of the stampede would not be so great. Still, I believe the heavy group closely packed together would go through all the lines in succession. If this was all there was to a cavalry fight then three or four ranks would be better then two. But we must not forget that after the football wedge struck the single line of its opponents it forced its way through for a short distance and then crumpled up, the players stumbling over each other and falling from the mere impact and interference of three or four of their opponents. This short distance was, in football, sufficient to warrant the wedge. But the individual players were often tumbled in a heap merely by one tackler in front throwing the first man. In all cases a confusion resulted and it took some time before everybody had regained his feet and the man with the ball had emerged from the struggling heap. In other words, after the shock the heavy group forced its way through for a short distance by its very weight and momentum and then everybody became helpless

in a most disordered confusion. The ball had been carried perhaps sufficiently far forward to warrant such a formation.

But this is not sufficient for cavalry. Each cavalryman carries weapons of offense, and any shock which throws the mass into a helpless confusion prevents the use of arms. If front ranks fall, rear ranks will fall also and neither can use their weapons. By their weight and cohesion those who in either rank remain on their feet will certainly be pushed forward cleaving their way through the enemy's thinner line (supposing the enemy to be in single rank.) But what then? Although our double ranks have forced us through the enemy's single rank, we, like the football wedge, have nevertheless been thrown into confusion by this single line and a second line of the enemy now attacking us with sword and pistol finds us in no condition to cope with it on equal terms. We have no second line because we have put all into one mass. Of course I do not refer to the second echelons, supports or reserves, which both sides will probably have. I refer to a line of men in double ranks against the same number of men in two single ranks, whether these organizations be the attacking lines, the supports, or the reserves.

There is another very interesting feature connected with shock tactics. I doubt if any student of military history can find an authentic account from a reliable source of any body of cavalry in compact masses meeting at full speed a similar body of opponents so that the two groups were brought into violent shock. We hear of plenty of cavalry charges against cavalry. But the testimony of actual participants is always to the effect that the two masses did not rush into each other at full speed like two colliding locomotives, but instead that one side always loses its desire for such a shock, and probably both sides do. The result is a slackening of speed sufficient to prevent such a brutal shock, each side preferring to trust the issue of the combat to the courage and skill of their men in the use of their arms. A famous cavalry officer of Napoleon's cavalry, who had participated in more cavalry actions than almost any other single officer ("Etudes sur le Combat" by Colonel Ardant du Picq. Also, Marmont in his "Esprit des Institutions Militaires")

has answered this very question and replied that head-on collisions between cavalry masses were myths. He said that the individual troopers would not submit to it and he remarked that he believed they were right. For, if two mounted combatants charge upon each other so that their horses' heads met, it is a matter of chance which goes down, and probably both will go down, regardless of the relative weight. But the troopers will not do this. Each prefers to put the issue to his skill with his arms and horse and his courage rather than to a senseless shock in which he has no advantage and in which both combatants may be put *hors de combat*, neither profiting in the slightest manner.

He goes on to say that what we would find in the minds of these two individuals we shall find in the minds of the mass of the rank and file. The better trained the trooper is the more reason to believe this.

Shock tactics are, therefore, of rather doubtful value after all. Perhaps lancers might make more of it than troopers armed with any other weapon especially if their opponents were armed only with sabers. This may be one of the reasons why Europe is adopting the lance.

I feel certain that we can devise a system of tactics to meet and defeat with pistols and sabers any cavalry depending on shock tactics and swords or lances. This leads us to the question of tactics and arms for which I have little room in this paper.

I fear the experiments at Winchester may lead to some wrong conclusions in this matter. If they were merely trying to find out if double ranks work smoothly they might have save themselves the trouble. Of course it works. It is also handsome and smooth. The fact that all European Cavalry have always used it would be sufficient, one might think, to prove that if you want to handle cavalry in close order masses the double rank is convenient and works smoothly.

The French regulations are nearly perfect for this kind of action. I fear that some of the officers recently at Winchester may have been carried away by the idea on account of its novelty and on account of the fact that double ranks and platoons led by signals are found to work admirably. Yet one could have told

them that beforehand. The real *point* is, how do we expect to use our cavalry? Do we wish to train it almost exclusively in shock tactics, in charging formations with the "*arme blanche*"? For that is the way European cavalry is trained, almost to the exclusion of fire action. They talk about fire action but they do not like it. The French do it badly—I mean dismounted action—the Germans perhaps better—but both spend most of their time and thought on mounted action with the "*arme blanche*;" on maneuvering and charging with lance or saber in hand, (never with firearms) and therefore in leading their men in solid masses. Therefore they believe in the double rank. That it is just as handy for this kind of work as the single rank is admitted. It is silly of our people ever to have doubted it. *But is this the real point* in deciding our organization and our tactics? I say, NO.

I have watched the Germans and I have watched still more the French. They are well trained for what they believe they are going to do in war. But I do not believe they will do it. They say you must first best the enemy's cavalry to clear the field for your further operations. Well, what then? Suppose one side has beaten the enemy's cavalry, what then are they going to do? They are trained only for fighting against cavalry *armed and trained and depending on shock tactics as themselves*. To defeat the enemy's cavalry will not have one particle of effect on the final issue of the campaign unless your cavalry is prepared by its training to assist the infantry in its operations, not only by reconnaissance but by taking its part in the actual fighting, perhaps at the finish of the battle, perhaps at the beginning, as did Buford's cavalry at Gettysburg, perhaps during the battle.

Is the European cavalry trained for this? I think not. They are trained for the first stage—that of defeating the enemy's cavalry, armed and trained as themsevles—the second stage they are not prepared for, neither are they prepared to meet a cavalry using firearms in mounted action.

However magnificent the cavalry action might be in a war between Germany and France, they would have little effect on the main issue because neither is prepared for the second stage,

the stage of the war after the enemy's cavalry is defeated and its spirit broken.

The object of cavalry is, or should be, not merely to fight cavalry, but to exert a powerful influence on the issue of the campaign. Otherwise cavalry is a useless waste of money and material. Only cavalry that is properly armed, properly organized and properly trained can do this. And the arming, organization, and training of the European cavalry does not fit them for this second and most important step of the cavalry's work in war. However formidable against cavalry, a cavalry armed with the lance and almost exclusively trained in its use can never fill its rôle in this second stage.

Furthermore, I feel certain that even in the first stage, that of the cavalry combats against cavalry, the European cavalry could be beaten by a cavalry which held fire action, both mounted with pistol and dismounted with carbine, in greater respect.

An organization, armament and training, therefore, which will enable us to fill our mission in the first stage, defeating the enemy's cavalry, and which is also calculated to fill our most important rôle in the second stage, is the one most desirable for us.

The kind of warfare in which we are likely to be engaged and the terrain upon which we are likely to operate, make fire action, both mounted with pistol and dismounted with carbine, of the greatest importance to our cavalry.

Horsemanship is just as important in this kind of work as in the mere shock action or work with saber or lance. Perhaps more so, because mounted work with the pistol and rifle requires more dispersion.

The French cavalry officers for the most part despise dismounting to fight and consider it only as an expedient. Their text books hold it in greater respect than formerly, but it is not the spirit of their cavalry. The Germans are pretty much the same. I do not believe any European cavalry would have done better than the Russians in the Japanese war, and the Russians, while they performed considerable service, were a failure on the whole.

European cavalry believes that if you inculcate the spirit and willingness to fight on foot you loose the spirit of dash and the willingness to fight on horseback. Our Civil War proved the contrary.

European cavalry is on the wrong track. Such a statement of opinion on the part of a mere captain of American Cavalry against the military opinion of the authorities in Europe may seem presumptious. But when one considers the blindness with which Europe clung to obsolete cavalry traditions during the Franco-Prussian war, five years after our war was finished, and the fact that it is only recently that the cavalry lessons of our Civil War have even begun to take hold in Europe, the presumption does not seem so great.

The question of armament has much to do with the question of organization. In fact it is one of the determining factors. Therefore if we adopt European organization we should go the whole way and adopt their armament. In other words, we should have the lance. The fact that German cavalry is all armed with the lance has made the French cavalry follow suit. To meet compact cavalry which is armed with the lance is a serious propostition. For a cavalry armed with swords to form in compact mass and meet an enemy also in compact mass but armed with the lance is to my mind little less than suicide.

Therefore, I repeat, we should adopt the European armament also, that is the lance, if we adopt their organization which is based primarily on the idea of the charge in compact mass.

Now I do not believe in the lance for Americans. As long as we have the pistol, to go back to the lance is like going back to the old days of tilting, of fighting with spears. And as I have indicated in an article on the question of the pistol, I believe the pistol has many advantages.

But in order to use the pistol we must have a suitable organization and our tactics must be different from those of Europe. If we retain the pistol we cannot adopt European organization and tactics. If we adopt European organization and tactics then we must discard the pistol. A trooper cannot carry a carbine, a lance, a sword, and a pistol. This is obvious.

I believe that we could contrive tactics and organization of our own so as to use the pistol, and that with such a weapon backed up by sword and carbine we could defeat lancers or swordsman.

On our own terrain we must make our tactics suitable to the presence of wire fences and other impassible obstacles. We should never lose sight of this. The pistol may be shown to be invaluable here. The European organization is unsuitable to such terrain. We should therefore make the presence of fences work to our advantage and not lose such advantage by adopting European organization, arms and tactics, making our terrain as difficult for us as for our enemy.

In fighting in Mexico or South America we would also find difficult terrain. If we met a European cavalry in these countries I doubt if they could use their compact masses in shock action.

In fighting Mexicans, or Central or South Americans, the pistol would be invaluable and it is doubtful if we should find use for shock action in compact masses.

What should be the evident conclusion? It is that the double rank is useless.* Our organization should be based on single rank formation in which greater use of the pistol and the rifle can be made.

As I have shown in my article on "The question of the Pistol," the pistol is far better than sword or lance in reconnaissanc work in small parties and also in the second stage of cavalry work in war, that of fighting infantry and artillery. The double rank in this second stage is out of the question.

Why then should we base our organization on double ranks?

On account of reasons detailed above, the single is better for both the first stage and the second stage of cavalry work in war.

As for being able to dismount to fight on foot and take a position quicker from double ranks than from single, I cannot

*It is advocated by those only who, through sentiment and stubborn European tradition, still enshrine in their hearts the "*arme blanche*" and shock action, strangely disregarding the wonderful opportunities which modern fire arms have given to cavalry both mounted and dismounted.

regard the difference as of much importance even if I could believe that a regiment in single rank formation, say in line of platoon columns, could not deploy a dismounted line on a given position as quickly as a regiment from double rank formation. It is true that more men can be placed on a given spot quicker from double ranks than from single ranks. But since this group of men must be deployed at seldom less than two years interval, I cannot see but that from single ranks they would find themselves already deployed more nearly opposite their positions on the line than from double ranks. In the varying conditions which obtain in war I doubt that the advantages either way are worth considering since the differences are too small and might vary one way or the other.

All of the above goes, I think, to prove that the double rank for American cavalry is unwise.

THE PLATOON (CONTINUED.)

Therefore, in continuing our discussion on the organization of a regiment we should base our reasons with the *single rank* in mind.

We therefore conclude that twenty-four men is about the right number for the platoon. That is, twenty-four men actually in line so that this number does not include those who ride out of the ranks.

THE TROOP.

For both tactical and administrative purposes it is essential to group several of these platoons, these little hammers, into a unit commanded by an officer of more experience and presumably of more knowledge than is expected of a lieutenant or platoon leader. This officer, the world over, is called a captain. He too, must control his command by his voice or by signals at close range, but it is essential only that his platoon commanders hear him or observe his signals. The troopers will often hear his voice and may see his signals and will be influenced by his personal leadership. But it is to their platoon leader, always near them, and whom they always follow, that they must look for guidance. They may often be out of direct personal

touch with the captain, but never far from the platoon leader. The platoon is too small for administrative and disciplinary purposes and it is convenient to have a larger tactical unit commanded by a more experienced officer.

The next thing therefore for us to decide is the number of platoons to be grouped to form the command of a captain.

When we consider the necessary intimate relation of the captain to his command and the necessity that he should hold his platoons, his units of action, in his hand ready to use them instantly in any desired manner, it becomes apparent that three or four platoons is the greatest number that we can consider. Any more than four becomes unwieldly and the leaders would not always be within control of the captain's voice and signals. The captain's voice must play a great part, for signals are not always sufficient. Even where signals are appropriate it is not always possible to make more than four leaders see them.

Now, with the limitations pointed out it is desirable to have as many platoons in the troops as possible or the principle of organization, that of giving each officer as many units to command as he can handle in order to give power to his operation as well as for economic advantages, is lost. It is obvious that from a tactical standpoint two platoons are not as good as three and we must decide therefore between three and four. Aside from the advantage of having as many platoons as possible I think four is better than three for tactical reasons. Three platoons gives us a ready division for attacking line, supports, and reserves, or a three echelon attack, but four platoons gives us a more flexible command in which it is easier to change the relative strength of attacking line and reserves. It has been pointed out why it is considered unwise to have more than four platoons, and therefore, everything considered, four platoons is believed to be the proper command for a captain.

The organization which I would therefore propose for the troop would be as follows. I would not for the present propose increasing the number of lieutenants to have one for each of the four platoons because that would require legislation and bring up arguments about promotion. Two of our platoons would therefore be commanded by sergeants.

The idea would be always to have twenty-four men in line in each platoon or ninety-six in the troop. Considering the number always absent both in peace and war and those who do not ride in the line this number must be materially increased as will be indicated.

OFFICERS:

1 Captain,
2 Lieutenants.

ENLISTED MEN:

1 First sergeant
1 Quartermaster sergeant
6 sergeants (1 as mess sgt. 1 as stable and guidon sgt., 1 permanently assigned to each platoon.)
12 Corporals (3 to each platoon, and ride in ranks.)
2 Cooks (not considered in the ranks.)
2 Horseshoers (ride in ranks.)
1 Farrier (rides in ranks.)
1 Saddler (rides in ranks.)
1 Wagoner (rides in ranks.)
2 Trumpeters (do not ride in ranks.)
79 Privates.

Total enlisted, 108. This quite accidentally agrees with the number prescribed in our Field Service Regulations for a company of infantry. The best opinion indicates that it is much too small for the latter.

But we can never get all of these men out either in peace or war. Therefore, as we should always be able to drill at war strength in peace and take the field also at war strength we must without doubt arbitrarily add a certain number of privates. I would add sixteen. Even if by an accident, which no one need ever apprehend, all of our men should turn out at any formation, this only adds four men to each platoon and indeed it is making a fine distinction to say that twenty-four men is better than twenty-eight.

So our total 108 plus 16, equals 124 men for the troops and this is the number that I think should be prescribed in our Field Service Regulations. It goes without saying that we

should have the same number in peace as in war and no army officer should ever preach any other doctrine to our people. Two regiments trained at war strength are worth more than six skeleton regiments.

THE SQUADRON AND REGIMENT.

Calling the captain's command a *Troop* we must now decide as to the next higher unit. This is not so easy. In Germany and France they group five of these troops or escadrons, as they call the captain's command, and call this group a regiment. But of course one of their troops or escadrons is larger, on paper, but rarely in practice, than the troop I have proposed. And also they use the double rank. One of these escadrons is a depot escadron and the other four form the colonel's command in the field. A similar reasoning to that I have used in determining the number of platoons in the troops would lead us to believe at first glance in the European organization. But aside from the consideration that the escadron is larger than the troop I have proposed and that it uses double ranks, there is another very important consideration, as follows:

While our cavalry must be organized for mounted action, and it is this which leads us to consider the platoon as the fighting unit and four platoons as the proper command of a captain, it must also be capable of a powerful dismounted fire action. It is believed that this is of growing importance. The organization of infantry regiments is based on just this idea and it will be of advantage to us when dismounted to approximate to their organization. Considerations for mounted action forbid us having quite the same strength. But if we organize three squadrons of four troops each, four being selected for the same reasons as those given for four platoons in the troop we have a powerful organization for dismounted fire action. In addition this organization gives our majors command of squadrons and is more logical than the European custom of pretending that majors command demi-regiments, where as they really command nothing and are only assistants to the colonel.

If we follow the principle of organizing four platoons into a troop and four troops into a squadron, so as to extend it

to having four squadrons in the regiment we shall undoubtedly have too large a command for the colonel. All higher units than the squadron are found to be more convenient and flexible when organized into three parts than they would be in four parts.

With four troops our squadron corresponds to the European regiment except that it is slightly smaller. We thus would give our major a command similar to that of a European colonel and our colonel a command similar to that of a European general of brigade. The major's command is smaller in point of numbers than the European regiment but the regiment is about the same size as a Europan brigade of two regiments. Compared to a European brigade our regiment has three squadrons as against two regiments. It would seem that our organization is more flexible.

Those of our officers who want to adopt the European organization of the regiment argue that it is less economical and less compact to divide a regiment of 600 men, assumed as the greatest number one colonel can personally lead, into 12 different organizations than it is to divide it into 4 organizations. But this argument goes astray at the outset by assuming that our American regimental organization is planned for the same number of men as the European regimental organization. But our regimental organization, as I have indicated would have at full strength 1,488 men of which we might count on having present little more than 1,200. Why limit our regiment to 600? Why cannot one colonel lead 1,200 or 1,400 men organized into three squadrons as well as a European brigadier can lead a brigade of about the same number divided into two regiments? Why is a brigade of 1,200 men with a general and 2 colonels, and majors as assistants, more economical than a regiment of about the same number of men with no general, one colonel, with each major commanding an appropriate command? Why are 1,200 men organized into two semi-independent commands more flexible than 1,200 men organized into three semi-independent commands?

Objection is made to a regiment organized like a brigade. But what brigade? A European brigade. What is in a name? If we choose to call 1,200 men a regiment, and have reason for

doing so, what difference does it make that Europeans call 1,200 men a brigade? Of course the objection to calling 600 men a brigade is obvious. But we do not do so.

We admit that 600 men is as large a command as one colonel can personally lead in the manner that European colonels lead their regiments. But why require our colonel to lead the regiment in that manner when our younger majors can do such personal leading in conducting their squadrons and the colonel can lead as the European brigadier does his brigade, provided our regiment is as large as such a brigade?

I believe that 600 men is too small a command for an officer of the rank of colonel, and that a colonel should command as many men as the European cavalry brigadier. And this more especially since we believe that dismounted action will form a very serious part of cavalry work, and that, dismounted, the regiment of 600 men, with horse holders deducted, is too small for a colonel and renders his command entirely too ineffective and trivial.

From an administrative point of view we have proved that one colonel can handle a regiment of 1,200 to 1,500 cavalrymen. Why, therefore, is not one administrative head for thus number of men better than two? The less administrative heads the better, provided we do not exceed the limits of one man.

For divisional cavalry our organization of 3 squadrons of 4 troops of more than 100 men is especially good. A regiment of this size is not one particle too much to assign to an infantry division. Its three squadrons enables the colonel to divide the work or place the three parts to great advantage. Its strong offensive power in case of fire action makes it particularly suitable and effective for purposes which any one who has studied the very important work and possibilities of divisional cavalry will readily appreciate.

The regiment I would propose therefore is similar to our present organization. It would slightly be modified so as to have 124 men in the troop instead of the 84 which the Field Service Regulations now prescribes, and this troop should be divided into four platoons for both training and tactical work in the field. Four troops are to constitute a squadron and three squadrons the regiment. The accessories such as machine

guns, orderlies, band, and staff are not considered in this paper since their proper numbers and organization should not present any difficulty and are not causes for wide discussion or great difference of opinion.

BRIGADES AND DIVISIONS.

We must now briefly consider brigades and divisions. One of our brigades of three regiments is as large as a European division and it is doubtful if we ever would want a cavalry division of three of our brigades except in unusual and temporary circumstances such as leads the French or Germans to occasionally form cavalry corps.

Our brigade should consist of three regiments. Any larger number is evidently too large. Four regiments would consist of from 4,800 to 6,000 men. The brigade, like the European division, is supposed to be very mobile, to constitute a handy, active cavalry force, under complete tactical control of one general, and not so large or unwieldy that any part of it could be attacked and defeated before the remaining part could come to its assistance. This must obtain whether on one road or in several columns on parallel roads. These conditions lead Europeans to limit the size of their cavalry division, which is a grand and permanent unit of combat, to about 3,600 men.

Following the principle of organization, given before in this paper, that each officer must command as large a number as possible, under various limiting conditions, two regiments is too small a brigade. It is neither one thing nor another. It is undoubtedly handy because so small, but it lacks the flexibility of a three unit organization and it lacks the power of a larger brigade. Three regiments gives us 3,600 or more men. With the troops I have proposed of 124 men three regiments would come to nearly 4,500 men but we need never fear that, even if always kept at war strength, we should succeed in getting out many more than 1,200 men to the regiment.

Three regiments fulfills the conditions for our cavalry general's command and should therefore be adopted as our standard of the brigade.

As for the cavalry division, we should have none, except

for temporary purposes. Because Europeans assemble six regiments and call it a division is no reason for our trying to have divisions also. Our brigade corresponds to a European division and we can stop with brigades if we choose. Why blindly follow European terms when they do not suit our organization? If we organize divisions, our division would correspond to a European corps, and if we concede, as we all probably do, that the European divisions of 3,600 to 4,500 men is the largest permanent organization for tactical and administrative purposes which it is wise to organize even in time of war, then we should stop with our brigade and organize divisions only when in war the circumstances seem to justify it. It could then be done by merely uniting two or three brigades just as the French do by temporarily uniting two or three divisions to form a corps.

Our Field Service Regulations should therefore organize our *brigade* with all the *auxiliaries* just as it now does a division.* Our division as now given in Field Service Regulations consists of more than 10,500 horsemen with nearly an equal number of draft animals and as a permanent organization in time of war it is impossible and undesirable.

CONCLUDING REMARKS.

This paper was written after I had spent a year with a French cavalry regiment and was intended as a kind of report on the subject of organization based on my observations abroad. It was intended to present it to our cavalry board for their use and consideration, but upon my return from France I found that this board had already formed their conclusions on this subject and had submitted their report.

My report upon the French cavalry, a most efficient body of men, has therefore been delayed for this.

*Except that we should cut down the number of mounted auxiliaries to the lowest possible figure, because they need horses and forage better utilized in the cavalry itself. When we consider the tactical disadvantages of our great road spaces and the difficulties of supply of an army, we can or should appreciate that, outside of the cavalry and field artillery, we should cut down the number of horses with the army to the lowest possible figure.

A short comparison between the organization I have proposed and the French organization may not be uninteresting here. Let us suppose without argument that we have to meet the French cavalry on a terrain suitable to their organization and training for shock action. In order to take about the same number of men on each side we will imagine one of our regiments opposed to a French brigade.

We will suppose each squadron of the French brigade composed of 150 men. Right here it is, necessary however, to make a very important observation. The strength of an escadron is on paper not quite 150. In the field at maneuvers or in war this strength will never be over about 120 and it is more likely to be nearer to 100. This for the reason that it is impossible in war for them to keep their ranks recruited to full strength either in men or horses. They have too many regiments to be able to do it. The same applies to Germany. We should be able to do better in that respect as far as the men are concerned and some day, we hope, with the horses also. It is not unreasonable to suppose that, with the 124 men I have proposed for the troop, we could put 100 men into line of battle. If therefore we met a foreign cavalry our troops would be nearly equal in size to their escadron.

But to compare the two systems we shall suppose that the French have 150 men per escadron and that we have 100 men per troop.

At the end of the march of approach each side will probably hold something in reserve. For the French the most convenient unit to hold in reserve will be the demi-regiment of two escadrons, or 300 men. For us it would be one squadron, or 400 men. They would thus have 6 escadrons on the line or 900 men, and we would have 8 troops or 800 men on the line. Who can say which is the wisest division? It depends on conditions, but if we choose to augment or decrease our reserves our organization makes it easier than the larger unit organization of the French.

Now if we were so foolish as to wish to meet this body of French lancers in a shock action, we having sabers and pistols but no lances, and if, further, our commander desired us to

charge with double ranks, we should have to have had drill in forming double ranks. But this would be the easiest thing in the world. Say from line of platoon columns, in each troop the second platoon could close on the first, the fourth on the third, and the last two could oblique to arrive on the line with the first two, thus putting the troop into double ranks by the simplest of methods. Some such thing could be in our drill book, thus insuring sufficient practice and familiarity with the formation.

We should thus have eight troops in double rank in line as opposed to six escadrons in double rank in line or line of echelons. Who can say which is the best formation? Perhaps our line or lines of echelons is open to the criticism that there are more intervals between troops than there are between escadrons. That is, seven holes in our line to five holes in their line. But with the idea which we can well borrow from the French of slightly echeloning our units there is little reason for having *any* intervals, so that regarded from the front the number of holes would depend on our training and the cohesion of our ranks. Furthermore it would be perfectly simple, from line of platoon columns, to form double ranks so that the troops could, in pairs, close up the interval between their flanks, and thus the eight troops could move as four. And I repeat that by having these movements in our drill book no complication or lack of simplicity could be claimed.

Thus our commander could have a wide discretion as to the form of attack desired.

But the spirit of our attack should follow the spirit of our organization which takes its cue from the kind of arms we have and the manner in which we intend to use them. Certainly unless we arm our men with lances this spirit would not lead to an imitation of the French formation with their solid double ranks, thus giving them every advantage, unless we also are armed as they are with lances. It would be madness on our part, and furthermore we could not force soldiers to charge into such a mass of lancers. The evident conclusion is that we should have the lance or adopt some system of attack of our own suitable to our arms. But I have already threshed that

matter out in a paper on "The Question of the Pistol," and conclude that we do not want the lance.

Very well then, how are we going to attack this rapidly advancing French brigade? The idea of dismounting to fight on foot against cavalry is a good one only under certain rather limited circumstances. You must have time, you must know the enemy's intention to attack you, and even then it is only when on the defensive or holding a short line, or outnumbered, or the very rare and unusual good luck of finding the enemy committed to the attack and yourself still with time to dismount and to form, or the enemy caught in some predicament from which he offers you opportunity for fire action. Otherwise the attempt to fight him dismounted will fail. He will either avoid us and we shall have lost the advantage of our mobility, or he will inflict upon us a disastrous defeat. Nothing but big cavalry maneuvers will try out these things and teach our officers how to search for and find in each sparate case that shadowy line between mounted and dismounted action. But in the imaginary case in point we are searching for the enemy to whip him in order to get him out of our way. He is doing likewise. If we dismount he may leave a few scouts to watch us and go his way. We must meet him mounted.

But how? Our drill regulations do not help us out here. We must invent something. That something ought to have been in our drill book but it is not. It is then apparent that we ought to be prepared by our training for just this affair and it is simply one of the things which shows that our drill regulations should be rewritten.

It is evident that we must attack with the pistol and certainly a form of attack can be devised to meet the situation. There are several ways, none of which I am going to propose here. But some method such as sending out a line of foragers to swarm around the enemy's masses, those just in front of him pulling up and turning so as to shoot to the rear at very close range, the more bold being the most successful, and after such attacks, in several lines if necessary, perhaps a charge in close order with sabers, the main reserves being held as long as

possible out of the action, the swarms of pistol men with drawing to the flanks when necessary to reload, or drawing saber and attacking the flanks and rear, etc., etc.; some such methods, could and should be suggested in our drill book and practiced on all possible occasions. The saber is always there to back up the pistol or the pistol to back up the saber, and these two, or two pistols, are indispensable to the cavalryman. Horsemanship is a necessity and no one or two years enlistment will accomplish it. Three years is the minimum.

In the case we are imagining, how can anyone doubt the result? If we add our terrain to the situation, wire fences, etc., then the case of the lancers is still more precarious and a little judgment in the use of our fire action, perhaps mounted and dismounted combined, should give us every advantage.

The Coassck *lava* idea is worthy of study. Like the *Cossack-post* it is probably more American then Russian. The Germans regard it seriously and I saw them practicing evolutions to meet it, still however with their platoons in close order. But if the lava can be effective with lances and swords, how much more so it would be, or something similiar to it, with American cavalrymen armed with pistols and rifles?

Our organization therefore, modified as I have indicated, lends itself to the use of the pistol and rifle or the *arme blanche*. Modified to include the four platoon system in the troop it lends itself to training and administration as could be shown were not this paper already too long. This four platoon system is also very important tactically as I have attempted to briefly point out.

My conclusions are that our organization should be retained practically as it is, but with important modifications, and that our drill book should be rewritten to give us a form for attack for troop leading with less noise and more signals, adopting many of the French principles in this respect, to contain the elements of our improved system of equitation, and many other matters concerning training which this paper was not intended to discuss.

WAR AND EMOTIONALISM.

By Captain FRANK P. TEBBETTS, Troop "A" Oregon, N. G.

I take it that a "soldier" is one who enlists to serve his country under the leadership of his properly constituted and authorized superiors.

There is a precision and definiteness about military work which distinguishes it from most other occupations and pursuits. The business of soldiering, like any other business, has its distinguishing marks and characteristics. The ever present influence of authority and discipline with its fine reminder of that higher authority to which we are all subject, necessarily has its effect upon the outward machinery of the soldier's life. If the splendid example of the military system has its full effect on a man, it stiffens his moral and mental fiber, it makes his life orderly and regular, it helps him to meet emergencies cooly, and it brings him to the crisis with that solid confidence which is born of prompt obedience and good leadership.

But it is a mistake to think that military training, any more than any other sort of routine education, can dispense with with consideration of the individual, or can fail to reckon largely the emotions. To believe that it can do so is an error into which many military authorities have fallen. It does not require a military education for one who understands human nature to know that in dealing with men, the human equation can never be successfully submerged. Soldiering is a profession which deals with the most delicate, the most complex, and the most precious quantity known to science, human life and human understanding. To deal with that quantity as a purely mechanical unit is to ignore its wonderful possibilities, to dissipate its noble inheritance and is to fail utterly in the development of leadership. The successful leader will always be he who reckons

individually with every soldier in his command, who studies his faults and virtues, who sympathizes with his misfortune, who rejoices with his successes, and who is ready to stand shoulder to shoulder with him in that higher comradeship, regardless of rank, which makes them soldiers together in a common cause.

The tendency in modern warfare to fight battles in extended order and in small detachments, and to throw more responsibility upon the individual soldier, has brought a new influence to bear upon the profession of arms. And in view of the fact that the world has so long looked upon the soldier as an unthinking automaton, there is still room for development along newer and more scientific channels. It is probably safe to say that there is no longer a place in modern tactics for the soldier who cannot, under battle conditions, take care of himself if occasion arises. We are going back to the old theory of shock contact both in mounted and dismounted action, but at the same time we are training the individual man to think and act for himself, and his value as a soldier is rising in proportion. That training includes every element which provides him with the highest possible compliment of efficiency for battle.

Curiously enough, in the ages that have witnessed the evolution of the profession of arms, we have almost lost sight of the emotional part of the soldier's training. The intellectual side of the work has been highly developed. But the emotional side has been correspondingly neglected. We seem to have forgotten that the emotions have more to do with wars and the conduct of wars than all the codes and systems which man has devised to regulate them. Men fight much as they love—and for the same reason. When the eyes flash, when the sword is drawn, when consequences are forgotten—the emotions are in the ascendant. If we had not learned differently, we might believe as some of the peace advocates would have us believe, that the emotions are dangerous influences. But having learned through experience that the emotions are more often honorable, unselfish and direct—where reason is crafty, devious and ambitious, we are not disturbed by the knowledge that war is often the product of emotions. We can preach

until we are black in the face about "methods of advancing under fire," and "the use of the bayonet in the charge," but until we can appeal to the emotions of men, until we can stir their enthusiasm, until we can teach them to make unselfish sacrifices, reason will contribute to keep them out of the danger zone. Historical records seem at times to give us the impression that wars are made and fought by diplomatic bureaus. But no really close observer of men and events believes this to be the case. No war that is unpopular can be successful. After the learned doctors have argued and discussed, after the polite exchanges of protocols and messages is over, after the stage and the actors have presented their entertaining masque—the case promptly goes back to the people, and the people, usually without delay or dissimulation, proceed to take off their coats and settle the dispute in a manner as old as humanity itself.

Every influence therefore which helps to develop in the soldier a rational emotionalism is an important part of his training and should not be overlooked by a conscientious commander. I believe every captain should have in his squad room reminders in the form of pictures, battle flags, relics, etc., of notable actions in which his organization has distinguished itself. It does not matter that in time the organization will be largely composed of new men, men who remember nothing of the events to which the assembled relics relate. It will surprise one to observe the interest these new men will take in the history of the organization. They may not say much about it but down under the surface they will be a little more proud to know that back in '98, "E" company tackled twelve times its numbers in a certain engagement, and got away with it. One organization that I know has an annual dinner upon an anniversary of a certain battle in the Philippines when the odds were heavy and the victory decisive. There is only one man besides the captain now in the company who was there, but the dinner is still a great event and every recruit feels that he is a little better man because of his share in the inheritance. I have been greatly struck with the general failure on the part of National Guard commanders to take advantage of this splendid oportunity which many of them have to perpetuate regimental and company history. Frequently a few dusty

old photographs of troops leaving for the front, is the only reminder one finds of campaigns that were full of individual and regimental herosim. Our organization has no history but we are not neglecting an opportunity to perpetuate traditions. We have collected pictures, weapons and old battle flags from those of the men who have had previous service with other organizations, and hung them in the squad room. The officers have spent their money freely for a fine collection of the best battle pictures that could be obtained, illustrating different arms of the service in different wars. We have put up cards bearing patriotic sentiments, and quotations from the best military leaders. We have made a start upon a troop library, something which I believe every organization should have. Any books treating of adventure, whether by sea or by land, military campaigns, readable novels dealing with military subjects, biographies of famous generals, etc., should have a place there. Some of Kiplings stories and poems, Marryats' sea tales, Roosevelt's War of 1812, General Grant's Memoirs, Mrs. Logans' and Mrs. Pickett's Memoirs, General Gordon's Memoirs, Scott's novels, The Photographic History of the Civil War, The Fifteen Decisive Battles of the World, The Crisis, The Firing Line, The Long Roll, The Man Without a Country, and other books of a similiar type are good.

Esprit de Corps is merely capitalized emotionalism. Get trained men to take pride in their organization, to trust their leaders, to have faith in themselves—and they will be invincible. In the supreme moment of battle men do impossible things, things that they never were taught or were expected to do in training. It seems to me that we cannot do better than to prepare our men for that test, just as we prepare boys for the moral conflicts of life in the idealism of the university. We cannot underestimate the value of routine training becasue as nearly as every authority has pointed out, training forms habits which sustain us when we are surrounded by strange and trying conditions. But training can be profitably supplemented by Esprit de Corps. The Greeks at Marathon, Cromwell's Ironsides at Naseby, The Old Guard at Waterloo and even the Roman Sentry whose skeleton was found at its post after the destruction of Pompeii, lived up to a higher

ideal of duty than that developed merely by habit. If thoughts are things, and we have come to believe that they are, then the closer we can get to a man's thoughts and the sentiments which sway them, the better soldier we shall be able to produce. I took considerable personal interest in a water color reproduction of a painting representing the capture of Joan d' Arc by the English, which we recently purchased for the squad room. The picture is interesting as an illustration of the old equipment of Knights in armor. The heavy Norman horses are well painted. Joan d' Arc's charger is lead by a sturdy English yeoman. The English Knights are riding slowly and thoughtfully behind the captured leader, whose face is lifted in prayer. Dark clouds are rising. A fading light strikes only the girl, whose hands are tied behind her, and her powerful white horse. In addition to its military significance, the picture is a good illustration of what I am trying to express. A fine atmosphere of idealism surrounds the scene. The picture suggests the courage, the self denial, the patriotism, the pathos, the dignity, the solemn panoply, the exalted devotion—which makes the profession of arms distinctive in a solitary grandeur.

The man who has not felt something of this inspiration has yet to complete his military education.

SERVICE WITH A FRENCH CAVALRY REGIMENT.

BY ONE OF OUR CAVALRY OFFICERS.

ON the appointed day for beginning my "*stage*" as they call it, I drove through the town in full dress for the headquarters of the regiment. Some of the gamins hailed me as the king of Spain, others said I was a Japanese, and none failed to leave what they were doing and follow the carriage. From one of the principal streets we turned into a sally port and were in the court of the regiment. A number of officers were there, among them the colonel. The little speech I had so carefully rehearsed in my room was unnecessary for one of them came forward and introduced himself and presented me to the others. I was then and there attached to a troop and the stage was really begun.

The general aspect of the quarters occupied by the dragoons is rather dismal. The buildings of the regiment are closely grouped together about a central court and altogether cover a space of about 250 by 200 yards. The convenience of this arrangement and the saving in police details is at once apparent. No quarters are furnished the officers and they live in town in houses that they own or lease. Depending on the town where they are in garrison, officers are allowed commutation of quarters.

The captain and four lieutenants of the troop to which I am attached have made my work most pleasant. They have a very natural and hospitable manner that makes me feel as though I actually belonged to the organization. I am given liberty to go to all instruction of the troop, to study their administration, take fencing lessons from the regimental fencing master, and to ride in the lieutenants' equitation class. I am not expected to attend certain lectures that are given to the officers from time to time. In addition to the mount provided me by

our government I have one from the dragoons. I also have a striker from the regiment who, like other strikers, has no duties with the organization except to attend two drills per week.

I am told that this is one of the smartest regiments of French cavalry. Among its officers are representatives of some of the best families of France. Socially I have found them most hospitable and delightful. Their customs are very different from ours and their manner of living in town instead of in posts necessarily prevents much of the informal life that we enjoy in our garrisons.

Many of these officers are quite independent of the small salaries paid them by their government. The highest pay of a captain is about one hundred and ten dollars per month; that of a first lieutenant not over eighty dollars and a second lieutenant about fifty-four dollars.

A second lieutenant is promoted after two years service as such. Generally speaking captains and first lieutenants are promoted after twelve years service in their respective grades if they have not been selected for promotion before this time. All promotions to the grade of lieutenant colonel and above are made by selection. There are no examinations for promotion.

The senior noncommissioned officer of the troop is called an "*adjutant*" and has rank similar to a warrant officer in our navy. This is a very responsible and useful type of man. He fulfills the duties of first sergeant and to a certain extent those of an officer, but does not occupy himself with the paper work of the troop. Generally he looks after the feeding and grooming of the horses and supervises the work of the other noncommissioned officers.

The second ranking noncommissioned officer of the troop has a special grade and is charged with keeping all the records of the organization. As the funds in the ration account and the mens' pay are handled in the organization, this man's position is an important one.

Noncommissioned officers above the grade of corporal are saluted by the soldiers; if they live in the baracks they have separate rooms and a separate mess. Corporals live in the rooms with the men and mess with them. Many of these noncommissioned officers are married and live out in town. Some

of them are re-enlisted men, others are simply doing their compulsory service.

As is well known, every able bodied young Frenchman is now required to serve three years in the active army. Contrary to what might be expected they seem to take this as a matter of course and are a very cheerful, willing lot of men. Generally they are very responsive in disposition but do not give the impression of being more intelligent than our soldiers. Drunkenness is extremely rare among them and there are very few cases of any kind for discipline. There has been an average of about five or six men at a time from the regiment in the guard house for the past six months.

In order to save their uniforms the soldiers as seen about the barracks and stables wear generally a sort of linen overalls and wooden shoes. For ordinary drills they wear the jacket of these overalls as an outer shirt, a long wide cloth belt of red or blue wound several times around the body, red breeches, black leather leggins shaped like boot tops, heavy brogan shoes and a small red cap or a metal helmet. The metal helmet and blue blouse are worn by dragoons for more formal drills and for field service.

The captain of the troop gets a certain credit with the government against which he can draw clothing for his men. This credit is thirty one centimes (about six cents) per day per man actually present for duty with the troop. When a man finishes his service he leaves all the clothing that has been issued to him and it is re-issued. At the weekly inspection of the quarters any clothing that has become unserviceable is presented to the captain who decides whether the article shall be thrown away or repaired. Generally it seems that he orders it repaired as the shops for doing this work are run by the regiment and there is little cost for the labor.

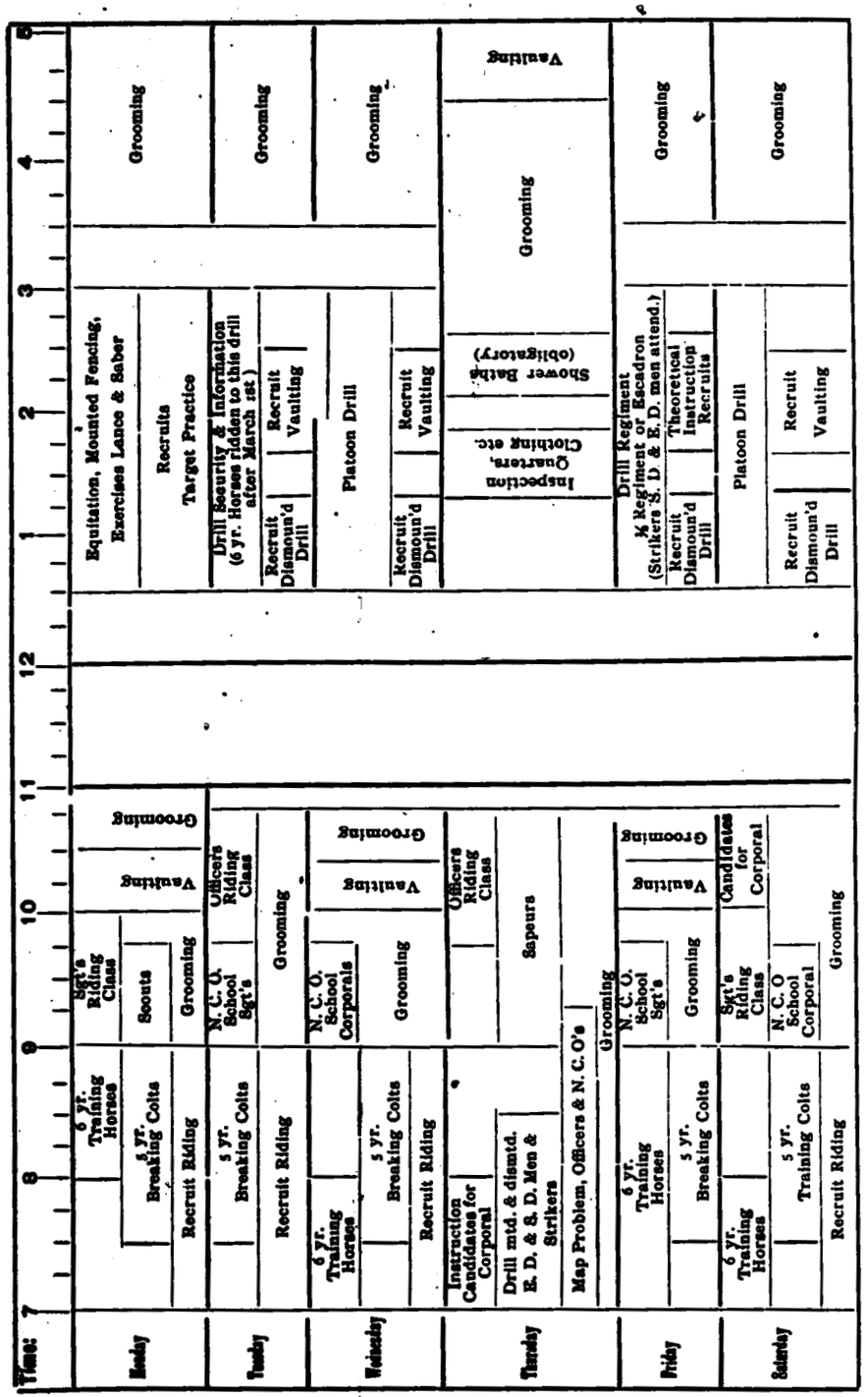
In the store room of the troop is kept a new uniform and suit of under clothing for each man of the organization. These have been fitted and each man's clothing is tied together and the package marked with his name. This uniform is only to be issued in case of going into the field for active service. In this event the old uniforms left by the active army would be worn by the reserve army.

Every ten days each man doing his compulsory service receives as pay seven sous (seven cents) and a three sou package of tobacco, making his pay a cent a day. It should be added in this connection that the laundry is sent to a contractor who is paid by the government. A troop barber is detailed and there is no charge for his services; cleaning material and some toilet articles are furnished free of charge. There are some re-enlisted men in the regiment; their pay is about twenty-five cents per day.

The horses of this regiment are, I am told, a little lighter than those of most dragoon, or medium weight, regiments. In height these run from fifteen hands to fifteen two. They are mostly half-breeds of Anglo-Arab or thoroughbred origin, many of them are thoroughbreds and very few are of unknown breeding. Generally speaking they show more quality than our horses, jump and gallop better, and have more pleasant gaits. As yet I have seen no work that would give an idea as to their comparative powers of resistance. The men spend more time at stables than do ours but so far as I can observe their horses are no better groomed. Their manes and tails are well plucked and trimmed: this gives them a better general appearance than ours usually present.

The troop is divided into four platoons. Each platoon is supposed to have and would have in war, thirty-two men in ranks. Particular parts of the barracks and stables are assigned to each platoon and its commander is responsible for their police and keeping. *Each platoon is commanded, instructed and disciplined by a lieutenant* or an "*adjutant*" almost as though it were a separate organization. The captain gives general directions as to the results he wishes but rarely occupies himself with details as to their accomplishment. A lieutenant therefore has a responsibility and a command in which he takes great pride. At stated times there are inspections of the different platoons by the colonel or brigade commander which is also an incentive to work on the part of the platoon commander.

An idea of the instruction given the troop may be gotten from the schedule of work for the month of March which is reproduced herewith.



A brief explanation of some of the work indicated on this schedule might give a better idea of their system of instruction.

As to the training of five and six year old horses they are very painstaking and patient. Generally speaking horses are bought and sent to the remount depots as four year olds. As five year olds they are sent to the troops where they are worked in the five year old breaking class. In this class no efforts are made further than to develop the colts and to teach them to go quietly under the saddle at all three gaits. As six years old they are put in the six year old training class. In this class they are taught all that it is considered necessary for a troop horse to know. No high degree of training is sought; it does not go so far as to require the change of lead at the gallop. As five and six year olds the horses are ridden each by a regularly assigned rider. As seven year olds they are put in the ranks as regular troop horses.

The recruit riding furnishes an interesting study. Among the soldiers brilliant horsemen are not produced but they ride uniformly well according to one established system. I believe any one making the comparison would say that these men ride as a whole better than ours. The method of teaching recruits to ride is first to get them to relax the body on horseback, then to teach them to conduct the horse. For the first seven or eight weeks the recruits of this troop were exercised in seeking this suppleness of the body, principally the upper part. For this work they rode in the hall on very steady horses that would follow one behind the other, with an old soldier as conductor of the column. They rode with saddles without stirrups and, with the reins on the horses necks; were put through a series of exercises, such as rotation of the arms, turning the body, etc., destined to take the contraction out of the body. As soon as practicable they did these exercises at a slow trot and at a gallop. They were occasionally given their stirrups and taken for a long walk outside. Now, after three months and a half of riding, they divide the time about equally between suppling exercises and conducting the horse, with occcasionally a drill in the use of the saber or the lance mounted. Great value is attached to these suppling exercises and the old soldiers are frequently put through them.

The instruction of scouts is given to about twenty men in each troop, chosen for their intelligence or natural aptitude. They are taught map reading and the theory generally of scouting and patrolling. This instruction is given in addition to the regular drills which these men attend.

Vaulting appears on the schedule for old men four times per week and for the recruits three times. This is done some times from a horse standing still, at other times it is from a horse put on the longe and carrying a surcingle provided with handles to which the man holds when making the vaults. There is a diversity of opinion among the officers as to the value of this exercise.

Mounted drills for the old men and horses take place every day of the week except the day of inspections. The men carry a carbine slung over the back by a strap and steadied by a hook in the back of the belt which catches in the small of the stock. This carbine weighs six pounds and about fifteen ounces, including the strap and a metal cleaning rod. Its sights are graduated up to two thousand meters. I have seen it fired at no greater range than four hundred meters; it seems to be accurate at that range. The soldier carries a steel lance a little over three yards long. The base of the lance rests in a socket attached to the right stirrup like our guidon socket, and there is a leather loop attached about the middle of the lance through which the soldier places his arm when he wishes to have the use of his right hand. The lance is unwieldy and a nuisance to carry. There are various opinions among the officers here as to its value as an arm; generally they have faith in it. They have a straight saber that has a blade about three feet long. It hangs back of the rider's thigh, and in the dragoons on the left side of the saddle. The drills are very simple; they have but few movements. They get from one formation to another silently and in most cases easily and quickly. I have seen one brigade drill, and a number of regimental, half regiment and troop drills. In the course of these drills they generally execute one or more charges and in them all I have seen only one runaway horse. They rarely practice dismounting to fight on foot and do not take very much interest in target practice;

however, I am informed that there is a growing tendency to pay more attention to these matters.

It will be noted that the lieutenants have equitation class twice a week. Graduates of Saumur attend as well as others. A captain of the regiment has charge of the equitation classes. Each lieutenant chooses from his troop a six year old horse to train. One of the weekly equitation hours is devoted to these horses, the instructor seeing what progress has been made with them during the week and giving instructions as to what shall be done during the course of the next week. These officers give about an hour's work daily to their training colts. The other equitation hour of the week is devoted to riding the regular chargers. In this class they take cross country rides jump in the hall, execute the ordinary school movements and occasionally they have mounted fencing and tilting at heads with the saber and the lance. Generally the officers ride well and take great interest in horses.

Each troop has nine men and a noncommissioned officer designated and instructed as pioneers. These men are selected from amongst those having had experience in the use of explosives or with ordinary tools. They are given special instruction in the preparing of hasty intrenchments, the destruction or repairing of roads, railroads, bridges, etc. These men like the scouts attend all regular instructions of the troop. In the field they carry special tools for accomplishing any work in their line that they may be called on to perform.

The class of candidates for the grade of corporal is conducted by a lieutenant of the troop. This work is both theoretical and practical. Any man, even a recruit, can with approval take this course. At stated times a board of officers is convened to examine the candidates.

No mention is made of fencing in the schedule of work; this however takes place at odd times throughout the day. There is a fencing master with the regiment who is rated as a professional. He gives lessons to the officers in the use of the duelling sword and the saber. He has four or five assistants who give lessons to the noncommissioned officers and also instruction in mounted fencing to the men at certain drills.

A study of this schedule will show how completely the time is taken up and how well it is divided among the different kinds of instruction that are to be given a troop. A high degree of perfection is not required in the training of the men and the horses but a known general proficiency is sought for and well attained. Their organizations, their formations and their equipment furnish an interesting study. Whatever may be our ideas on these subjects, there is a most valuable lesson to be gotten from their systematic procedure in training, their patience, and their simplicity of requirements.

PERSONAL OBSERVATIONS ON THE FRENCH MANEUVERS OF 1912.

By Captain L. R. HOLBROOK, Fourth Cavalry.

THE following remarks are extracted from copious notes made while attached for instruction to the Sous-Intendant, 21st Division, 11th Army Corps, French Army at the Grand Maneuvers, 1912. Numerous officers of the United States Army attended these maneuvers as observers and by means of automobiles and expert conductors were enabled to follow the different phases of the combat and doubtless have fully reported upon the wonderful marching powers of the French infantry, the excellence of the artillery and the advancement made in aeronautics. Fortunately or otherwise my field of view was more restricted. I was mounted upon an ordinary troop horse, rode in a trooper's packed saddle, was billeted with the troops or slept on the floors of school houses, or elsewhere in the straw as occasion demanded, and can report only the simple facts coming under my obesrvation while living the life of a supply officer in close contact with the private soldier, and daily associated with the common peasants whose life was as interesting as the maneuvers themselves.

The troops consisted of four army corps of about 23,000 men each, one division of cavalry and certain special troops, bringing the grand total up to approximately 95,000 men. The maneuvers were held at a period of the year when the soldiers were in their most advanced stage of training, just before returning to their homes of approximately one-half the active force completing their two year's service and before the receipt of the new levies who (between the ages of 20 and 21 years) are received during the month of October. Moreover the work at certain Service Schools is completed just prior to this time, or as in l'Ecole de l'Intendance the course gradually leads up to

the maneuvers as a climax. Incidentally it is also the time of the year when the crops have already been harvested and maneuvers can be carried on with the least damage possible while the reservists as a rule find this a time when their services are least required at home. Moreover the weather is normally settled, cool and invigorating and the supplies of vegetables purchased locally are cheapest and best while the cattle are in prime condition.

The section of the country chosen for the grand maneuvers this year was a large rectangle south of the Loire between Tours and Saumur, rolling and not too sparsely wooded, cut

CAVALRY MACHINE GUN DETACHMENT.

by several rivers (which in themselves constituted rather formidable obstacles to the passage of troops), not over productive and normally subject to as little damage by the passage of troops as any section that could be chosen.

A few days preceding September 10th were consumed in the concentration of troops by marching or by train, two army corps, (Blues) Army of the East in the region south of Tours, two army corps (Reds) Army of the West similarly concentrated with reference to Saumur. The base of supply (Station Mag-

azin) for the Blues was at Orleans, for the Reds at St. Cyr, eighteen miles west from Paris.

September 10th was a day of rest for the troops—a day for cleaning equipments and clothing, greasing shoes and rearranging packs for the days of activity to follow; for the supply department of assuring itself of the completeness and efficiency of its equipment, purchase of beeves and other supplies and completion of details of movements of supply trains for this large force. Thereafter each three days of activity, necessary for solving a single problem with this large force, were followed by a day of rest.

In a maneuver of this magnitude one can follow perhaps to better advantage the movements and supply of a single division than that of the army as a whole. Generally speaking the supply of troops in the field seemed remarkable for its efficiency and simplicity, and for the almost entire absence of paper work in advance of the "*gare regulartrice*," and this regardless of the fact that a large proportion of the supply officers were officers of the reserves and infrequently called to the colors. Here the same as with the troops, the reserves (officers and men) were absorbed by the standing army and performed the duties of regulars throughout the maneuvers. They wore absolutely the same uniform as the active force and close observation would not always reveal to which class any officer or man belonged. Many of the regimental supply officers belonged to the reserve class and each day upon the arrival of the division trains, the division Sous-Intendant (performing the duties regularly assigned to a chief commissary of our divisions as a part of his work) assembled all the regimental supply officers and his own assistants and explained in detail the day's problem of supply and that of tomorrow.

The regular and well timed movements of trains supplying an army on the march or in actual contact with opposing forces when the destination of regiments, much less the halting place for the night, was a matter of much uncertainty, could not fail to excite one's admiration. The numerous excellent roads were not alone responsible for the success; we must attribute part to the general abundance of supplies in the theater of operations, the simple ration, the single control of transporta-

tion and supply, the small amount of baggage, the automobile service of the division trains and the simplicity of a system that always brought the regular daily supplies to the front without requisition unless it became necessary to change the number of rations required.

GENERAL METHOD OF SUPPLY.

To my great disappointment Field Bakeries* were not employed during these maneuvers, but all bread was baked at

CAISSON TRANSFERRED INTO A POST OF OBSERVATION.

St. Cyr for the Red Army and correspondingly near the base of the Blues. Beeves were purchased locally or supplied from the division herd, driven along each day and slaughtered as required. Hay was purchased locally and the "*supply*" consequently resolved itself into forwarding each day from St. Cyr and Orleans 45,000 to 50,000 rations of field bread, coffee and sugar and the quantity of oats required for each army. The fixed amount was forwarded daily without requisition, although the amount might have been changed from time to

*Belongs to line of communication.

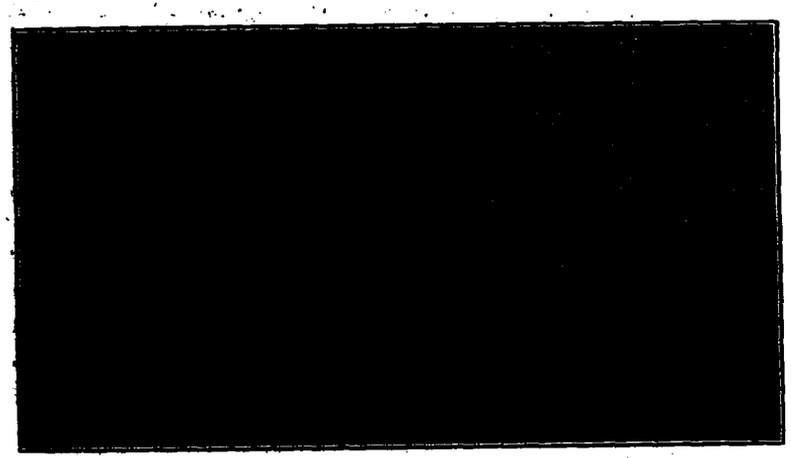
time by request from the "*Gare Regulartrice.*" Similarly from the Angers, the "*Gare Regulartrice,*" for the Red Army the fixed supply was sent forward daily unless changed by request from the "*Gare de Ravitaillement,*" the next supply station for the front. The supplies next reached the "*Gare de Ravataillement*" designated for each corps, and at that point were transferred to the auto trucks composing the sections of the division train. As a rule the transfer was effected at an early hour in the morning and generally 2 or 3 P. M. found these trains at their destinations, perhaps 90 kilometers away, ready to transfer to the empty sections of the regimental trains held in waiting, generally near the town where the division had passed the preceding night.

As a rule the regimental trains did not go to the rear. Each morning the loaded sections followed the columns as closely as safety permitted and then parked in a convenient place from which it moved from time to time according to circumstances, but generally with a view to joining and supplying the troops as early in the evening as possible. The empty sections were assembled and parked near the town the division had just left and to which the automobile section of the division trains advanced during the day. The transfer accomplished, perhaps by 5:00 P. M., these sections advanced during the evening to join the column, distribution being made the following evening.

Two days' reserve rations (war bread, coffee, sugar, canned meat and bouillon) were at all times carried by the troops, generally one day in the pack and one day on the company wagon, though sometimes both rations were ordered carried on the back. The soldier also carried one days' ordinary rations (excepting fresh meat) in a canvas sack slung by his side. The day's ration consisted of field bread, coffee and sugar, to which cheese or cold meat were sometimes added for the lunch, and wine or sweetmeats if provided by the soldier himself. The soldier was permitted to add almost anything he desired to be carried in his sack.

FRESH BEEF.

Beeves were of excellent quality and condition when purchased and between four and ten years old. They were sometimes procured near the place selected for slaughter but generally the division herd supplied the demand and the meat deteriorated in proportion to the length and number of marches and the shortness of the period that must intervene between the time of arrival at the abattoir and the killing. Although it was desirable to kill during the evening and let the carcasses cool during the night, it was sometimes even more important to let the



FIELD HANGAR.

animals rest and kill in the early morning. The meat was then distributed to the regimental supply officers who carried the same away in specially built meat wagons, so constructed as to allow a good circulation of air and keep out dust. Supply officers told me that even in warm weather these wagons were sufficiently cool to preserve the meat without refrigeration. The wagon was thoroughly sanitary, being zinc lined and always clean. These wagons when filled joined the full sections of the regimental trains and remained with them during the day, distribution of beef being made during the evening for use the next night.

In the companies the meat was carried in specially constructed wicker baskets or chests transported in the baggage

wagon, and was from thirty-six to forty-eight hours old when cooked. The meat is all cooked for supper and the allowance is so small that it is generally consumed at the one meal, though sometimes a portion is set aside for a part of the lunch the following day.

The purchase of beeves, driving of herds, sometimes thirty kilometers in a day, the provisions of abattoirs, etc., seemed the most arduous and trying duty of the Sous-Intendant and the supply of dressed beef in the field is one of the problems now being worked out for the service. It is, however, a difficult problem in a country where refrigeration is used so little and where refrigerator cars are unknown.

FIELD BREAD.

The field bread supplied, as stated above, was baked at the base and forwarded hundreds of miles by railroads, auto-trucks and wagons to the troops. This bread was almost exactly of the same type as our own, though made in two ration loaves. It was more dense, and had large cavities, being made by the sour dough process, which, in their opinion, gives it better keeping qualities. No special protection was given to the bread in transit and each loaf was handled many times. The time for each transfer could have been cut down in the proportion of about one hour to ten minutes if the bread had been sacked, and it would have been handled in a far more sanitary manner and with less chance of loss or error in count.

THE RATION SUPPLIED.

The ration supplied consisted of bread, fresh beef, coffee and sugar, and about four and one-half cents per day for each man. This is stronger than the garrison ration as the coffee and sugar are there purchased out of the four and one-half cents daily allowance.

Upon arrival in the town where billeted for the night, the company is divided into sections and the chiefs march them to their respective lodgments, generally a group of stone structures on a common court like a farm house with its outbuildings. The Chief of Section spends his four and one-half sous per man for vegetables, fruit, cheese or wine and all hands get to work

to prepare the one warm meal of the day. In almost every such place a large soup kettle with stove is found. The kettle is cleaned up for the stew, which invariably consists of the day's allowance of beef to which such vegetables are added as can be purchased locally and some hours must elapse before the supper is ready to serve.

The meal is a good one when ready; bread, meat and vegetables and perhaps coffe and wine, but, during the maneuvers the troops arrived late at their lodgment and it was frequently ten or eleven o'clock at night before the supper was ready, and this when the column must be formed again before break of day the following morning. The breakfast consisted of one-fourth litre of coffee (less than half a pint) and a small chunk of field bread from the sack slung from the shoulder. The lunch was generally consumed between 10:30 and noon and consisted of bread to which, as stated above, cheese or cold meat was sometimes added.

SOUP CART.

The soup cart was not in common use, but one day when returning from the front I ran across the combat train of a division other than that to which I was attached and was surprised to find a column of soup carts. I dismounted and talked at length with the soldiers in charge who were enthusiastic over their part in the maneuvers. The cookers provided coffee and stew and a sergeant passed this remark: "You see the 167th regiment will have a good supper as soon as it arrives at its lodgment because we have had plenty of time to buy vegetables and prepare a good stew. Now the 57th over there will have to get a place to cook after arrival, things to cook with and wait at least two hours longer before it has its supper, perhaps until eleven o'clock tonight. My regiment will have three hours longer to sleep and you know we are on the march again before dawn"—a strong argument in favor of the soup cart in campaign.

THE COMPANY WAGON.

The only transportation assigned for the exclusive use of the company was a two wheeled cart, presumably for carrying one day's reserve field ration, lightening the packs of the soldiers (which I was told they never did) and carrying the baggage of the company officers.

THE "CANTINE VOITURE."

The "*cantine voiture*" is a well built delivery type of wagon, generally hauled by one horse, for furnishing hot coffee at two sous a cup and light lunches to the soldiers in the field. A good copper urn is attached to the side of this vehicle and a continuous flame keeps the coffee hot. The wagon is generally in charge of a retired sous-officer and his wife, though sometimes handled by a noncommissioned officer of the band. One is authorized for each battalion and follows the troops closely everywhere in the field except during actual mobilization.

WATER CASK.

A large cask of water mounted on a two-wheeled cart accompanied each battalion supplying an extra litre of good drinking water for each man—an excellent idea considering that the single litre carried in the canteen is seldom sufficient and good water is frequently difficult to obtain on the march.

AUTO TRUCKS.

The auto trucks were given their first thorough trial this year though they were used only with certain division trains. These trains were divided into sections of seven automobile trucks each, one of these trucks always going empty to meet emergencies. The trains always arrived within a few minutes of scheduled time and no accident occured which caused serious delay. The specifications called for auto trucks capable of carrying from 2,000 to 4,000 kilos according to character of supplies, minimum speed twelve to fifteen kilometers per hour and maximum expenditure of gasoline one-half litre per kilometer. Only those trucks designed for special work as for

carrying signal apparatus were owned by the government. All others were requisitioned and the idea prevails that they always will be provided this way even in war. It is stated that 1,200 such trucks are available in Paris alone. A colonel of Intendance told me that while the automobiles were exceedingly efficient for maneuvers in fair weather, they were so hard on roads and uncertain in wet weather that their use was doubtful in war time. All others with whom I spoke from generals down expressed the idea that their necessity had been demonstrated beyond question and that their use would be continuously ex-

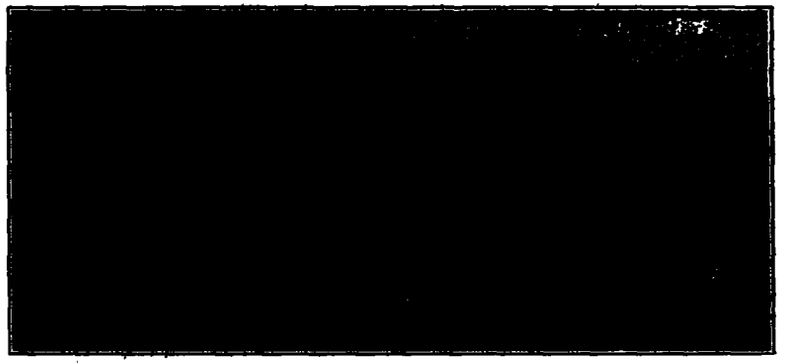
FIELD AUTOTRUCK.

tended. One general said to me: "The automobiles brought my supplies from ninety kilometers away today. We can never again rely upon horse transportation."

BICYCLES.

Bicycles seemed to be used wherever they could to save horseflesh. Not only were there several organized companies operating on bicycles, which could be folded and slung across the back when necessity required, but bicyclists were frequently attached as orderlies to mounted officers. Two cyclist orderlies always followed the Sous-Intendant of my division and were specially useful on account of their rapidity in carrying orders.

Upon approaching a town where we were to stop for the night, a cyclist would speed ahead to carry out the orders of the Sous-Intendant and he would return far enough to meet him with all information desired before entering the town and conduct him to the headquarters. Motorcycles were often seen speeding from one column to another and it could only be assumed that they were efficient in carrying orders and aiding the corps commander to keep his units well in hand.



A COMPANY OF CYCLISTS.

REGIMENTAL SUPPLY OFFICERS.

These officers were first lieutenants, regulars and reserves. It was their duty to receive the meat for their regiments in the morning, the remainder of the rations in the afternoon from the division train, and then hurry forward to join their commander to make the evening distribution at the cantonment. They went, however, where their services seemed to be most required and frequently had to leave a part of this important work to their noncommissioned officer assistants. On the march of concentration, they purchased supplies for men and animals and for payment carried all funds on their person. One regimental supply officer told me he started out with 8,000 francs in his pocket and that checks could not be used on account of the poor banking facilities throughout the country. He said he carried this money at personal risk and had no recourse in case of loss.

He carried 4,000 francs throughout the maneuvers for use during the return trip. In time of peace a supply officer can take any supplies required so as not to leave a family without eight days provisions for themselves or two weeks forage for animals. Nor can beds be taken for the military that are habitually used by a family. In case of dispute as to price to be paid for supplies, the supply officer simply gives a receipt and leaves the price to be settled by a commission which pays a price no higher than the highest that the supply officer himself could have paid.

At maneuvers the regimental supply officer obtained supplies from the division supply officer upon the presentation of a "*bon*"—a simple requistion signed only by himself, no approval or reference to higher authority and no return rendered by him.

DAMAGES.

A lieutenant colonel of intendance whose duty it was to receive complaints for damages done by the troops rode with us each day and covered the ground passed over by his division. Three weeks later he passed over the same territory as a member of a commission to settle for these damages. This officer told me that it was seldom that any destruction of property was committed by the soldiers on the march or when billeted and that practically the only damage done was incident to the movement of troops during contact and combat. Toward the close of the maneuvers this officer told me he had received no complaints for depredations committed by the soldiers, and it was well understood that no complaint would be entertained unless received within twenty-four hours of the passage of troops.

BILLETING.

During the first days of the maneuvers, while the troopers were widely scattered, the "*billet de logement*" was available and furnished ample accomodation for the officers; and under the same circumstances the men were supplied shelter and straw. Neither officers nor men were allowed blankets in the field and after concentration it was seldom that a junior officer at least found a bed, and sometimes the men had to sleep in the open.

Personally I was furnished with a "*billet de logement*" but twice, but sometimes was able to secure a bed for a few francs

even though the inhabitants had declared officially that they had none available.

THE OFFICERS' MESS.

No mess furniture was carried by the officers' mess and for nourishment we had to depend upon arrangements made at cafés, small hotels and farm houses. The government allows three francs per day to captains and lieutenants for subsistance in the field and five francs to field officers, but even with a dozen officers in the mess, the average cost was not under seven francs per day. When the small towns were crowded it was quite difficult to get a meal and sometimes my special comrade, a captain of the Greek army, and I sought food and shelter in a peasant's home.

SKETCH OF PEASANT LIFE.

To the weary soldier, after a long day's march, or desperate combat, the shelter of the peasant's home was truly welcome and the warmth of the fireside most cheerful after the dust and fatigue of the day. To these simple peasants the preparation of the meals is a simple incident of the day rather than the salient feature which governs all else. Incidentally before the serious work of the day begins, the little family gathers about the bare but clean table for the simple repast of bread and coffee or milk. Then the whole group betakes itself to the field where the able bodied men and women toil together throughout the long morning hours while the old and decrepit tend the herds of cattle and goats and the children watch over the flocks of geese. Just before the sun reaches its meridian height a light repast consisting of a loaf of bread and a bottle of wine (followed perhaps by a little nap) fills up the interval that divides the long day in two and it is not until the sun sinks into the forest that the family gathers about the huge open fireplace to watch the sizzling roast or gurgling stew that really furnishes the sustaining meal of the day. As we draw up before the cheerful chimney and listen to peasant Jean tell of the days when he was called to the colors, the family cat and shepherd dog gaze longingly at the singing kettle and watch with curiosity the peasant's wife dig the baked potatoes from the bed of ashes. While

we sit about the table recounting the incidents of the day and planning the work of tomorrow, peasant Jean draws from his deep pocket the trusty all purpose jack knife, strops it across his jeans and tossing the yard long loaf up under his left arm, cuts a huge chunk of the real staff of life for each to consume with the steaming soup and satisfy the demon hunger that gnaws at the pit of each man's stomach. It is this plain economical and serious life that makes the simple ration possible, that teaches the soldier to slip into his pack the stray faggots he finds in his path, that fits him for eight to ten hours hard military service each day throughout the two years he serves his government gratuitously in preparing for the defense of his home.

MISCELLANEOUS NOTES.

For military purposes the day is divided into twenty-four hours numbered from one to twenty-four beginning at 1:00 A. M. The practice has also been adopted by the railroads and is otherwise becoming quite common.

The comradeship existing between officers and men was everywhere noticeable; excellent discipline prevailed throughout, although it is not uncommon for the private soldier to engage in general conversation with his officers, to sit at the same table in cafes and restaurants or at any time to dispense with useless military forms when working together for the common good.

The mounted man never dismounts to address an officer, nor does he hesitate to ask for information or directions from a general or his staff when carrying a message from one part of a field to another. The soldier thoroughly respects an officer and his position and all grades work with intense interest in preparation for the great struggle they believe is to come.

The aristocratic spirit of former years has disappeared and the soldier finds in his officer not only a commander but a comrade in arms.

It is noted that officers and men performed the duties they expect to perform at the outbreak of war. The possible hope of captains and lieutenants to command battalions, or major's brigades, did not make them lose interest in their proper commands.

Even in garrison one is impressed with the constant preparation for war. Little time is consumed in attaining military stiffness and useless uniformity. Their baracks are sanitary as a matter of fact, but the untidy appearance of the men's squad rooms their personal negligent dress about quarters and while exercising in the "*cour*," the simple kitchen, labaratory and bathing facilities would make some of us seek an early grave.

The "*set-up*" of the French soldier would not be considered good in our service. The mounted man always crouches close to his horse and the foot soldier swings along at a rapid pace with a comfortable slouch; but the spirited chant when not in the vicinity of the enemy, the habitual good cheer during fatiguing work, the absence of stragglers on the march, of drunkenness, of personal altercations and combats, bespeak much for their esprit and discipline. I find in the French Army less aristocracy than in our own, better discipline, more comradeship and more serious work. The officers do not indulge in idle criticisms nor waste their hours at games of chance, but the probability of war makes the profession of arms a serious occupation. These qualifications combined with universal service, national military spirit and unity, the self-sacrifice they are individually ready to make for the common good, the simple and economical life, will count for much in war when it comes.

The men are constantly employed on military work and the hours spent with us on general fatigue, kitchen police, unnecessary guard, etc. are more profitably employed in better care of horses and equipments, oiling of shoes and harness, and repairing and washing their uniforms, preserving material and *preparing for war*.

NOTES ON AUSTRIAN CAVALRY.

BY AN OFFICER ABROAD.

The service methods of all branches of this army are so similar to our own that a casual observer might think there was nothing particularly new to learn.

Admitting that the efficiency in all military establishments depends upon the amount of hard word done by officers and men their enthusiasm and the national traits, I noted some minor details that struck me as being the result of much field and maneuver practice, carried out intelligently and thoroughly, with a conscientious attention to detail which we would do well to imitate. For instance: A cavalry officer gave an order to an orderly on the field who immediately, almost before the officer had ceased to speak, repeated in a loud voice, as if at drill, the order he had received and dashed off at full speed on his mission. We too, have the regulation that verbal orders shall be repeated but it is generally carried out in a halting, dilatory manner. As I have seen it done, the officer usually *asks* the man to repeat the order, he gives a garbled version, it is then corrected and possibly after further conversation and delay the man departs. The orderly who *knows* that he must immediately turn over the order received the minute the officer ceases speaking pays *intense attention*. I was quite thrilled by the efficiency displayed by the enlisted men in this matter of carrying orders. How much goes wrong even in a placid maneuver because of the failure of orders to correctly reach their destination! No duty of an enlisted man is more important. Our field regulation obtained the paragraph on repeating orders from the German, but for us it is still merely the words of a printed book.

The manner of preparing for a cavalry attack was shown me and it also had some interesting points. A regiment was supposed to be behind the railroad embankment. A squadron

was in front hidden by a fold in the ground. Scouts were sent out to look for sunken roads, wire, etc., and to report on the enemy. That of course is the method of all troops but here is the point to which I want to call attention. As a returning scout, at full gallop, neared the point from which he had been sent out, he waved his saber over his head and shouted the name of the officer who awaited his return. It was the duty of everyone who saw him, officers and men, to point the direction in which the officer could be found. The scout did not have to dismount and ask respectfully where Captain ——— was; instead he was practically blown across the face of the waiting troops to the captain. Suppose while the man had been out on his scouting mission more troops had been moved up, or his own troops had been forced to give way to the right or left to make interval in the line for reinforcement, etc.; in such a case he would have found strange troops in the place of his own and possibly would not have found his captain until precious moments had been lost. The waving of the saber over his head was the signal for everyone to point the whereabouts of the officer whose name he was calling and for whom he had important information. Upon viewing this strange spectacle for the first time I asked: "What are they all yelling and pointing at?" And then I was told its meaning.

Another point: I saw at Santiago officers of our army dancing up and down in front of their troops waving their hats and yelling "*cease firing*" with absolutely no effect. In an exercise here where troops were fighting on foot, the order to cease firing was yelled by every man in the firing line. However dazed by the excitement of the fight it seemed that such a method, daily trained into a man would subconsciously cause him to obey. We have the piercing whistle signals which can be heard above the rattle of rifle fire, but it is used for so many signals that I doubt if the soldier will pay as much attention to it as he would to his own voice saying, "*cease firing.*"

The double line formation is used in the Austrian cavalry. I know nothing of the merits of this question, over which our cavalry is using so much printers' ink. However, I saw troop after troop take low hurdles in double rank and the ranks were very close together. It looked like a dangerous line up for

a charge or a maneuver at a gallop on any other field than a well known drill ground. I feared for the men in the front rank when they came to the hurdles, but nothing happened.

The Austro-Hungarian army is supplied with remounts from its own stations and I must say the horses looked superb although they seemed a little small and not what Carter's book called "*weight carriers*." They all had a thoroughbred look and the appearance of being officers' mounts and not those of enlisted men. The horses are received from the remount station when they are three years old, but are not put into the troop until they have been thoroughly trained in gaits and are leg and bridle wise. The care they take of their horses is astonishing. I saw the young horses being trained. A sandy space of about four acres is fenced off and there every day, with expert riders, under the immediate inspection of an officer, the horses are gently taught. To anyone who loves a horse the sight of these fine, young horses being taught their lessons as if each animal were a pet, without whip, spur, or irritable jerking rider, was worth seeing. At first they are ridden only with a snaffle, later the curb is used. The horses when fully trained are ridden on the curb and the snaffle is used for correction or punishment. The curb reins and the left snaffle rein are held in the left hand; the right snaffle rein is held in the right hand and when the rider wishes to inform the horse that he is doing wrong the right hand jerks the snaffle up into the corner of the horse's mouth. I won't presume to discuss the merits of this system, but would like to know what our mounted service school men think of it. The position of the rider in the saddle is with heel carried back on a line with the spine and the calves of the legs used to grip and signal the horse. This I presume is the same method taught at Riley by the men from Saumur.

Austrians, according to our standards, know little of personal cleanliness—a few houses are equipped with baths. And we, according to their ideas, know little about a clean stable. I never expect to see more immaculate stables than those kept by the hussars. The mangers are sunk into the wall and are a part of it—there are no projections on which a horse can hurt himself. His halter is attached on either side to two light chains, which are fastened to the wall in such a way as to

give him plenty of lateral room but not enough to nip his neighbor and plenty of room to back and lie down. The horses are separated by a single bar covered with woven straw half it length to keep hocks from being injured. The floor is covered deep with straw and there is no sign of urine or dung. I asked how this was accomplished and they pointed to a small wooden bucket attached to a pole which the men on duty day and night were supposed to quickly hold under a horse when necessary. There are four of these buckets at convenient intervals. I was skeptical of any man being able to act quickly enough, but I was assured that it was a most efficacious method as the men were required to immediately clean up what they did not catch. This stable management keeps the place free of steaming manure and does away with the horses lying all night in dirt awaiting the morning stable call. Two men are on duty in each stable all night with about fifty horses to guard and watch.

The Austro-Hungarian cavalry claim their saber to be the heaviest of any used in the European armies and I should judge they are correct. It is slightly curved with no point to speak of and looks like a medieval weapon. Some of the troopers went through the saber exercise for me. It was a strenuous affair of complete circles and each weapon had to "*whistle*" or the movement was not considered correct. It looked as though a blow given as practiced would break down any guard, but of course a sword thrust is always more deadly than a blow.

I took advantage of an opportunity to inspect the storerooms. Here are kept the supplies for the additional men necessary to bring the regiment up to full war strength. These men are not present with the troops but their names and measurements are on file and their full equipment in the storeroom. An old German (Austrian) was in charge, a familiar figure, his duplicate can be found in almost any Quartermaster store room in our own country.

The Austro-Hungarians are proud of their cavalry—and rightly so.

THE SOLDIER VERSUS ENERGY, AMBITION AND INITIATIVE.

By Color Sergeant R. W. LEWIS, Fifth Cavalry.

THE thought that the enlisted man has no need of ambition, energy, and initiative is, sad to say, a very prevalent one, though none the less erroneous. Indeed, it is so prevalent that the mere fact alone has almost convinced the average enlisted man that these qualities are undesirable in a soldier. Could this thought be banished from the mind of the enlisted man himself it would operate to make of him a much better soldier.

In the profession of arms, as in any other, a man possessing ambition, energy, and initiative is much more valuable than one not having these qualities. Every opportunity should be seized to instil this into the mind of the enlisted man. When he has cast out the old morbid thought and become receptive of the new, then will he be able to do credit to his profession, and no sooner. Many who read this will say that the habits of life of the soldier are such as to kill any germs of ambition, energy, or initiative that may be latent in him. This is but too true!

A soldier's habits of life are made for him. So to get at the root of the evil, those who make his habits should change them.

To get at the relation that a soldier's habits of life have upon his ambition, energy, and initiative, let us discuss a day of a soldier's life.

To begin with, at "*first call*" he must jump out of bed, dress hurriedly, and, if he is a hustler, will have his bunk made and will have swept up about it and just have time to get into line for "*reveille roll call.*" This rush is stimulating.

After dismissal from the reveille formation the man, under the supervision of one non-commissioned officer, "*in charge of quarters*," are dispersed about the grounds near the quarters and troop parade for the purpose of "*policing.*" The "*habitual beats*" then get around a corner or lag behind and "*beat it.*" The remainder walk about in a desultory way, picking up a match-stick here and leaving a piece of paper there. Those who have observed the "*beats*" will feel injured that they have to perform the duties of the "*beats.*" So it is more than likely that on the morrow the observers will be among the "*beats.*" In this manner the habit of slighting his duty is developed in the soldier. You will say: "Why does not the non-commsisoned officer prevent all this." The answer is that he cannot. He has too many men for the size of the job. Give him a squad of eight men and let these be changed each morning and then see the result.

After policing about quarters there is an interval in which to wash up for breakfast. I am glad to say that few soldiers are negligent in this respect, mainly, perhaps, because their comrades would make it hot for them. Then, of course, the laggards make up their bunks and sweep out, which generally operates to cause their being late at "*mess call.*" A little energy might be developed for the next morning by making "*Mr. Laggard*" miss his breakfast.

There is then an interval of time until morning stables.

The men are made to fall in at quarters and then marched to the stables. Here is something which is detrimental, inasmuch as it keeps a number of men away, who would otherwise have been at the stable sooner looking after their mounts.

At "*stables*" the horses are led out, tied on the picket line, and groomed from fifteen minutes to half an hour. That is a very uninteresting performance and generally leaves the soldier disgruntled and disgusted. I have seen horses present as clean an appearance after ten minutes energetic grooming, and the man doing the grooming still be in a cheerful mood. Let the soldier see that his energy is looked upon as an asset, rather than a detriment. Why cannot a certain limit of time be set in which the soldier shall have his horse groomed and saddled and causing him to be responsible for the appearance of the animal at the end of that time? It seems to me that this would

be an energy developing method, while the other is setting a premium on slowness.

After stables the troop is formed by the first sergeant, who calls the roll and presents the troop to its commander.

The commander marches his troop out to the drill ground. For example, suppose he has jumping drill. Let us say that he has a troop of fifty men. First he sends one man over the hurdle at a time, each man starting at a point, perhaps, forty yards from the hurdle, so that with balky horses and other mishaps he will average at the least one quarter of a minute per jump. The first man jumping, then, does not get to jump again for over ten minutes. By this time his attention has wandered to half a dozen subjects other than jumping and he loses interest. What can be expected of a man under such dallying conditions? The commander, of course, is very much occupied, as he watches each jump with interest, but the interest of watching the jumps is from a different standpoint in the case of the enlisted men, for they do not care whether anyone other than themselves makes a good jump or not. So to keep his interest at the bubbling point, he must have his jumps at shorter intervals. And it is only by keeping his interest that the desired results may be obtained. Who ever heard of a man becoming proficient in anything in which he was not interested? It is evident then, to have better soldiers, soldiers who are energetic and ambitious to perfect themselves in their profession, that the profession of arms must be taught in a manner that will be both attractive and interesting.

Did you ever observe a troop while grooming after mounted drill? First, the horses are tied on the picket line and unsaddled. The picket line, being in the open, is, of course, exposed to the sun. This is a condition which many writers refer to as being detrimental to the horse; I should think it would also be detrimental to the man who must groom his horse on the picket line. At any rate, I know it is none too comfortable and has a very detrimental effect upon the spirits and temper of the men. In most troops noncommissioned officers are permitted to exercise their own individual judgments as to when their horses have had sufficient grooming and the observer will notice that they take advantage of this and groom their horses

energetically so as to finish as quickly as possible. In troops where this is permitted I have never seen it fail that the noncommissioned officer did not finish grooming and commence walking the picket line by several minutes before the command "*cease grooming*" had been given.

Another person who is also allowed to use his own judgment in this respect is the commander's striker. This man grooms both his own horse and that of the commander and invariably he will have finished with both in less time than the troopers on the picket line will have finished with one. If this man can be trusted to use his own judgment in grooming a horse in which the captain is certainly much more interested than those groomed by the men on the picket line why cannot these latter be allowed to use their own judgments, subject to any correction that may be needed.

Speaking straight from the shoulder, the men on the picket line are made to groom by the numbers; are not allowed to use their own judgments as to when their horses have been sufficiently groomed; and whatever energy and initiative they may have is smothered. The trooper's relations with his mount are such as to produce hatred rather than affection and interest in its well being.

Striking an average, I will say that "*after drill grooming*" will consume as much as three quarters of an hour. Now say that the troopers are allowed to exercise their individual judgment, subject to the approval of an officer or a non-commissioned officer, the time consumed would not aggregate more than one third of that. This would leave half an hour in which the trooper could be taught hippology. Let the individual trooper know his mount, let him learn what is best to do in case of an accident to it, and I am sure that he will take a much more intelligent and affectionate interest in it.

After finishing grooming, the trooper generally is made to clean his equipments, and in this as nearly every other work, the energetic ones are made to bring their pace down to that of the lazier soldier. The idea of allowing the slowest horse to set the pace in a charge in which cohesion of movement is necessary is all very well, but suppose this idea was allowed to govern in a forced march or retreat, what would be the result? In this

latter case, anything which would tend to delay the march would have to be eliminated else the success of the enterprise would be jeopardized. Then there are cases in which the slow horse does not set the pace! A commanding officer who failed to recognize such a fact would be lost in this latter case. Then why should energetic soldiers be made to bring their pace down to that of the lazier ones? Why not apply the spur in this instance as in that of the forced march?

Upon the completion of cleaning equipments the men are marched from the saddle room to the quarters and there dismissed. It is now approaching the hour for dinner and at mess call the men repair to the the mess hall and are usually very prompt. I wonder why! The answer is easy—because there is an incentive. After dinner the troop is again formed and marched to the stables and the horses are tied on the picket line. Upon completion of this duty the men are again marched to the quarters and, outside of fatigue and guard details, are left very much to their own resources until "*water call*" in the evening. At this time the troop is again formed and marched to the stables. The troopers then take their horses from the picket line and water them, after which the horses are led into the stables to feed.

Upon completion of this duty the troop is again formed and marched back to the quarters. By this time the supper hour has arrived and the men must hasten to make ready for it. By the time the men have finished with supper, it is time to fall in for retreat roll call.

Retreat roll call is the only formation that I recall in which all of the men are not held until everyone has completed the duties in connection therewith. In this formation, after the first sergeant has called the roll he dismisses the troop and the reports to the officer of the day the result. Assuredly, it would be a brainless proceeding to retain the men in line, with no purpose whatever in view, until the first sergeant marched out, in making his report, to the officer of the day and then back again. Nevertheless, it seems to me that it were as sensible as making a man continue grooming his horse or cleaning his equipment, even after well done, merely because a lazier man had failed to complete a similar task. The man who

should be encouraged and given every inducement to follow the path he is in is punished instead of the real culprit. After a time a man recognizes this fact and, becoming discouraged of any recognition of his merits, adopts the lazier methods of the "*pace setter*."

Retreat roll call completes the day work, after which the men are left much to their own devices.

It seems that the principle cause of dissatisfaction in drilling is a too strict adherence to the letter of drill regulations. Instead of developing the initiative of the non-commissioned officer by allowing him to study his regulations and teach his squad in his own individual way, he is made to learn his regulations word for word and cause his squad to execute each and every movement, step by step, whether the squad be week old recruits or men of several years service. After a soldier has been taught his drill, step by step, once he should be made to execute the movements without having to listen to the long and tedious explanations laid down in the regulations. After a man has learned his drill, step by step, then the commands should be given with snap for his execution. Enter a little "*ginger*" into the drill, keep the soldier's interest at the bubbling point by keeping him in constant expectation of a command. Let a man be marched along for a considerable distance and he will more than likely have allowed his mind to wander and will be confused by a command suddenly given him. Take the same man, give him a series of snappy commands at short intervals and he will execute each with precision because his interest is not allowed to wander and he has been kept in constant readiness for any command.

Saber drill, which is naturally a very attractive subject, is made so uninteresting and unattractive that the average soldier is reluctant to enter upon it. A man is made to take up a position such as "*guard*," in which the heavy saber is held in prolongation of the forearm, and while in this position is made to listen to a long and unvarying explanation, day after day, until, becoming disgusted, he ceases to listen. In the first place these exerises, as laid down in the regulations, are only intended to strengthen and lend precision to the muscles required in handling the saber. In the second place it was intended

that the long explanation be dropped after a degree of proficiency had been obtained. And thirdly, the men should be taught to fence, as it is then only that the full value of the exercises are obtained. By permitting the instructor to present the subject in his own way, subject to supervision, initiative is developed. By bringing this subject to its conclusive point, fencing, an ambition to excel is instilled into the men. By giving quick, snappy commands, causing rapid thinking and movements, energy is developed.

Another class of instruction in which any healthy minded man is interested is shooting. It allows of that spirit of competition, which is so stimulative to ambition, to enter more than in any other class of instruction. There are few drills connected with target practice in which the men do not strive to out do one another. Target practice is naturally so interesting that it is hard to find fault with the manner of instruction. But there is this one fault, the intervals of waiting are too long. It would seem after a target season that a man would never get over the habit of waiting.

I suppose you have heard it said that "*the actual fighting in a battle is not so trying as the wait under fire before engaging.*" There is so much "*waiting*" in the army that to be a good soldier a man has to be a good "*waiter.*" No wonder a man who is loafing on his job in civil life is referred to as "soldiering."

MOBILIZATION OF THE FRENCH ARMY.

By First Lieutenant CARL BOYD, Third Cavalry.

MOBILIZATION for the active (or standing) army simply means filling their ranks to war strength with the necessary number of reserves and preparing for concentration.

To fill the active regiments of cavalry very few reservists are necessary. Depending on the locality of the regiment, it might require from none to four or five men per platoon. The infantry and artillery mobilize with a larger proportion of reservists, ordinarily about fifty per cent.

Depending upon what use is to be made of them these troops are under different orders for concentration. Some know that they are to leave on the third, fourth, or a certain day of mobilization. Other troops are to get away with great urgency, a certain number of hours after orders for mobilization are received and are followed later by their reservists. These troops have sealed orders given them in time of peace which are to be opened only on receipt of instructions. To be systematic and avoid confusion in getting away each troop has a table of events drawn up telling all that must be done in preparation for leaving. These details are arranged in logical sequence dividing the time for preparation into hours, as "*first hour*," "*second hour*," etc., and stating what is to be done during each of these hours. The order for leaving gives the beginning of the first hour of preparation and to be ready in time each troop has only to follow its schedule. The minutest details are covered in this plan. Each sergeant in charge of a platoon has a list posted up telling the successive steps he is to take with his platoon, what details he is to furnish, the number of men to run errands, etc., and the time and place they are to report. For example he will have marked to send a man to the orderly room at the third hour to get an order on

Captain X for a horse. (Probably a staff officer keeping a troop horse at his house.) This order is already written on a card and filed with similar notes, the troop clerk has only to fill in the date and give it to the man.

In order to be thoroughly ready to leave in the designated time the troops have practice mobilization exercises. Twice during the year I saw the troop to which I was attached go through all the work of packing up, issuing new uniforms, bundling the old ones for turning over to the depot, closing the troop accounts, loading the wagons, saddling up and leaving the barracks. Once they completed the exercise by going to the station and loading horses, wagons and men on the cars.

In leaving for the war they only had to repeat what they had done in practice. No one was excited or rushing about. Every thing was done in its regular order, and the trains left at the hours first announced for their departure.

The general effect of mobilization is to place the entire country under military control. The civil authorities of the towns continue their functions under direction of the military. The railroad, telegraph, postoffice, and certain other designated employees continue their work under military control. Every-other able bodied man within the age limit goes to the army. Under the new law every man physically fit serves three years in the active army and eleven years in its reserve, seven years in the territorial army and seven years in its reserve. This takes them up to the age of forty-eight if they enter at the regular age of twenty. The old law under which these men come takes them up to the age of forty-five.

Every man at the completion of his service in the active army is given what we might call an individual descriptive book in the back of which is pasted a leaf of instructions. This leaf tells him where he shall report in case of mobilization, what day of mobilization he shall be there, as first day, second day, etc., up to the sixteenth or last day of regular mobilization. In case he is to join by railrroad, it tells him what route he shall take as the routing of trains is changed at such a time.

The first notification we had of general mobilization was a drum beating at a street corner in our quarter of the town about 4:00 P. M., August 1st, and a gendarme read the order

for mobilization to the assembled people, announcing the next day, August 2d, as the first day of mobilization. In a similar way, or by the ringing of church bells, etc., the news was announced in every little town and spread like wild fire over the land. The civil functionaries of every little precinct filled in the date on the mobilization orders that they had been holding, perhaps for years, and sent men out through the country to post them up and inform the inhabitants.

Officers of the army belonging to a department called "*Train Service*" took charge of the railroad stations and with the assistance of the regular civil officials directed the train service. The all important duty of the railroads for the first few days was to transport men to their places of mobilization and troops to their centers of concentration. Schedules with this end in view are prepared in time of peace and kept under seal at each railroad station only to be opened on receipt of orders for mobilization. Train service for the first few days was almost exclusively for soldiers; since that time it has gradually been becoming more nearly normal.

During the first days of mobilization hundreds of men departed from this town and hundreds arrived. There was the greatest system and order at the railroad station. The hordes of men arriving were formed into groups according to regiments, etc., before they left the station. It took an amazingly short time to rush these groups to their respective headquarters, then to the large storehouses where they were uniformed, armed and equipped. There seems to be an exhaustless supply of clothing, arms and equipments. No attempt is made to turn out smart looking soldiers but their clothing is comfortable and substantial and their arms are good.

The necessary horses, wagons and automobiles for the army are gotten by requisition. Every year a board of officers is convened in each little precinct to class and register the horses and rolling stock that might be needed in case of war. All proprietors are required to present their property to this board. The owner of a horse is told for example that he will in case of mobilization present him at that place, at such a time on, the third day, the horse is listed on the register as suitable for cavalry, artillery or draft as the case may be. In this way before

mobilization is ordered the military authoritites have a very good general idea as to what are the resources of each region. The recent order for mobilization directed that all horses, etc., accepted at the last session of the commission be presented at the time directed by them, and that all horses, etc., not accepted by the commission or acquired since its last session be presented at the public square at 9:00 A. M., on the third day. On presenting their horses, wagons, or automobiles the owners were given by the commission an order for their estimated price of same. These orders were cashed on presentation to the pay department of the government in town. The maximum price allowed for a horse was about three hundred and twenty dollars. Very few brought this price. On the other hand numbers were taken that cost their owners many times this amount. Race horses, hunters, and all other kinds must be presented. Automobiles brought proportionate prices, a limousine went like a delivery truck for the price of its running gear and engine without much consideration for the superstructure. These prices however do not work the hardship on poor owners that might be imagined. The owners themselves are probably going to the war and it gives them ready cash to leave with their families and, in the case of horses, saves the expense of feeding them during the war when they would be little used. There are still enough stallions, old horses and ponies to do the necessary work.

During the days of mobilization the town was filled with soldiers and the benefits of martial law were in many ways apparent. The French soldiers are not addicted to drinking whiskey but there were a few cases of taking too much absinthe, accordingly its sale to soldiers was forbidden under penalty of having the offending café closed. This order I believe has become effective throughout France. All cafés were ordered closed at 8 P. M. These orders have been very effectively carried out. Consequently at about 9:00 P. M., the town is quiet, the soldiers asleep and ready to get up at five the next morning.

Other benefits of the martial law to every one were realized when gendarmes were stationed in the town market to prevent produce dealers from raising their prices on account of war

conditions. These gendarmes also had instructions to prevent more than an ordinary amount of produce from being sold to any one person. Consequently during the days when the town was temporarily deprived of outside sources of supply every one had what he needed at the regular prices.

A most impressive effect of the military control is the self censorship they impose on the newspapers with reference to what they publish concerning movements, operations, etc., of troops. The government issues a bulletin each day stating the official news that the papers may publish. This news is posted a little later on bulletin boards in the towns. Any paper publishing news of movements of troops, etc., not given in this official report and which might be of information to the enemy does so at the peril of being suspended from publication. I notice that a paper in one of the provinces was suspended by the military authorities of that region for having published news of movements of troops in that vicinity. The government has arranged to publish a daily statement of operations which is to be presented free of charge in newspaper form to the soldiers at the front who have no means of knowing what is going on in other theaters of operations.

The secrecy as to the positions of troops is so well guarded that letters addressed to soldiers are ordered addressed to their original place of mobilization where they are taken up by the military who handle their mails. Soldiers writing letters are not to give their locality. No postage stamps are put on letters to or from soldiers. No post marks are put on letters from soldiers.

The people would naturally like to know just where their soldiers are and what they are doing, but realizing the danger of these matters becoming generally known they loyally forego the satisfaction of knowing.

The French have never had a mobilization under the present system and were not certain themselves as to how it would operate. The unanimous opinion seems to be that its every detail has worked out as had been previously planned. Judging by what could be seen here this opinion must be correct.

It is true that the eastern frontier of France is only about five hundred miles from the furtherest point of the country west, north or south and that absolute control of the railroads in such a time is a tremendous factor for success. Nevertheless it is an awe inspiring lesson to be here and see the calmness and quickness with which they can form an army, ready to march out, of men who less than two weeks before were following their various pursuits with no thought of war.

Reprints and Translations.

THE ANCIENT COMBAT.*

BY COLONEL ARDANT DU PICQ.

TRANSLATOR'S PREFACE.

OF the value of Colonel du Picq's work in the study of the psychology of war and of the soldier, it is unnecesary to speak. The aim of his writings may best be shown by an extract from the "lettre questionnaire" which he sent to all officers of his acquaintance—superiors, equals, or subordinates —*who had seen service.*

* * * * *

It seems as though no one was willing to understand that to know tomorrow, one must know yesterday, and nowhere is yesterday *sincerely* described. It is found only in the memories of those who know how to remember because they have known how to observe, and *they* have never spoken. To one of them I now appeal.

The least detail, observed in the act on the field of battle, is more instructive to me, a soldier, than all the Thierses and Jominis in the world. They write, doubtless, for the chiefs of States and of armies, but they never explain what I want to understand—a battalion, a company, or a squad in action.

*Translated from the French by Captain J. W. Kilbreth, Jr., Sixth Field Artillery, and reprinted by the kind permission of the *Field Artillery Journal.*

Whether dealing with a regiment, a battalion, a company, or a squad, it is interesting to know:—

The dispositions made to receive the enemy, or the order of march to move against him; what happens to these dispositions or to this order of march under the independent or simultaneous influence of accidents of the terrain or the approach of danger.

To know whether this order is changed or maintained on drawing closer to the enemy.

What happens when the zone of artillery fire is reached; the zone of infantry fire.

At what moment or at what range certain dispositions, *spontaneous* or ordered, are made before (or for the purpose of) opening fire, or charging, or doing both.

To know how the action opens, what kind of fire is employed how the men aim. (This last is judged by the results whenever possible—so many rounds fired, so many men down.)

How the charge is made; at what distance the enemy has fled before it; at what distance it is repulsed by the fire, the firm stand, of such or such movement of the enemy. The cost of the charge. Whatever has been noticed of all these same things on the side of the enemy.

To know the bearing, that is to say the order, disorder, cries, silence, nervousness or coolness of leaders and of soldiers whether on our side or the enemy's before, during, and after the charge.

Whether the soldier has been amenable to control throughout the action, and whether he has been controlled, or at what moment he has showed a tendency to leave the ranks, either to remain behind or to dash to the front.

If control has become impossible and lost to the leaders, to know at what moment this control has become lost to the battalion commander; at what moment to the captain, to the chief of section, to the chief of squad; at what moment, in brief (if such a thing has happened) the charge has become nothing but a blind rush, whether to the front or to the rear, carrying leaders and soldiers pell-mell.

To know where and when the halt is made.

Where and when the leaders get the men in hand again.

At what periods before, during, or after the day, the roll of the battalion or of the company has been called—the result of these roll-calls.

To know the number of dead and of wounded on both sides; the character of the wounds; the wounds of officers, of non-commissioned officers, of privates, etc., etc.

All details, in a word, which can throw light on either the material side or the moral side of the engagement and can give us the nearest possible view of it, are infinitely more instructive to us soldiers, than all imaginable discussions about the plans and strategy of the greatest generals, or about their grand tactics on the field of battle.

From colonel to rifleman, we are soldiers, not generals, and we want to know our trade.

Of course, one cannot obtain all possible details of any given action. But, from a series of honest reports, one should certainly be able to pick out a mass of characteristic details, well suited to show us in a striking and irrefutable manner what *must*, of necessity, happen at such or such moment in a battle—to show us the limits of what we can require the soldier *however good he may be*—to serve; consequently, as the basis for a rational method of fighting—and *a priori* to put us on guard against methods, the pedantic methods of the school.

Every man who has seen anything of war has made for himself a method founded on his own knowledge and his personal experience as a soldier. But experience is long and life is short. The experience of one man can only be completed by that of others.

And that is the reason, General, I dare address myself to yours.

* * * * * *

The results of this "enquête sur le combat" are a series of studies on infantry fire and other subjects, written in 1865; "Le combat antique," published in 1868; and "Le combat moderne," never completed. His death occured when the last was but a mass of manuscript notes, some developed into chapters, some mere fragments.

Colonel du Picq took part in the Crimean war, transferred

at his own request to a regiment ordered to the front, and was captured at Sebastopol in the assault on the central bastion on the 8th of September, 1855. He also took part in the Syrian campaigns of 1860-61, the African campaigns of 1864-66, and the beginning of the war of 1870. He died at Metz on the 19th of August, 1870, from wounds received in action at Longeville-lez-Metz four days before.

AUTHOR'S PREFACE.

Battle is the final goal of armies and man is the chief instrument of battle; nothing can be ordered intelligently in an army—constitution, organization, discipline, tactics—all mutually dependent like the fingers of a hand—without an exact knowledge of the chief instrument, of man, and of his moral condition in this definitive moment of battle.

It often happens that those who discuss the art of war, taking the weapon as their point of departure, take it for granted that the man called on to wield this weapon will always make of it the use foreseen and ordered by their rules and precepts. But the fighting man considered as a reasoning being, given up his mobile and variable nature to transform himself into a passive pawn and to play the part of an abstract unit in the combinations of the battle field, is the man of theory—not at all the man of reality. This latter is a being of flesh and bone, of body and spirit, and, strong as this spirit often is, it cannot so master the body that there will be no revolt of the flesh and disturbance of the mind in the face of destruction.

The human heart, to use the words of Marshal Saxe, is, therefore, the basis of all things in war; to understand these latter, the former must be studied.

Let us undertake this study, not dealing at first with the modern battle, too complex to be understood at the first glance, but with the battle of ancient times, simpler and, above all, clearer, even though nowhere fully explained.

The centuries have not changed human nature; its passions, its instincts, and, strongest of them all, the instinct of self-preservation, have manifested themselves in various ways

according to the times, the localities, and to the characters and temperaments of the various races. So in our times one can wonder at the coolness of the English, the dash of the French, and that inertia, called tenacity, of the Russians, under pressure of the same danger, the same emotions. But at the bottom one always finds the same man; and it is with this man, always the same at bottom, that the experts, the masters, start when they organize and discipline, when they order in all its details a method of fighting, and when they make their general dispositions for battle. This is shown clearly by a careful analysis of the ancient formations and battles.

The purpose of this work leads us to make this analysis, and, by studying these battles, the study of the man will be accomplished.

We shall go back even farther than the battles of ancient history, back to the fights of primitive man. In studying from the days of the savage down to our own times, we shall obtain a better grasp of the subject.

And shall we then know as much as the masters of war? No more so than one knows how to paint after seeing how an artist does his work. But we shall have a better understanding of these experts and of the great examples they have left us.

We shall learn, as they learned, to distrust mathematics and dynamics applied to war; to avoid the illusions of the target range and of the maneuver ground where our experiences are gained with the soldier calm, cool, unexhausted, well-fed, attentive and obedient—in a word, with an intelligent and docile human instrument, and not with that nervous, impressionable, troubled, inattentive, over-excited, uncertain creature which, from general to private, is the man in the battle. There are exceptions, but they are rare.

They are persistent and tenacious illusions nevertheless, which always reappear the very day after the reality has proved them false, of which the least serious result would be to lead one to order the impossible, were ordering the impossible not a direct blow at discipline, and did it not result in disconcerting leaders and soldiers by unforseen events and by

surprise at the contrast between battle and practice in time of peace.

It is true that there are always surprises in battle. But the more an understanding and knowledge of real conditions has governed the training of the combatant, and the wider they have been spread through his ranks, the fewer surprises there are. Let us study, then, the man in battle, for it is he that is the man of reality.

CHAPTER I.

Man does not go to battle for the sake of fighting, but to gain the victory. He does everything in his power to minimize the former and to assure the latter.

War between savage tribes, among the Arabs even in our times, is a war of ambuscades by small parties of men, each one of whom, at the moment of surprise, chooses, not his adversary but his victim, and assassinates him. The weapons are the same on both sides, and the only way to gain the advantage on one's own side is to surprise the other. The man surprised needs a moment to see clearly and to put himself in position for defense; before that moment has passed he is dead or in flight.

An adversary surprised does not defend himself; he tries to escape. Combats with primitive arms—hatchet or knife—face to face and body to body, so terrible between naked or unarmored enemies, are exceedingly rare. They could only occur between enemies mutually surprised, without any chance of safety for either side except in victory. And yet, in case of such a surprise, there is one other chance of safety—that of retreat, of flight by both sides—and this chance is often taken. If the actors are not savages, but soldiers of our own day, the fact is not less significant, as will be shown by the following account of an eye-witness, a thorough fighting man, an enforced spectator, held to the ground by a wound.

During the Crimean war on the day of a general action, at a turn in one of the numerous ravines which covered the country, some "Red" soldiers and some "Blue" soldiers came unexpectedly face to face at a distance of 10 paces. They halt, paralyzed—and then—as though forgetting their rifles, throw

stones at each other and fall back. Neither of the two groups has a definite leader to carry it forward, and neither of the two dares fire first for fear the other may bring rifle to shoulder at the same moment. They are too close together to hope to escape, or at least they think so (for mutual fire at such short range is almost always too high);—but the man who fires first sees himself already killed by the return shot; he throws stones—and that not very hard—to distract his own mind from his rifle, to distract the enemy, in a word, to occupy the time until his withdrawal may give him some chance of escaping a point-blank fire. This agreeable situation does not last long—a minute, perhaps; the appearance of a Blue troop on one flank causes the Red to fly, and then the opposing group opens fire.

Certainly, the affair seems ridiculous and laughable. Let us see, however. In the midst of their native forest, a lion and a tiger meet face to face at a turn in the trail; they halt instantly, crouched ready to spring. With their eyes they measure each other, growling. With claws bared, mane erect, tail thrashing the ground, neck stiffened, ears flattened, lips drawn back, they show their formidable fangs in that terrrible grimance of menace and of fear characteristic of felines. I, an invisible spectator, tremble. For the lion as for the tiger, the situation is not a happy one. One movement in advance and a beast will die; which of them will it be?—both, possibly. Gently, very gently, one of those hind legs bent for the spring, unbends again, and carries the foot a fraction of an inch to the rear; gently, very gently, a fore-paw follows the movement after a wait, gently, very gently, the other legs do the same, and insensibly the two beasts, little by little, and always facing each other, draw apart, until, when their mutual withdrawal has put between them a space greater than that of a single leap, lion and tiger softly turn their backs and, still watching each other, move more freely, taking up again without haste their natural gait, with that sovereign dignity which befits such great lords. I have ceased trembling, but I do not laugh.

No more should we laugh at the man, for the latter bears in his hands a weapon more terrible than the fangs and claws of

lion or tiger —the rifle, which instantly, without possibility of defense, sends one from life to death. One can understand then that no one at such short range is in haste, by cocking his own rifle, to cock that hostile rifle which will surely kill him. One hesitates to light the match which will blow up him and his enemy together. Who has not seen such cases between dogs, between dogs and cats, or between cats?

In the Polish War of 1831, two Russian cavalry regiments and two Polish regiments charged each other. Both sides charged with the same dash until, at the distance when faces could be recognized, the horses slowed down and both parties turned their backs. The Russians and Poles at this terrible moment recognized each other as brothers and, rather than shed fraternal blood, fled from the combat as from a crime. That is the version of an eye-witness who tells the story, a Polish officer. How many troops of cavalry have so recognized each other as brothers! But let us resume:

When tribal groups became larger, and it was no longer possible to surprise at the same instant the entire population of a large territory, when a sort of public conscience grew up with the growth of society, warning was given in advance; formal declarations of war were made. Surprise is no longer the whole art of war, but it is to this day one of the means, the best, of making war.

Man can no longer murder his enemy while defenseless, for he has given the latter warning. He must expect to find him prepared and in force. He must fight—gain the victory, with the least possible risk—and so he carries an iron-shod club against the wooden stake, arrows against the iron-shod club, a shield against the arrows, a shield and breast-plate against the shield alone, long lances against short lances, tempered swords against untempered, chariots against men on foot, etc.

Man taxes his wits to kill without danger of being killed. His bravery is only his consciousness of his own strength, and it is not an absolute quality; before one stronger than himself he flees without shame. The natural instinct of self-preservation is so strong that he feels no shame in obeying it. However, thanks to defensive armor, there are fights that are hand-to-hand. How can he be sure otherwise? He must experiment to find out which is the stronger, and when the latter is recognized, no one can stand before him.

In these primitive combats, individual strength and courage play the leading part to such an extent that when the champion falls the nation is vanquished; that often by mutual and tacit agreement the combatants halt to watch in wonder and anxiety, that great sight, two champions at swords' points. Often the moral level of man rises even to self-sacrifice and tribes put their fate in the hands of champions who accept the trust and who alone fight. It is a matter of self-interest, to be sure, since no one can stand against the champion.

But intellect revolts against brute force. No one can stand against an Achilles, but no Achilles can stand against ten enemies who unite their forces and act in concert. Hence, are born tactics, which prescribe in advance methods of organization and action to bring the efforts of the combatants into concert, and discipline, which seek to guarantee that concert against the weaknesses of the individual.

So far we have seen man fighting man, like wild beasts, each man for himself, seeking the man whom he can kill, avoiding the man who can kill him. But now discipline and clearly formulated tactical rules compel solidarity between leader and soldier and among the soldiers themselves. In addition to intellectual progress there has been a moral progress. To compel solidarity in battle and to make tactical dispositions possible, is to count on the devotion of all and to raise all the combatants to the level of the champions of the primitive battles. The point of honor arises, and flight becomes shameful, for the soldier is no longer alone in his fight against hostile strength, but one of an organized band, and he who gives ground abandons both his leaders and his comrades. In all respects the fighting man has improved. Thus, reasoning has taught the power of efforts intelligently combined, and discipline has rendered such combination possible.

Are we about to see terrible battles—battles of mutual extermination? No. Men collected in a disciplined troop

and governed by a reguar method of fighting, by their tactics become invincible against an undisciplined troop; but this disciplined troop opposed to one disciplined like itself becomes again the primitive man who flies before a destructive force which he has proved or suspects to be greater than his own. The heart of man is not changed. Discipline holds the opponents face to face a little longer, but the instinct of self-preservation maintains its power, and with it the sense of fear.

Fear! There are leaders and soldiers who know it not—they are men of a rare stamp. The mass trembles—for one cannot suppress the flesh—and this trembling, under penalty of reckoning falsely, must enter as one of the essential data into all organizations, descipline, dispositions, movements, maneuvers and methods of action, which all have for a definite object the curbing of fear, its deception and side-tracking among our own men, and its exaggeration among those of the enemy.

If the rôle of this trembling in ancient battles is studied, one sees that, of the races most expert in war, the strongest have been those which not only understood best the general conduct of war, but took into account the frailty of man and took the best precautions against it. It will be noticed that the most warlike races are not always those whose military institutions and methods of fighting are the best or based on the soundest reasoning. Indeed, the warlike races have a large share of vanity. They reckon only on courage in their tactics; it seems as though they do not wish to admit the possibility of weakness. The Gaul, passionately fond of war, has a rude system of tactics, which, after the first surprise, always causes him to be defeated by the Greeks or the Romans. The Greek, warlike, but also politic, has a system of tactics far superior to that of the Gauls or Asiatics. Politic before all things, the Roman, to whom war is nothing but a means to an end, wishes that means to be perfect. He has no illusions, but takes account of the weakness of man and evolves the legion. But this is merely to affirm; the facts must be demonstrated.

CHAPTER II.

The tactics of the Greeks culminated in the phalanx, Roman tactics, in the legion; the tactics of the barbarians, in the phalanx—square, wedge-shaped, or lozenge-shaped formations.

The mechanism of these different battle-formations is explained in all elementary text-books; their mechanical power is discussed by Polybius, where he contrasts the phalanx and the legion. (Book XVIII.)

The Greeks were superior to the Romans in intellectual civilization; their tactics should, it would seem, be more skillfully devised. This is not the case at all. Greek tactics are based on mathematical resoning; Roman tactics, on a profound knowledge of the human heart—not that the Greeks did not give great weight to morale and the Romans to mechanics, but their controlling considerations were different.

By what dispositions may the most powerful effort be obtained from a Grecian army? By what means may all the soldiers of a Roman army be made to fight effectively? The first question is still discussed. The latter has been solved in a manner which should satisfy those who asked themselves the question.

The Roman is not essentially a brave man. He presents no type of warrior as great as Alexander, and the impetuous valor of the barbarians, Gauls, Cimbri, and Teutons, kept him, I need scarcely say, in terror for years. But to the glorious courage of the Greeks and the temperamental courage of the Gauls, he opposes a courage based on a far stronger sense of duty, imposed on the leaders by the most earnest patriotism and on the masses by a terrible discipline.

The discipline of the Greeks depends on the penalites and recompenses of public opinion; the discipline of the Romans does the like, but also depends on death. They flog to death, they decimate.

A Roman general asks himself how to conquer these enemies who terrify his men. He does so by raising their morale, not by enthusiasm, but by rage. He makes the lives of his

men miserable by excessive labor and privations. He bends the spring of discipline until, at a given moment, it must break or be released against the enemy. A Grecian general makes his men sing the songs of Tyrtaeus. It would have been interesting to see them face to face.

But discipline is not enough to make a perfect system of tactics. Man in battle, we repeat, is a being whose instinct of self-preservation, at a certain point, dominates all other feelings. The object of discipline is to overrule this instinct by a greater fear; but discipline cannot accomplish this absolutely —it can only reach a certain point which cannot be passed. Of course, I cannot deny the striking examples where discipline and devotion have raised man beyond himself; but, if these examples *are* striking, it is because they are rare; if they are admired, it is because they are regarded as exceptions, and the exception proves the rule.

The determination of that moment when man loses his reasoning powers and becomes a creature of instinct is the basis of the science of combat. In its general application, it makes the the strength of the Roman tactics, and, in its particular application, at a certain moment or to given troops, causes the superiority of Hannibal or of Cæsar.

At the period we have reached, a battle is fought between masses more or less deep, commanded and supervised by leaders with a clearly formulated rôle. It consists in each mass of a series of individual fights, side by side, where only the front-rank man fights, and if he falls wounded or exhausted, is replaced by the man in the second rank, who, in the meantime, guards his flanks, and so on to the rear rank. Man quickly tires, physically and morally, in a hand-to-hand fight where he uses all his strength. These fights usually lasted but a short time. With equal morale, those best able to resist fatigue always won the victory.

During this combat of the first rank (of the first two ranks, one may say—one fighting, the other watching so close at hand,) the men of the ranks in rear, a couple of paces away, await in inaction their turn to fight which will not come to them unless their file-leaders are killed, wounded or exhausted. They are

tossed about by the fluctuations of the struggle of the first ranks. They hear the crash of blows struck, and perhaps distinguish those which bite into the flesh. They see the wounded and exhausted drag themselves to the rear through the intervals of their ranks. Passive and enforced spectators of danger, they calculate its approach and measure with their eyes its chances, at each moment more to be dreaded. All these men, in a word, undergo all the emotions of combat in their keenest forms, and, not being sustained by the stimulus of figting, they find themselves weighed down by the moral pressure of the greatest anxiety. They often are unable to hold their ground, but run before their turns come.

The best tactics, the best dispositions, are those which facilitate the succession of efforts, by best assuring the relief of the various ranks of each unit engaged, and by making possible the relief and mutual support of the different units employed; engaging at once no more than the number needed for the combat and holding the rest as a support and reserve beyond any immediate moral pressure. Therein lay all the tactical superiority of the Romans, and also in the terrible discipline which prepared for and enforced the execution of their tactics. They held out longer than others in battle, both on account of the endurance given them by their severe and continuous labor, and on account of their constant renewal of combatants.

By an error of reasoning, the Gauls could see nothing but the inflexible rank, and they were even known to tie themselves together, thus rendering relief impossible. They believed, as did the Greeks, in the power of masses and the driving force of deep formations. They would not understand that an accumulation of ranks is powerless to push forward the leading ranks, when these latter resist and balk before death. It is a strange error to believe that the rear ranks will advance against that which has made the front ranks give way. On the contrary, the contagion of retreat is so strong that a mere check at the head of a file means an acutal movement to the rear at its tail!

Undoubtedly, the Greeks looked on the second part of their accumulated ranks as supports and reserves; but, the

idea of mass being predominant they placed these reserves and supports too close at hand, forgetting the weakness of man.

The Romans believed in the power of masses, but from the point of view of morale. They did not multiply their ranks to add to the mass, but to give the combatants confidence of being supportd and relieved. So they calculated the number of ranks according to the length of time the rear ranks could resist the moral strain.

Beyond the time during which man could, without being engaged, endure the anguish of watching the combat of the ranks in front of him, the Romans did not multiply their ranks. The Greeks, who sometimes piled up their ranks to thirty-two, never made this observation and calculation; and the rear ranks which, in their minds, were undoubtedly their reserves, found themselves, instead, forcibly carried away by the actual material disorder of the first ranks.

In the order by maniples of the Roman legion, the best soldiers, those whose courage had been tempered by the habit of war, waited firmly posted in the second and third lines, far enough away to escape injury by weapons. Here they could keep cool and not be carried away by the first line falling back through the intervals, but were still close enough to support the first line in time, or to complete its work by moving to the front.

When the three separate and successive maniples of the original cohort were united to form the cohort which was the tactical unit of Marius and Cæsar, the same intelligence placed in the rear ranks, the steadiest soldiers, those of the longest service; the youngest and most impetuous were assigned to the front ranks. There is not a single man in the legion simply for the purpose of increasing its numbers or its mass. Each has his turn of action, each man in his maniple, each maniple in its cohort, each cohort in the line of battle.

We see what idea, with the Romans, governs the density of the ranks and the arrangement and number of the successive lines of combatants. The genius and tact of the general modified these normal dispositions. If his men were inured to war, well-drilled, firm, tenacious, on the alert to relieve their file-leaders, full of confidence in their general and comrades, the general decreased the density of his ranks, and even did away

with entire lines by extending his front, in order to increase the number of men actually engaged. Since his men were of moral and sometimes of a physical tenacity greater than that of the enemy, the general knew that the rear ranks of the latter would not stand the strain long enough to relieve the front ranks nor to wear out the relays of his own men. Thus Hannibal, a part of whose infantry (the Africans) was armed and drilled in the Roman fashion, whose Spanish foot-soldiers had the endurance of the Spaniard of today, whose Gallic soldiers were picked men, survivors of many hardships—strong in the absolute confidence which he inspired in those about him, formed his men at Cannæ in a single line of only half the depth of the Roman army, enveloped the latter (which had twice his strength) and exterminated it. Cæsar at Pharsalus, for similar reasons, did not hesitate to diminish his depth, opposed Pompey's army of double his strength, a Roman army like his own, and crushed it.

Since we have mentioned Cannæ and Pharsalus, we shall, by studying them, inform oursleves concerning the mechanism and the moral forces of the battle of ancient times—two things which cannot be separated. We could not have chanced on better examples, on battles more clearly and impartially described; the former by Polybius, who got his information from the few who escaped from Cannæ, and even from some of the victors themselves; the latter by Cæsar with that impassive clearness with which he writes on the subject of war.

CHAPTER III.

ANALYSIS OF THE BATTLE OF CANNÆ.

The Account of Polybius.

Varro placed his cavalry on the right wing, resting on the river itself; the infantry was deployed near by and in the same line, the maniples closer to each other or with intervals more decreased than usual, and the maniples showing more depth than front. The allied cavalry on the left wing, closed the line, in front of which were posted the light troops. There

were 80,000 foot and more than 6,000 horse in this army, counting the allies.

Hannibal at the same time moved his slingers and light troops across the Aufidus and posted them in front of his army. When the rest of his troops had crossed the river by two fords, he placed on his left wing, at the river bank, the Spanish and Gallic cavalry to oppose the Roman cavalry, and then on the same line half the African heavy infantry, the Spanish and Gallic infantry, the other half of the African infantry, and finally the Numidian cavalry, which formed the right wing.

After he had so arranged his troops in a single line, he moved against the enemy with the Spansih and Gallic infantry, which was detached from the center of the line of battle, and, as it had been joined in a straight line with the rest, it formed, in the process of separation, the convex of a crescent which took from the center much of its depth, it being the plan of the general to begin the battle with the Spaniards and Gauls and to support them with Africans.

This latter infantry was armed in the Roman fashion, having been equipped by Hannibal with arms which he had taken in previous battles from the Romans. The Spaniards and Gauls carried the shield, but their swords were very different. Those of the former were equally adapted to cutting or thrusting, while those of the Gauls could only be used for cutting, and that at a certain distance. The Spaniards, divided into two bodies by the Gauls, formed the center, with the Africans on both flanks. The Gauls were naked, the Spaniards dressed in shirts of purple linen, which was an extraordinary and terrifying spectacle to the Romans. The Carthaginian army was composed of 10,000 horse and a little more than 40,000 foot.

Aemilius commanded the Roman right, Varro the left; the two consuls of the preceding year, Servilius and Attilius, were in the center. On the side of the Carthaginians, Hasdrubal had the left under his command, Hanno the right, and Hannibal, who had with him his brother Mago, reserved for himself the command of the center. The two armies would be at no disadvantage from the sun when it rose, since one had wheeled

toward the south, as I have remarked, and the other toward the north.

The action was begun by the light troops which, on either side, were in advance of the two armies. This first engagement gave no advantage to either side, but as soon as the Spanish and Gallic cavalry on the left approached, the fight grew warmer and the Romans fought with fury, more like barbarians than Romans. They did not fight according to the rules of their tactics, now withdrawing and now returning again to the charge, but, scarely had they come to blows, when they leaped from their horses and each man engaged his adversary. Nevertheless, the Carthaginians had the better of it. The greater part of the Romans, after defending themselves with the greatest valor, remained dead on the field; the rest were driven along the bank of the river and cut to pieces without quarter.

The heavy infantry finally took the place of the light troops and came to blows. The Spaniards and Gauls held their ground at first and vigorously resisted the shock of assault; but they soon gave way before the weight of the legions and, opening the crescent, turned their backs and retired. The Romans followed them impetuously, and broke the Gallic line all the more easily, because they (the Romans) had drawn in their wings toward the center where the heaviest fighting was. Now all the line did not engage at the same time, but the action was begun by the center, because the Gauls, being arranged in the form of a crescent, left the wings far behind them and presented to the Romans the convex side of the crescent. These latter, following closely the Spaniards and Gauls, and crowding toward the center at the point where the enemy had given ground, pushed so far to the front that they touched on either flank the heavy armed Africans. These on the right of the Carthaginian line wheeling from right to left, found themselves on the flank of the enemy, as did those on the left who made the wheel from left to right. The very circumstances showed them what they had to do. It was what Hannibal had forseen; the Romans, in pursuing the Gauls, could not fail to be enveloped by the Africans. The Romans then, no longer able to preserve their ranks and their files, were forced to defend

themselves man to man, or by little detachments, against those who were attacking them in front and flank.

Æmilius had escaped from the carnage on the right wing at the beginning of the battle. Wishing, according to his promise, to be present everywhere, and seeing that it was the legionary infantry which would decide the fate of the battle, he pushed his horse through the mêlée, scattered or killed all who opposed him, and sought at the same time to revive the ardor of the Roman soldiers. Hannibal, who had remained in in the mêlée throughout the battle, did the same on his side.

The Numidian cavalry on the right wing, without either doing or suffering much, did not cease to be useful on this occasion, for, falling on its enemies from all sides, it gave them so much to do that they had no time to think of helping their comrades. But when the left wing, which Hasdrubal commanded, had put to rout all except a very few of the cavalry of the Roman right, and had joined the Numidians, the auxiliary cavalry (on the Roman left) did not wait to be attacked, but fled.

They say that Hasdrubal then did a thing which proves his prudence and skill, and which contributed to the success of the battle. As the Numidians were numerous, and as these troops are never more useful than in pursuit, he gave them the fugitives to pursue, and led the Spanish and Gallic cavalry at the charge to assist the African infantry. He fell on the Romans in rear and, charging with his cavalry in a body into the mêlée at several points, gave new strength to the Africans and made the weapons fall from the hands of the enemy. It was here that Lucius Æmilius, a citizen, who, through all his life as in this last battle, had nobly fulfilled his duty toward the country, finally fell, covered with mortal wounds.

The Romans still fought, and, facing those by whom they were surrounded, resisted to the end. But as the troops on the circumference became fewer and fewer, they were finally drawn into a very narrow circle and were all put to the sword. Attilius and Servilius, two men of high character who had distinguished themselves in the battle as true Romans, were also killed on this occasion.

During the carnage at the center, the Numidians pursued the fugutives on the left wing. Most of the latter were cut to pieces, and others were thrown from their horses. A few escaped to Venusia, among whom was Varro, the Roman general, that wretched man whose consulship cost his country so dear. Thus ended the battle of Cannæ, a battle where prodigies of valor are seen on either side, as may easily be proved.

Of the 6,000 Roman cavalry, only 70 escaped to Venusia with Varro, and, of the auxiliary cavalry, there were only about 300 who fled to different towns; 10,000 of the foot, indeed, were captured, but they had not taken part in the battle. Only about 3,000 men escaped from the mêlée to take refuge in the neighboring cities; all the rest, to the number of 70,000 died on the field of honor. Hannibal lost in this action about 4,000 Gauls, 1,500 Spaniards and Africans, and 200 horses.

Let us analyze: The light infantry scattered in front of the armies skirmishes without result. The real battle begins with the attack by Hannibal's cavalry on the legionary cavalry of the Roman left wing.

There, says Polybius, the fight became warmer and the Romans fought with fury, and more like barbarians than Romans, for they did not keep withdrawing and coming again to the charge according to their tactical rules; scarcely had they come to blows when they leaped from their horses and each man engaged his adversary, etc.

This means that the Roman cavalry was not in the habit of fighting hand-to-hand like the infantry. It dashed at the gallop on the opposing cavalry; then, at the extreme range of its weapons, if the hostile cavalry had not turned to the rear on seeing its approach, slackened its pace, threw a few javelins, and, making a half-wheel by platoons, proceeded to take ground to begin all over again. The opposing cavalry did the like, and this, or a similar maneuver might be repeated several times until one side succeeded in convincing the other by the impetuosity of its advance, that it intended to charge home, when the latter fled before the charge and was pursued to the death.

At Cannæ, as the fight became warmer, they really fought hand-to-hand—that is to say, the cavalry of both sides closed in

earnest and engaged man-to-man. Besides, it was a matter of necessity. Far from falling back on each side, they were compelled on that day to close; there was no space for skirmishing. Shut in between the Aufidus and the legions, the Roman cavalry could not maneuver;* the Spanish and Gallic cavalry was equally restricted, and, being twice as strong as the Roman cavalry, and so forced to form in two lines, was even less able to maneuver. This limited front was of great advantage to the Romans, inferior in numbers, since they could only be attacked in front—that is to say, by an equal number—and it rendered, as we have said, close fighting inevitable. These two bodies of cavalry, halted head to breast, were compelled to fight at short range, to engage man-to-man, and, for horsemen with a piece of cloth for a saddle and without stirrups, encumbered with a shield, a lance, and a saber, or sword, to engage hand-to-hand is for both to grasp each other, for both to fall to the ground, and to fight on foot. That is just what happened, as Livy's story (which completes that of Polybius) explains, and it is just what happened every time two bodies of cavalry of that period really wanted to fight, as the battle of the Ticinus shows. This method of fighting was to the advantage of the Romans who were well armed and were trained to it. An evidence of this also is that same battle of Ticinus, where the Roman light infantry was cut to pieces, but where the best of the Roman cavalry although surrounded and, after the first moment of surprise, fighting partly on foot and partly mounted, inflicted more damage on Hannibal's cavalry than they received, and brought their wounded general (Scipio) safely back to camp. The Romans were, moreover, well commanded by a man of sense and courage, the consul Aemilius, who, instead of escaping when his cavalry was defeated, went to meet his death in the ranks of the infantry.

And yet we see 3,000 to 3,400 Roman cavalry almost exterminated by 6,000 or 7,000 Gauls and Spaniards, at a cost of less than 200 men (for all Hannibal's cavalry lost only 200 men throughout the day).

*Livy.

How can this be explained? It was because most of them died without even thinking of selling their lives dearly; because they took to flight during the fight of the first rank and were cut down from the rear with impunity. These words of Polybius: "The greater part remained dead on the field after defending themselves with the greatest valor," are a consecrated formula; they date from long before the time of Polybius; the conquered consoled themselves with the thought of their bravery, and the conquerors never contradicted them. Unfortunately, the figures are there. In whatever way we try to view this battle, one is compelled to picture it as of short duration, which means that it was not desperately fought. The horsemen of both sides, Gauls and Romans, had already made a great effort of courage in closing with each other. This effort was followed by the terrible strain of hand-to-hand combat. The Romans, who could see the second line of Gauls mounted begind those fighting on foot, were the first to give ground. Fear soon impelled the ranks not actually engaged, to mount and turn to the rear, delivering their comrades and themselves, like a flock of flying sheep, to the swords of the conquerors. And yet these cavalrymen were brave men, the pick of the army *equities, extraordinarii* (or consular body-guard taken from the allied legions) and volunteers of noble families.

When the Roman cavalry was defeated, Hasdrubal led his Gallic and Spanish horse, passing in rear of Hannibal's army, to attack the allied cavalry, which the Numidians had been keeping in play. The cavalry of the allies did not wait for the attack. It fled at once, pursued to the death by the Numidians, of whom there were about 3,000, and who excelled in pursuit. All but about 300 men were exterminated, and that without a fight.

After the skirmishing and withdrawal of the light infantry, the infantry of the line of both armies approached each other. Polybius has explained to us how the Roman infantry came to be crowded between the two wings of the Carthaginian army, and was taken in rear by Hasdrubal's cavalry. It is probable also that the Gauls and Spaniards, repulsed in the first part of the action and forced to retreat, returned and aided by a part of of the light infantry, charged the head of the angle formed by the Romans, and completed the work of surrounding them.

But we know, as will be seen again a little later in examples taken from Cæsar, that the horsemen of this period was powerless against unbroken infantry, or even against a single foot-soldier with the least presence of mind, and the Spanish and Gallic cavalry must have found behind the Roman army the *triarii* drawn up, very steady soldiers, armed with pikes. The cavalry must have kept a part of these in play and forced them to face about, but it could have done them little or no harm while their ranks were kept intact.

We know that Hannibal's infantry, equipped with Roman arms, was composed of not more than 12,000 men; we know that his Gallic and Spanish infantry, with only the shield for defensive armor, had been forced to retreat and turn their backs, and had probably already lost nearly all of the 4,000 men which the battle cost the Gauls. Let us deduct the 10,000 men who went to attack Hannibal's camp and the 5,000 which the latter must have left to defend it. There remains a mass of 70,000 men which is surrounded and slaughtered by 28,000 foot soldiers, or, counting Hasdrubal's cavalry, by 36,000 men, by half its own number.

One may ask how 70,000 men let themselves be slaughtered in this way, practically without defending themselves, by 36,000 men with inferior arms when each combatant had but a single man facing him; for in a hand-to-hand fight (and especially on so large a scale) the combatants actually engaged are equal in number in the force which surrounds and in that which is surrounded. There were no cannon or rifles there which could dig into the mass with converging fire and destroy it by the superiority of convergent over divergent fire. All the missile weapons were expended in the first period of the action. It seems as though, by their very mass, the Romans should have offered a resistance impossible to overcome, and that, after allowing the enemy to exhaust himself against it, this mass had only to let itself go to drive its assailants like straw. But is was exterminated.

When, following the Gauls and Spaniards who certainly could not hold their own against the superior arms of the legionaries, the center pushed vigorously to the front—when the wings, in order to support the center and not lose their intervals,

followed its movement, closing in by an oblique march to the front and forming the sides of the salient—the entire Roman army in a wedge formation was marching to victory. Suddenly the wings were attacked by the African battalions. The retreating Gauls and Spaniards turn on the point of the wedge. Hasdrubal's cavalry in rear attacks the reserves (the triarii). Everywhere fighting, without expectation or warning, at the moment when they believed themselves victors—from all directions, front, right, left and rear, the Roman soldiers hear the furious cries of the combatants.

The physical pressure was a small matter; the ranks they were fighting were not half as deep as their own. The moral pressure was enormous. Uneasiness and then terror take possession of them. The front ranks, tired or wounded, wish to retire; but the bewildered ranks in rear fall back, give way entirely, and come whirling into the interior of the triangle. The ranks actually engaged, demoralized and feeling that they are no longer supported, follow them, and the disorganized mass allows itself to be slaughtered. "The weapons fell from their hands," says Polybius.

The analysis of Cannæ is ended. Before passing to the story of Pharsalus, I cannot resist the temptation, although it is rather outside my subject, to say more words on Hannibal's battles.

These battles have a character of peculiar ferocity, which is explained by the necessity of overcoming the tenacity of the Romans. One would say that victory was not enough for Hannibal. He seeks for the destruction of his enemies, and his methods always tend to accomplish it by cutting off all their lines of retreat. He knows well that, with Rome, destruction is the only way to settle the matter. He does not believe in the courage of despair among masses of men; he believes in terror and, to inspire it, he has at his command all the resources of the unexpected.

But the losses of the Romans in these battles are not so surprising as Hannibal's losses. No one, before him or after him, has lost so many men in battle against the Romans, and yet gained the victory. To hold to their work until victory ensues, men who have suffered such losses, requires a strong

hand. He inspired an absolute confidence in those about him. Almost always his center, where he placed his Gauls—his food for powder—was routed; but that did not seem to worry or trouble either him or his soldiers.

One may say, on the other hand that this center was pierced by troops who were escaping from the crushing of the Roman army between the Carthaginian wings; that these troops were in disorder, for they had fought and driven back the Gauls, whom Hannibal knew how to make fight with remarkable tenacity; that they felt, from what was going on behind them as though they had escaped from under a press, and,—only too happy to be out of it—thought of nothing but getting away from the battle, and not at all of turning on the flanks or rear of the enemy; and, finally, that Hannibal had doubtless, though nothing is said about it, taken precautions against any idea on their part of coming back into the fight.

All this is true, or, at least, probable, but the confidence of troops with their center so pierced is not the less astonishing. Hannibal, to inspire such confidence in his troops, must have explained his plans to them before the battle, as far as he could without fear of injury from any treachery. He must have warned them that the line would be pierced, but that it was nothing to worry about, because it was an event foreseen and prepared for. His troops, as a matter of fact, did *not* worry about it.

Leaving aside the strategy of his campaigns, his greatest glory in the eyes of the world, Hannibal is certainly the greatest general of antiquity in his wonderful knowledge of the moral side of battle and the morale of the soldier—his own or the enemy's—a knowledge as deep as anyone's can be in the various sudden changes of a war, a campaign, or a battle. His soldiers are no better than the Roman soldiers; they are not as well armed and only half as numerous. Yet he is always the victor because his methods, are, above all, mental rather than physical methods, and because, without speaking of the absolute confidence of his men, he always has the faculty, when commanding one of his own armies, of putting, by some device, the moral ascendency on his own side.

He had, in Italy, a cavalry superior to the Roman cavalry. But the Romans had a far superior infantry. Suppose the rôles changed; he would very certainly have found a way to beat the Romans still more thoroughly. The means are not so important as the use one knows how to make of them. Pompey, as we shall see, was beaten at Pharsalus for the very reason that his cavalry was superior to Cæsar's.

If Hannibal was conquered at Zama, it was because the power of genius is always limited by the impossible. Zama proves again what a perfect knowledge of man Hannibal possessed, and what control he had over his troops. His third line, the only one where he had soldiers worthy of the name, was the only one which fought; and, surrounded on all sides, it accounted for 2,000 Romans before it was conquered.

We shall understand later what high morale and what desperate fighting that means.

Chapter IV.

Analysis of the Battle of Pharsalus.

Here now is the account of Pharsalus according to Cæsar:

When Cæsar had approached the camp of Pompey, he observed that the latter's army was drawn up in the following order:

On the left wing were the two legions called the 1st and 3d, which Cæsar had sent to Pompey at the beginning of the troubles, in accordance with a decree of the Senate; and there was Pompey himself. Scipio occupied the center with the Syrian legions. The Cilician legion, with the Spanish cohorts which Afranius had had brought with him, were placed on the right wing. Pompey considered these troops the steadiest of his army. Between them, that is, between the center and the wings, he had distributed the rest of his troops, and counted altogether 110 full cohorts in his line of battle. They were 45,000 strong. Two thousand veterans, previously rewarded for their services, had come to rejoin him, and these he had scattered along the line of battle. The other cohorts, to the

number of seven, had been left to guard his camp and the neighboring forts. His right wing rested on a brook with impassable banks, and, for this reason, he had put all his cavalry (7,000 men) and his archers and slingers (4,200 men) on the left wing.

Cæsar, keeping his old order of battle (4 cohorts of each legion in the first line, 3 in the second, and 3 in the third), had placed the 10th and 9th legions on the right and left wing, respectively. To the latter, which had been very much weakened by the fighting at Dyrrachium, he joined the 8th, in order to make about one full legion of the two, and ordered them to support each other. He had in line 80 nominal cohorts (very incomplete), amounting to 22,000 men. Two cohorts had been left to guard the camp. Cæsar had given the command of the left wing to Antonius, that of the right to Sylla, and of the center to Domitius. Cæsar, himself, took post opposite Pompey. After he had reconnoitered the formation of the hostile army, he feared that his right wing might be envolved by the numerous cavalry of Pompey, and, at the last moment, took from his 3d line one cohort of each legion (6 cohorts) and formed of them a 4th line, posted it to receive the charge of this cavalry, and showed it what it had to do. He then warned these cohorts that the success of the day depended on their valor. At the same time he ordered all the army, particularly the 3d line, not to advance without orders from him, keeping in his own hands the power of giving the signal by means of the standard, when the time had come.

Cæsar then rode his lines to exhort his troops to do their best, and, seeing them full of ardor, had the signal given.

Between the two armies there was just the space necessary for each side to charge. But Pompey had ordered his troops to await the charge without moving, and to let Cæsar's army break its own ranks. He did so, it is said, on the advice of Triarius, in order that the force of the first dash of Cæsar's soldiers might be exhausted and their battle-formation broken, and that his own men, well posted in their ranks, might, sword in hand, have nothing to receive but men in disorder. He also thought that, if his troops held their ground instead of running to the front, they would lessen by just that much the force of the

pila thrown against them, and he hoped, at the same time, that Cæsar's soldiers, by this charge of double the usual length, would be out of breath and overwhelmed with fatigue. This order to stand fast would seem to us to be an error on the part of Pompey, because there is in all men an animation, a natural ardor, which is inflamed by the charge. Generals should not repress, but rather increase this ardor, and it is not in vain that the rule was established in ancient times for the troops to cheer and all the trumpets sound in advancing to the attack, in order to terrify the enemy and inspire our own men.

Meanwhile, our soldiers, at the given signal, rush forward, pilum in hand, but, when they see that Pompey's men do not run to meet them, they slacken their pace of their own accord, taught by experience and by former battles, and halt in the middle of their charge in order not to arrive out of breath and at the end of their strength. After several moments they take up the charge again, throw their javelins, and then immediately, in accordance with Cæsar's orders, draw sword.

Pompey's men bear themselves perfectly. They do not flinch from the javelins or give before the charge of the legions. They keep their formation and, after casting their pila, draw their swords.

At the same time all Pompey's cavalry dashes forward from the left wing, as it had been ordered to do, and the swarm of archers spreads in all directions. Our cavalry does not await the charge, but gives ground and falls back a little. Pompey's cavalry becomes only the more eager on this account, and begins to deploy its squadrons and to turn our exposed right flank. As soon as Cæsar sees its intention, he gives the signal to his 4th line, composed of six cohorts. These move at once and (with ensigns lowered) charge Pompey's horse with such spirit and resolution that not one holds his ground, but all not only turn and leave the field, but, carried away by their flight escape to the mountains. When the cavalry have gone, the archers and slingers, left without support, are all killed. By the same movement, these cohorts move in rear of Pompey's left wing, whose army is still fighting and resisting, and take it in rear.

At the same time Cæsar advances his 3d line which, until this moment, has remained quietly in position. These fresh troops having relieved those who were exhausted, Pompey's soldiers, taken in rear, can no longer hold their ground and all take to flight.

Cæsar was not mistaken when he told these cohorts, which he posted as a 4th line to oppose the cavalry and exhorted them to do their best, that the victory would come from them. By them, as it turned out, the cavalry was repulsed; by them the throng of slingers and archers was cut to pieces, and by them Pompey's left wing was turned and the rout of his army determined.

As soon as Pompey saw his cavalry repulsed and that part of the army on which he most relied struck with terror, having little confidence in the rest, fled on horse back to his camp, where, addressing the centurions who were guarding the praetorian gate, he said in a loud tone in order to be heard by the soldiers: "Guard well the camp and defend it vigorously in case of misfortune; as for me, I am going to make the rounds of the other gates and see to the defense of the post." This said, he retired to the praetorium, despairing of success, yet awaiting the outcome.

After having forced his routed enemies to take refuge in their entrenchments, Cæsar, convinced that he should not give them the least respite from their terror, exhorted his soldiers to profit by their advantage and to attack the camp; and the men, though overcome, with the heat, for the fight had been prolonged until midday, did not balk at any fatigue but obeyed. The camp was well defended at first by the cohorts which were guarding it, and particularly by the Thracians and barbarians. The soldiers who had fled from the battle, terrified and exhausted had almost all thrown away their arms and their ensigns and thought far more of escaping than of defending the camp. Soon, even those who were holding their ground on the parapets could not resist the cloud of missiles. Covered with wounds, they abandoned their post and, led by their centurions and tribunes fled to the high mountains which were near the camp.

Cæsar lost only 200 soldiers in this battle, but about 30 of the bravest centurions were killed. About 15,000 men of

Pompey's army perished, and more than 24,000, who had taken refuge in the mountains and whom Cæsar had surrounded with entrenchments, came in and surrendered the following day.

Such is Cæsar's account. The points of this story stand out so clearly that comment is scarcely necessary.

Cæsar employed the habitual order of battle of three lines, consecrated by custom in Roman armies, yet not absolutely prescribed, for Marius is seen to fight with only two lines. But the genius of the leader, as we have already said, on occasion modified the rules. There is no reason to suppose that the army of Pompey was not in the same formation.

To oppose this army, twice the strength of his own, Cæsar had he kept the regular formation of 10 ranks to the cohort, could have formed only a first line, and a second of half its strength, as a reserve. But he knew the worth of his troops and he knew, we have also said, what weight to give to the apparent strength of deep ranks. Accordingly, he did not hesitate to diminish the depth of his ranks in order to preserve intact up to the moment of their engagement the good order and morale of three-fifths of his troops. Again, in order to be more certain of his third line, his reserve, and to prevent its yeilding to the temptation to forget its anxiety in action, he gave it very particular orders, and, possibly, for the text lends itself to that interpretation, held it at double the usual distance in rear of the combatants.

And then, for the purpose of parrying the turning movement of Pompey's 7,000 horse and 4,200 slingers and archers—a movement on which Pompey rested his hope of victory—he set aside six cohorts, scarcely 2,000 strong. He had perfect confidence that these 2,000 men would repulse the cavalry, and that his own 1,000 horsemen would then know how to push them so sharply that they would never even think of rallying. It happened as he had planned, and the 4,200 archers and slingers were slaughtered like sheep by these cohorts aided, doubtless, by the 400 young and agile foot-soldiers Cæsar had joined to his 1,000 horsemen, and who remained behind for this work, leaving the horsemen, whom they would have delayed, to pursue the terrified fugitives. Here we see

7,000 horse swept aside, and 4,200 foot slaughtered without a fight, all demoralized by a mere vigorous demonstartion.

Pompey's order to his infantry to await the charge is judged too severely by Cæsar. Undoubtedly his general proposition is correct. One should not chill the ardor of his troops, and the initiative of attack *does* give the assailant a certain moral superiority. But, with steady and duly warned soldiers one may attempt a trap, and Pompey's men proved their steadiness by awaiting, without flinching, the charge of an enemy in good order and full of vigor, when they had counted on receiving them in disorder and out of breath. Although it did not succeed, the advice of Triarius was not bad; the very conduct of Cæsar's soldiers proves it. This advice and conduct show the importance of the material rank in ancient battles. In its assurance of support and mutual aid, it was the basis of the soldiers' confidence.

In spite of the fact that Cæsar's men had the initiative of attack, the first shock was not decisive. There was a fight on the spot—a fight of several hour's duration—and here are 45,000 good soldiers, who, after a fight where they lose scaracely 200 men (for, equal in weapons, courage and swordmanship, Pompey's infantry should not lose more than Cæsar's in hand-to-hand fighting), are stampeded, and, in the flight from the battle-field to their camp, are slaughtered to the number of 12,000.

The ranks of Pompey were twice as deep as those of Cæsar. The charge of the latter could not drive them back a single step. On the other hand, their mass was powerless to repulse the charge, and they fought at the point of meeting. Pompey had announced to his men, Cæsar tells us, that the hostile army would be turned by his cavalry, and suddenly, while they are fighting bravely, foot-to-foot, they hear behind them the uproar of the attack of Cæsar's six cohorts—2,000 men.

Does it seem that for such a mass of men to ward off this danger was an easy matter? It was not. The wing thus taken in rear gives ground. Little by little, the contagion of fear carries away the rest; and their terror is so great that they do not think of reforming in their camp, defended for a moment by the cohorts on guard. As at Cannæ, the weapons fall from their hands. Without the firm stand of the camp guards

which made it possible for the fugitives to reach the mountains, the 24,000 prisoners of tomorrow would have been the corpses of today.

Cannæ and Pharsalus have sufficed at least to give us some understanding of the battles of ancient times. Let me add, however, several other characteristic quotations, which I shall quote briefly and in chronological order. The lessons will be more complete.

Livy tells how in some battle against the tribes near Rome (I do not know which) the Romans did not dare pursue for fear of breaking their ranks. In a battle against the Hernici, he shows us the Roman horsemen, unable, mounted, to do anything toward breaking the enemy, begging the consul for permission to dismount and fight as infantry. And the Roman horsemen are not peculiar in this; in later times, the best horsemen, the Gauls, the Germans, and even the Parthians, are seen to dismount in order to fight in earnest.

The Volscii, the Latins, the Hernici, and others are united in a multitude to fight the Romans; the battle is nearing its end and, Livy tells us: "Then, when the first rank has fallen, each man *sees that the slaughter has finally reached him* and takes to flight; then, hard pressed, they *throw aside their arms* and disperse in flight. Now the cavalry dashes forward, with orders not to kill individuals but to annoy the crowd with its missiles, to harass it without ceasing, in a word, to check its flight and prevent its scattering until the infantry can come up and massacre it."

In Hamilcar's battle against the rebel mercenaries, who had up to that time always defeated the Carthaginians, the mercenaries thought to envelop him. Hamilcar, by a maneuver new to them, surprised and beat them. He marched in three lines—elephants, cavalry and light infantry, and then the heavy-armed phalanxes. On the approach of the mercenaries, who advanced boldly to meet him, the two lines formed by elephants, and the cavalry and light infantry, turned their backs and hastened at full speed to the flanks of the third line. The third line, thus unmasked, met an enemy who thought he had nothing to do but pursue, surprised and put him to flight, and so delivered him to the action of the elephants, the horse, and the

light infantry, by whom the fugutives were massacred. Hamilcar killed 6,000 men, took 2,000 prisoners, and lost so few that no mention is made of them. Probably he did not lose a man, since there was no fight.

At Trasimenus, the Carthaginians lost 1,500 men (almost all Gauls), the Romans lost 15,000 killed and 15,000 prisoners. This was a hotly contested battle, lasting three hours.

At Zama, Hannibal had 20,000 killed and 20,000 captured, the Romans had 2,000 killed. This was a hard-fought battle with Hannibal's third line, which alone fought and did not give way until attacked in rear and flank by Massinissa's cavalry.

At the battle of Cynoscephalae between Philip and Flamininus, Philip pushed Flamininus with his Phalanx, 32 deep. Twenty maniples took the phalanx in rear. Philip lost the battle. The Romans counted 700 killed, the Macedonians, 80,000 killed and 5,000 captured.

At Pydna — Aemilius Paulus against Perseus — the phalanx advances and cannot be stopped, but it breaks up naturally in accordance with the greater or less resistance it encounters. The centuries force their way into the openings in the mass and kill the soldiers, hampered by their pikes and only formidable when united and attacked from the front at spear's length. Terrible disorder and slaughter results; 20,000 are killed and 5,000 are captured out of 44,000 engaged. The historian does not deign to mention the Roman losses.

In the battle of Aix, Marius caused the Teutones to be surprised in rear. Fearful carnage ensued—100,000 Teutones and 300 Romans were killed.

The battle of Chaeronea, Sulla against Archelaus, the lieutenant of Mithridates—Sulla had 30,000 men, Archelaus 110,000. Archelaus was defeated by a surprise from the rear. The Romans lost 14 men and killed until exhausted by the pursuit. The battle of Orchomenus against the same leader was a repetition of Chaeronea.

Cæsar tells how his cavalry could not fight the Britons without great disadvantage because these latter feigned flight to get away from the infantry and then, jumping out of their war-chariots, *fought on foot with success*.

Less than 200 veterans embarked on a ship and ran ashore at night to avoid being captured by superior naval forces. They gained a strong position and passsed the night there. At daybreak, Otacilius sent against them about 400 cavalry and some infantry of the garrison of Lissus. They defended themselves bravely and after killing several of their oponents, joined Cæsar's troops wihout having lost a single man.

Cæsar's rear guard is struck by Pompey's cavalry at the crossing of the river Genusus in Macedonia—a river with very steep banks. Cæsar opposes Pompey's cavalry, 5,000 to 7,000 strong, with his cavalry of 600 to 1,000 men, with whom he has taken care to mix 400 picked infantrymen. These do their work so well that in the fight which follows they repulse the enemy, kill a number of them, and fall back on the main body without the loss of a single man.

At the battle of Thapsus, in Africa, against Scipio, Cæsar kills 10,000 men, and loses only 50 killed and a few wounded.

At the battle under the walls of Munda (in Spain) against one of the sons of Pompey, Cæsar has 80 cohorts and 8,000 horse, about 48,000 men in all. Pompey has 13 legions—60,000 infantry of the line, 6,000 horse, 6,000 light infantry, and 6,000 auxiliaries, in all, nearly 80,000 men. The battle, says the narrator, was bravely fought, foot-to-foot and sword-to-sword. It was one of exceptional fury, where fortune, for a long time uncertain, was on the point of turning against Cæsar. Cæsar lost 1,000 killed and 500 wounded. Pompey lost 33,000 killed, and if Munda had not been so near (scarcely two miles away), his losses would have been doubled. The contravallations of Munda were built of corpses and arms.

In studying the battles of ancient times, it is evident that they are nearly always won by an attack in flank or rear, or some form of surprise, especially when won against the Romans. It was in this way that their excellent system of tactics sometimes miscarried—a system so excellent that a Roman general, who was only half as good a man as his adversary, was sure to beat him. I have never seen them conquered in any other way. Xanthippus—Hannibal—the unexpected methods of fighting and strange appearance of the Gauls, etc., bear witness to the truth of this statement.

Xenophon somewhere says: "Whatever it may be, agreeable or terrible, the less it has been foreseen, the more pleasure or terror it causes. This is seen nowhere more than in war, where any surprise strikes with terror even those who are much the braver.

Combatants armed with breast plate and shield lost very few in fighting face to face. In his victories, Hannibal lost practically no man except among the Gauls, his food for powder, fighting with inferior shields and without armor. Almost always driven back, they nevertheless fight with a tenacity which they have never shown before or since his time.

Thucydides characterizes the fighting of the light-armed troops when he says, in one account: "As usual, the light-armed troops put each other mutually to flight." In fighting with closed ranks, there was a mutual shoving, but little loss, for the men had no room to strike freely and with their full strength.

Cæsar, in his campaign against the Nervii, seeing his men in the midst of an action instinctively closing in to resist the mass of the barbarians and yet yeilding to the pressure, *ordered the ranks and files extended*, so that the legionaries, who had been crowded together and consequently paralyzed and obliged to yield to the stronger force, could kill and so demoralize the enemy. As a result, as soon as men in the first rak of the Nervii began to fall under the blows of the legionaries, there was a check, a recoil, and then, under an attack in rear, this whole mass fell into confusion and defeat.

CHAPTER V.

We are now enlightened on the moral aspect and the mechanism of the battle of ancient times. The expression "mêlée," employed by the ancients, was a thousands times stronger than the thing it was intended to express. By "melée" a mere crossing of swords was meant, not an actual intermingling of men.

The results of the battles and the losses of both sides are enough to show us this, and a moments reflection makes us see what a mistake the mêlée would have been. In the pursuit

one might throw oneself among the flying sheep, but during the fight each man had too much need of those behind and beside him, who were guarding his flanks and rear, to go gaily to certain death on the enemy's ranks.

With the mêlée, moreover, where would the victors have been? With the mêlée, Cæsar at Pharsalus and Hannibal at Cannæ would have been conquered; their shallower ranks, penetrated by the enemy, would have been forced to fight two to one, and would even have been taken in rear by the enemy breaking completely through.

Have we not also seen with troops equally firm and determined, a common exhaustion cause both sides, by tacit agreement, to withdraw for a breathing spell before beginning again? How would this be possible with the mêlée? And I repeat, with the melée, the intermingling of combatants, there would have been a mutual extermination, but no victors. How would they have been recognized?

Can one conceive two crowds mingling by individuals or by groups, where each man, engaged with the enemy in his front, can be struck with impunity from the side or the rear? It means a mutual extermination where the victory rests with the last survivor, for in this intermingling, this mêlée, no one can fly, no one knows whither to fly. Besides, are not the common losses a sufficient proof?

The word is then too strong a one; it is in the imagination of painters and poets that the mêlée has been seen. This is what really used to happen:

At charging distance, they advanced on the enemy with all the speed compatible with the good order necessary for free use of the sword and mutual support of the combatants. Very often the moral impulse, that resolution to charge home shown by good order and unhesitating gait, alone put to flight a less resolute enemy. Ordinarily, with good troops, there was a shock, but not a blind meeting of the masses with lowered heads. Their care for the preservation of their formation was too great for this, as is shown by the conduct of Cæsar's soldiers at Pharsalus, or the slow march to the sound of flutes of the Lacedaemonian battalions. At the moment of meeting, the speed slackened naturally, for the man in the first rank involuntarily

and instinctively assured himself that his supports—his neighbors in the first rank and his comrades in the second—were in their proper places, and gathered himself in order to have more control of his movements to strike and parry. There was a meeting man-to-man; each one took the adversary before him and attacked him in front, for, by breaking through the ranks before defeating him, he lost his supports and risked wounds from the side. Each one, therefore, struck his man with his shield, hoping to make him lose his balance and to strike him while trying to recover it. The men of the second rank, in rear opposite the intervals in the first necessary for a free use of the sword, were ready to protect his flanks from anyone breaking through and to relieve the exhausted. The third rank and those behind it did the same. Since, therefore, both sides were braced for the shock, it was rarely decisive and the fencing, the real hand-to-hand fighting, began.

If the men in this first rank on one of the sides were quickly wounded, the other ranks were in no hurry to relieve or replace them, and there was hestiation and then defeat. Thus it was with the Romans in their first meetings with the Gauls. The Gaul, with his shield, parried the first thrust and, striking down furiously with his great iron saber on the top of the Roman shield, split it and reached the man beneath. The Romans, already wavering before the moral impulse of the Gauls, their fierce cries and their nakedness (a sign of their contempt for wounds), at this moment fell in greater numbers than their adversaries, and demoralization ensued. Soon they became accustomed to their enemy's impetuosity, brave but without tenacity, and when they had trimmed the top of their shields with a strip of iron which turned and bent the Gallic sword, they no longer fell, and the rôles were reversed.

The Gauls, indeed, could not hold their ground against the better arms and the thrusting sword of the Romans, whose superior individual tenacity was mulitplied almost tenfold by the possible relays of the eight ranks of the maniple. And even the maniples relieved one another. With the Gauls the duration of the fight was limited by the strength of a single man. Their too crowded and disorderly ranks rendered

relief difficult, or impossible, as, for example, when they tied themselves together, as has been described.

If the arms were nearly equal, to keep one's own ranks, and to break, drive back and confuse, those of the enemy was to conquer. The man in disordered and broken ranks feels that he is no longer supported but exposed on all sides, and he runs. It is true that one can scarcely break the enemy's ranks without breaking one's own; but in the latter instance the man is advancing. He has only been able to advance because he is driving back the enemy before his blows, killing or wounding him; he is doing a thing which he has expected and intended, which raises his courage and that of his neighbors; he *knows* and *sees* where he is going; while the enemy, left behind by the withdrawal, or by the fall of the men on either side, is surprised, and sees himself exposed on the flanks; to get support, he falls back himself, in line with the rank in the rear of him. But his adversary also pushes forward, and the rank in rear is no longer to be found. The ranks in rear yield to the recoil of the leading ranks, and if this recoil continues for any length of time or is violent, a fear of the blows which are thus pushing back and perhaps striking down the first rank arises. If, in order to make way more quickly and easily for the pressure, and in order not to fall and be piled one on another, the rear ranks turn their backs for several steps, there is very little chance that they will again turn their faces to the front. Space has tempted them—they will turn back no more.

Then, by that natural instinct of the soldier to worry about and to assure himself of his supports, this fear passes from the last ranks to the first, which, so closely engaged, has, in the meantime, been compelled to keep faced to the front under pain of immediate death; and what follows need no longer be explained—it is massacre.

Let us return to the combat. It is evident that the exact line formation of troops which are engaged hand-to-hand lasts scarcely a moment. But each group of files formed by the action is bound none the less to the neighboring group; groups, like individuals, are always careful about their support. The battle is fought along the line of contact of the first rank of the two armies, a line straight, broken, crooked, bent forward or

backward according to the varying fortunes of the fight at various points, but always limiting and clearly separating the combatants of the two sides. In this line, once willingly or unwillingly engaged, one has to keep faced to the front under pain of immediate death, and each man in these first ranks naturally and necessarily exerts all his energy to defend his life. No part of the line becomes entangled as long as the real fighting lasts, for the object of each man, from general to private is to preserve the continuity of support along this line, and to break or cut that of the enemy, for then comes victory.

We see, then, that between men armed with the sword there can be—and there is, if the fighting is serious—a penetration of one mass into the other, but never a confusion, an intermingling, a mêlée of ranks or of the men who form these masses. The fight of sword against sword was the most deadly and could show the most sudden changes of fortune, for it is the class of fighting in which the valor of the individual combatant, his courage, dexterity, coolness and swordmanship, has the greatest and most immediate result. After studying this, the other forms of combat are easy to understand.

Let us consider pikes and swords. The lance thrusts of men in close order, a forest of pikes holding one at a distance (the pikes were fifteen to eighteen feet long) were irresistible. But one had lesiure to kill everything—cavalry and light infantry—around the phalanx, a mass powerless to destroy, moving with measured steps, which a mobile body of troops could always avoid. Openings in the phalanx might be made by the march, by the terrain, by the thousand accidents of the fight, by brave men, or by the wounded on the ground who crawled under the breast-high lances to hamstring the men in the first rank. These latter scarcely saw them, since the men in the first two ranks hardly had room to see and to direct their strokes, consequently when the least opening had been made, these men with long lances who were useless at close quarters, and were prepared to fight only at the full length of their lances,* were struck down almost with impunity by the groups which had thrown themselves into the intervals. Then, with the

*Polybius

enemy in its vitals, the phalanx, through fear, became a disorderly mass—mere sheep falling over and crushing one another under pressure of fear.

In a crowd, indeed, men pushed on too hard from the rear, prick with their knives those who are pushing them, and the contagion of fear changes the direction of the human wave, which recoils on itself and crushes itself into a mass in order to leave a vacant space around the point of danger. If the enemy then flies before the phalanx, there is no mêlée. If he only falls back for tactical reasons and takes advantage of the openings to penetrate the phalanx by groups, there is still no mêlée, no mingling of the ranks. The wedge entering a block of wood does not mingle with it.

In the case of a phalanx armed with long pikes against a similar phalanx, there was still less chance of a mêlée; but there was a mutual shoving which might last a long time, unless one side succeeded in taking the other in flank or rear with some detached body of troops. We see, moreover, that in almost all the battles of ancient times the victory is won by such means—means eternally good, since their action is moral, and the nature of man does not change. It is useless to explain again how and why, in all battles, demoralization and then flight began with the rear ranks.

I have tried to analyze the fighting of the infantry of the line, for it was the only serious fighting in the battle of ancient times; the light infantry put each other reciprocally to flight as Thucydides proves. They came back to pursue and massacre the conquered.

On cavalry (in the case of cavalry against cavalry), the moral impulse, represented by the speed and good order of the mass, had a very great effect, and we see that only infinitely rarely were two bodies of cavalry able to resist this effect. They did do so at the Ticinus and at Cannæ—battles mentioned because they are rare exceptions. And even in those battles there was no shock at full speed, but a halt face to face and a fight.

Indeed, the meeting of whirlwinds of cavalry occurs only in poetry, never in reality. In the shock at full speed, men

and horses would be shattered, and neither men nor horses with it. The hands of the riders are there, their instinct and the instinct of the horses, to slacken the pace and to halt, unless the enemy himself halts, and to make an about-face if the latter continues to come on. And if ever they do meet, the shock is so lessened by the hands of the men, the rearing of the horses, and the drawing back of heads, that it is merely a halt face-to-face; they exchange a few blows of saber or of lance, but their equilibrium is too unstable, their point of support too mobile for sword-play and for mutual support; each man feels himself too isolated, the moral pressure is too strong, and, though little blood is shed, the fight only lasts a second, just because it cannot last without a mêlée and in the mêlée each man feels and sees himself alone and surrounded by the enemy. The leading men, who think themselves no longer supported and can no longer stand the uncertainty, wheel to the rear; the rest follow; and the enemy, unless he has also wheeled to the rear, pursues as he pleases, or until he meets some fresh cavalry which makes him fly in his turn. With cavalry against infantry, there was never a shock. The cavalry annoyed the infantry with its missiles, and possibly with lance thrusts delivered on the run, but it never closed.

To tell the truth, such a thing as close fighting on horseback did not exist. Indeed, if the horse, by adding so much to man's mobility, enables him to menace the enemy and to charge upon him at high speed, it also permits him to escape with like rapidity when this menace does not stagger the enemy, and man uses the horse, following the tendency of his nature and sound reasoning, to do the most possible damage with the least possible risk. To sum up, with cavalry without stirrups or saddles, for whom throwing the javelin was a difficult thing,* battle was merely a succession of mutual harrassings, of demonstrations, menaces, skirmishing with missiles, where each side seeks an opportunity to surprise, intimidate, profit by disorder, and to pursue its opponent, whether cavalry or infantry; and then, *vae victis*—the sword does its work.

Man of all periods has the greatest fear of being trampled by horses, and, undoubtedly, this fear has overthrown a hundred

*Xenophon.

thousand times more men than the real shock (always more or less avoided by the horse) would have or has knocked down. When two bodies of cavalry of ancient times wished or were compelled to fight in earnest, they fought on foot.* I scarcely see in all antiquity any case of fighting on horseback except Alexander's passage of the Granicus. And what happened there? His cavalry crosses a river with steep banks defended by the enemy and loses 85 men—the Persian cavalry loses 1,000—and both sides are equally well armed!

The battle of the Middle Ages was a repetition (less the science) of the battles of ancient times. The knights came to close quarters perhaps oftener than the ancient cavalry because they are invulnerable; it was not enough to overthrow them—their throats must be cut when they were on the ground. They knew, moreover, that their fights on horseback were not serious in their results, and, when they wanted to fight in earnest, they fought on foot.† The conquerors, clad from head to foot in iron, lost no one (the villeins did not count); and if the conquered and unhorsed knight was wounded he was not killed, for chivalry had come to establish a fraternity of arms among the noblesse, the mounted warriors of the different nations, and the ransom had taken the place of death.

If we have dealt principally with the fighting of infantry, it is because it is the most serious fighting, and because, whether on foot, on horseback, or on the deck of a ship, one always finds, at the moment of danger, the same man, and he who knows this man well can, from his actions here, infer his actions everywhere.

CHAPTER VI.

Let me repeat what I said at the beginning of this study: Man does not fight for the sake of fighting, but to gain the victory; he does everything in his power to minimize the former and to assure the latter. The constant improvement of engines of war is due to this cause alone—to destroy the enemy and to remain unharmed. Absolute bravery, which does not

*The Ticinus, Cannae, Livy's example.

†Battle of the Thirty, Bayard, etc.

refuse to fight at a disadvantage, committing itself to God or destiny, is not natural to man; it is the result of moral cultivation and is infinitely rare. In the face of danger, the animal instinct of self-preservation always gains the upper hand. Man calculates his chances, and how wrongly does he calculate them? We have just seen.

Man has, then, a horror of death. With certain chosen souls, a great duty which they alone can understand and accomplish, sometimes makes them move to the front; but the masses always recoil at sight of the phantom. The object of discipline is to overcome this horror by a still greater horror—that of punishment, or shame. But the moment always comes when the natural horror is too strong for discipline, and the combatant flies. "Stop, stop! Wait a few minutes—a single instant more—and you are the victor! You are not yet even wounded—if you turn your back it means certain death." He does not hear—he can no longer understand. He is filled with fear to the exclusion of every other feeling. How many armies have sworn to conquer or perish? How many have kept their oath? The oath of sheep to stand fast against the wolf. History records, not armies, but individual souls who have known how to fight to the death, and the devotion of the men of Thermopylae is justly immortal.

Here we are, back again at the elementary truths, by so many forgotten or unknown, which I have stated in my preface. Since real, serious fighting is the serious ordeal we know it to be, in order to impose it on a crowd of human beings it is not enough for this crowd to be composed of brave men, like the Gauls or the Germans. We must, and do, give them leaders who have firmness and decision of command arising from habit and a perfect faith in their imprescriptible right to command, consecrated by tradition, law, and the social constitution. We add good weapons, a manner of fighting suitable to these weapons and those of the enemy, and to what we know of the physical and moral forces of man; and, further, a rational subdivision of troops which makes possible the direction and employment of every effort down to that of the last man. We animate them with passions—the fierce desire for independence, the fanaticism of religion, national pride, love of glory, desire

for gain—and a law of iron discipline, forbidding anyone to withdraw from the action, imposes solidarity from the highest to the lowest, among the various units, among the leaders, between leaders and soldiers, and among the soldiers.

And have we, then, a strong army? Not yet. Solidarity, that first and supreme force of armies, is, it is true, prescribed by the severe laws of discipline backed by strong passions; but to prescribe is not enough. A surveillance which nothing can escape during the action must, by insuring the execution of discipline, guarantee this solidarity against weaknesses in the face of danger—those weaknesses which we know so well—and to be felt and (what is most important) to exert a strong moral pressure and make everyone advance through fear or shame, this surveillance, this eye of all watching each one, requires in each group men who are sure of themselves and who understand it as a right and a duty for the common safety.

A wisely planned organization (and with that we must start) must, therefore, place permanently the same leaders and the same soldiers in the same groups of combatants, in such a way that the leaders and comrades of peace and the maneuver camp may be the leaders and comrades of war; in order that from the habit of living together, of obeying the same leaders, commanding the same men, of sharing fatigues and recreations, and of associating with men quick to understand the execution of military movements and evolutions, may come fraternity, union, the sense of calling—in a word, the clear feeling and understanding of solidarity—the duty to submit to it, the right to impose it, the impossibility of escaping from it.

And now confidence appears. Not that enthusiastic and thoughtless confidence of disorderly or improvised armies, which lasts until danger appears and then fades so rapidly to make room for the opposite feeling, that confidence which sees treason everywhere, but that deep-seated, firm, and conscious confidence which does not forget itself in the moment of battle and which alone makes true combatants.

We have now an army; and it is no longer difficult to understand how men actuated by the strongest passions, even men who know how to die without flinching, without paling, really

brave in the face of death, but without a strong organization, are conquered by others individually less brave, but organized with solidity and solidarity.

One likes to picture an armed mob overthrowing all obstacles, carried on by a breath of passion. There is more picturesqueness than truth in this imagination.

If battle were an individual work, the brave, passionate men composing this mob would have more chance of victory; but in a troop of any kind, once before the enemy, each man realizes that the task before him is not the work of an individual but a collective and simultaneous work and, surrounded by companions assembled at random the day before under unknown leaders, he feels by instinct the lack of union, and asks himself whether he can count on the others, a distrust which will lead him far at the first hesitation, the first serious danger which checks for a moment the enthusiasm of passion.

Solidarity and confidence cannot be improvised; they come only fron that mutual acquaintance which is the basis of uhion, and of the point of honor. From these come, in turn, that feeling of strength which gives the courage to attack through the confidence of succeeding, the triumph of the will over instinct, the greater or less duration of which means victory or defeat. Solidarity, then, can alone give us combatants. But there are degrees in all things—let us see if the battle of today is less exacting in this respect than the battle of ancient times.

In the battle of ancient times there was no danger except at close quarters. If a body of troops had enough morale (and the Asiatic mobs often did not) to advance within sword's length of the enemy, there was a fight. Whoever came to that distance knew that to turn the back meant death; for, as we have seen, the victors lose very few men and the vanquished are exterminated. This simple reasoning held the men in place and was able to make them fight, were it but for a moment.

Today (except when very rare and exceptional circumstances bring two troops unexpectedly face to face) the battle begins and is fought at long range. The danger begins at a great distance, and one must march for a long time in the face

of projectiles becoming thicker at each step he advances. The vanquished loses prisoners, but often, in killed and wounded, loses no more than the victor.

The battle of ancient times was fought by groups crowded together in a small space, in open country, in full view of each other, and without the deafening noise of the weapons of today. The supervision of the leaders was easy, and individual weakenings were immediately suppressed. Only a general fright caused flight.

Today the battle is fought over immense areas, along long, thin lines, broken every instant by the accidents and obstacles of the terrain. From the time the action begins and the first shots are heard, men, scattered as skirmishers or lost in the inevitable confusion of a rapid march, escape from the surveillance of the leaders; a greater or less number conceal themselves and withdraw from the advance, and, diminishing by just that much the material and moral effect and the confidence of the brave men who are left alone, may cause defeat.

But let us get a closer view of the man in the ancient battle and in the modern. I am strong, quick, vigorous, skilled in arms, cool, and clear-headed; I have good offensive and defensive arms and reliable comrades who have been with me for a long time and will not let me be overcome without supporting me; I, with them, they with me—we are invincible, even invulnerable. We have fought twenty battles and not one of us has fallen. We need only support each other in time and keep cool. We are on the alert to relieve each other and to put a fresh combatant in front of a wearied enemy. We are of the legions of Marius, of the 50,000 who held their ground against the raging tide of the Cimbri, killed 140,000 and captured 60,000 of them, losing only 200 or 300 awkward men of our own.

Today, however, strong, determined, skillful, and brave I may be, I can never say to myself: "I shall come back alive." I am no longer dealing with men—I fear them not—but with the fatality of gun-metal and lead. Death is in the air, invisible and blind, with terrifying whispers which make me bend my head. However good, however brave, however firm, however devoted my comrades may be, they do not guarantee my safety. Only—and what an abstract thing this is and how

much less intelligible to all than the material support of the ancient battle!—only I imagine that the more of us there are to run a dangerous risk, the greater will be the chance for each one to escape; and then, too, I know that, if we are confident that not one of us will be found wanting in the battle, we shall feel ourselves to be stronger and shall be stronger. We shall begin the fight and carry it on more resolutely, and we shall get through with it sooner.

Get through with it! But to end it, we must advance and seek the enemy, and, infantryman or cavalryman, we are naked against the iron and against the lead, which cannot miss its stroke at a couple of paces. Even so, let us advance freely and resolutely. Our adversary will not stand before the sight of our rifle at point-blank range, for the charge is never mutual, we are sure—we have been told so a thousand times—we have seen it ourselves. But suppose things should be different today! What if he also should aim point-blank at us! What a difference between such confidence and the confidence of the Roman!

I have shown elsewhere what a difficult and dangerous thing it was for the soldier in ancient times to withdraw from the action. Today the temptation is far stronger, the opportunity greater, and the danger less. Today, battle requires a moral cohesion, a solidarity much closer than ever before. One last remark on the difficulty of directing the battle will complete my demonstration.

Since the invention of firearms—the musket, the rifle, the cannon—the distances of aid and mutual support among the different arms have continually increased. The facility of various kinds of communication makes it possible to assemble on a given terrain forces which are numerically enormous. For these reasons, as I have said, battlefields are becoming immense. To take in the entire field becomes more and more difficult. Control, ever increasing in difficulty, because more distant, tends more often than not to escape from the commander-in-chief to the subordinate leaders. That inevitable disorder which a body of troops in action always shows, because of the moral effect of our engines of destruction, keeps increasing to such an extent that, in the midst of the tumult and fluctuations of the fighting lines, the soldiers often lose their leaders—the leaders their soldiers. Among the troops closely and strongly engaged, small groups only, squads or companies, if they are well organized, keep themselves in hand and serve as supporting or rallying points for men who have lost their way. Thus, by force of circumstances, battles tend today, more than ever before, to become soldiers' battles. This should not be so. That is *should* not be so we do not dispute, but it *is* so.

Perhaps one denies this, and makes the objection that the troops taking part in battles are not all either closely or strongly engaged; that the leaders always try to keep in hand as long as possible troops in condition to march and to move at a given moment in a determined direction; that today, like yesterday, and like tomorrow, the decisive action is won by these troops in good order, appearing in such or such formation, at such or such a point, and, consequently, the battle is won by the leader who knows how to keep them in hand and direct them. That is undeniable.

But no less undeniable is it that the more men the enemy is compelled to put into the line to oppose the troops closely engaged, the more chance there is for us to keep a reserve of troops in hand. The objection made, stating a general principle, true at all periods of history, is in no way opposed to the following truth: Among the troops which are doing the fighting, for the reasons I have stated (and they are true ones), the soldiers and the leaders nearest them, from corporal to battalion commander, have more freedom of action than ever before; and as it is the vigor alone of this action, independent more than ever of the direction of the higher leaders, which leaves in the hands of the latter forces which they can direct at the decisive moment. So this action becomes of greater importance than, ever, and one may say, more truly today than ever before that battles are the battles of soldiers and of captains. They are always so actually, since, in the last analysis, the soldier does the work, but his influence on the final result varies. Thence, the true saying of today: *Soldier's battles.*

Aside from the rules of tactics and discipline, common sense shows the necessity for a reaction against this dangerous predominance of the soldier's action over the leader's—for

postponing, by every means, to the last possible moment, that instant when the soldier escapes from the control of the leader—an instant which influences, every day more powerful, are tending to hasten. But the fact is there, and this fact and the uneasiness it arouses, together complete the demonstartion of this truth. Battle, to return us the full value of our work, requires today a moral cohesion and a solidarity closer than ever before. So clear, that it is almost axiomatic, is the truth that the more bonds have to be stretched, the stronger they must be, if one does not wish them to break.

CHAPTER VII.

If there are other things to be learned from this work, they are left to the meditation of the reader. Their reduction to actual examples and treatment with the undeniable authority of fact must be based on a sincere study of modern battle, and this study cannot be made with nothing but the accounts of historians. These describe well, in a general way, the action of large bodies of troops. But this action in its detail and the individual action of the soldier, in their accounts, as in the reality remain enveloped in a cloud of haze. And yet they must both be grasped, for their mutual accord is the justification and the basis of all systems of fighting, past, present, and future. Where are they to be found?

We have infinitely few accounts giving as near a view of battle as Colonel Bugeaud's story of the fight at the Hospital bridge. It is such narratives, even more detailed—for the least detail is of importance—of actors or of witnesses who knew how to see and who know how to remember, which are needed for a study of the battle of today.

The number of killed, the character and location of wounds, will very often tell more than the longest narratives, even when the latter happen not to be lies. One must learn how man (and of the genius man, the Frenchman in particular) fought yesterday; how and to what extent, under pressure of danger and of the instinct of self-preservation, involuntarily and inevitably, he followed, despised or forgot the methods ordered or recommended, in order to fight in such or such manner, forced

on him or indicated to him by instinct or by his knowledge of war.

When we know that, truly and without illusions, we shall be very near knowing how he will bear himself tomorrow, wielding or opposed to the weapons of today, so much more rapidly destructive than those of yesterday. Even now, from what we know of the past, knowing that man is capable of but a given degree of terror, and knowing that the moral effect of destruction increases in the same ratio as its power and its rapidity, we can foresee that tomorrow, the formal methods to which the illusions of the target range and our neglect of our own experience seem to bring us back, will be less practicable than ever before; that tomorrow, more than ever before, we shall find predominant the individual worth of the soldier and of the small group and, consequently, of the stability of discipline.

The study of the past alone can give us a sense of what is practicable, and can make us see how the soldier, necessarily and inevitably, will fight tomorrow. Then, instructed and forewarned, we shall not be disconcerted; for we shall be able to prescribe in advance such methods of fighting, such organization, such preliminary formations, as may be suited to this necessary and inevitable manner of fighting, which will have the effect of regulating it as far as possible and, consequently, of doing away with chance to the greatest possible degree, by keeping longer in the hands of the leader the power of directing the combatants—a power which is lost in an instant, when the instinct of the combatant is absolutely incompatible with the method ordered. That is the only way to preserve discipline which is weakened by tactical disobediences at the moment when it is most needed.

But we must remember that we are dealing here with dispositions before action and with methods of fighting, and not with maneuvers. Maneuvers are the marchings of troops toward the scene of action and the movements necessary to dispose on this terrain the largest as well as the smallest units, with every guarantee of order and of the greatest possible speed. They are not the action itself. The action follows them.

It is the confusion between maneuver and action which leads in many minds to a doubt and distrust of our regulation maneuvers. These, considered altogether, are very good, since they give us the means of executing all movements and of taking all possible formations with the greatest rapidity and good order practically possible. To change or to criticise them does not advance us a single step. The problem of the final action always remains. Its solution lies in the sincere study of what has happened in the past, from which alone one can draw conclusions as to what will happen tomorrow—and then, all the rest follows.

This study has yet to be made—or, rather, to be written—for it has been made by all those leaders to whom experience of war has given a worth and moral authority recognized throughout an army, those leaders of whom it is said: "He understands the soldier and knows how to make use of him."

What more did the Romans know when they invented the legion? But how well they knew it, those masters of war! Only their incessant experience and profound thought could lead them to such a complete knowledge.

The experience of today has hiatuses; it must then be collected carefully, and this study which must be made will be good for that purpose, and also to stimulate thought, even among those who know—especially among those who know. And, since extremes in so many things meet—who knows—whether, just as in the ancient days of battle with spear and sword armies were seen to conquer other good armies of twice their strength—who knows whether the excessive improvement of weapons of long range destruction may not bring back again those heroic victories, with equal arms, of the few over the many by some combination of intelligence or genius with morale and artifice.

Even though the words be Napoleon's, it is hard to accept the statement that victory will always rest on the side of the heavier battalions.

THE MODERN PENTATHLON.*

ON the proposal of its President, the International Olympic Committee decided that, in the program of the Fifth Olympiad which was to be held in Stockholm in 1912, there should be placed a new competition—the Modern Pentathlon—comprising the following events: athletics, fencing, riding, swimming and shooting.

This decision was received with the greatest interest by the Swedish Olympic Committee which took its first steps for the organization of the competition, as early as the autumn of 1910. This was no easy matter, however, for there was nothing to go by as regards the new event as there was in the case of other competitions. In determining the five branches of sport that were to make up the Modern Pentathlon, the Swedish Olympic Committee had the following points in view: The five events ought to be such as would test the endurance, resolution, presence of mind, intrepidity, agility and strength of those taking part in the competition, while, in drawing up the detailed progam, it was necessary to have all the events of equivalent value, in order to make the Modern Pentathlon a competition of really all-round importance. As regards the shooting, which, of course, was not any test of physical strength,

*From the Official Report of the Swedish Olympic Committee, Olympic Games at Stockholm, 1912.

The International Olympic Committee, which controls all modern Olympiads, has awarded to the Panama-Pacific Exposition an event known as the Modern Pentathlon, which consists of Shooting, Swimming, Fencing, Cross-country Riding, and Cross-country Running.

This competition was held for the first time during the Olympic Games at Stockholm in 1912. It is purely a military event, but one with which Americans are not thoroughly familiar.

The United States was represented at Stockholm, but first, second, third and fourth places were captured by Sweden. Lieutenant Patten, U. S. Army finishing fifth.

Further information regarding this competition will be furnished by Mr. James E. Sullivan, Director of Department of Athletics, Panama-Pacific Exposition.—*Editor.*

it was necessary to demand a corresponding degree of skill in that branch, in order to make it equivalent to each of the other four events. But this was not enough. It was also necessary to consider the reciprocal order in which the events should be placed, this being an Olympic competition, although the real value of the Modern Pentathlon ought, of course, to consist in the fact, that a man who is really in perfect physical and psychical condition, and who is expert in the branches of sport in question, will always be able to satisfy these tests, irrespective of the order in which they come, so that, for example, he will be able to pass the shooting test perfectly well, even if he has previously been swimming, riding across very rough country, taking part in a cross-country run, or, for a longer or shorter length of time, been engaged in meeting an opponent with the épée.

Of course, the difficulty in executing the tests would be the same for all the competitors, so that, in this respect, the events could be placed in any order, but, on the other hand, there was the desire to obtain the best possible results that could be gained in each of the five events, so it was considered that the most suitable method to be adopted for the Olympic Games would be to place the events in a certain order, in accordance with the claim each made on the skill and endurance, etc., of the competitor.

In consequence of the character of the Modern Pentathlon, the question may be asked whether, eventually, the competition should not be so arranged that the competitor is left in ignorance of the order in which the five events are to be taken, and that the order is determined by drawing lots. This arrangement, however, might have the result of unsteadying the competitors to some degree, and of making it a matter of exceeding difficulty for the Olympic Committee to organize the competition.

The following brief account of the arrangements made for each of the various branches of the Modern Pentathlon at the Fifth Olympiad, in Stockholm, is given as some aid for future Olympic Games:

SHOOTING.

In the autumn of 1911, the Swedish Olympic Committee proposed that the shooting should be carried out with pistols (so-called "Duel-Shooting") at a distance of twenty meters, at a disappearing target consisting of a whole figure, which was to be visible for three seconds. Later on, however, the thought arose that it would be better to increase this, perhaps, too short, distance by five meters, so as to make the event more in accordance with the value of the competition, and so the distance of twenty-five meters was adopted.

The target was to consist of standing whole-figure, 1.70 meters high, i. e., corresponding in length to a man of normal height; the greatest breadth was 0.50 meter. In order to determine the respective value of the hits, the figure was to be divided into ten zones, the bull's-eye to count ten. The figure was to be visible three seconds, with an interval of ten seconds between each shot, this period being fixed so as to allow ample time for reloading, for such competitors as did not use automatically loading pistols.

As regards the weapon, it was not considered suitable to require the use of any fixed model, otherwise than that it had to be one intended to be held in one hand only, and any revolver or pistol could be used provided that it had open fore and back sight.

Regarding the number of shots, these were fixed at twenty, which were to be fired in four series of five shots each. With respect to the trial of the weapon it was determined that, before the shooting for the event began, two sighters should be allowed at the ranges, under similar conditions to those obtaining during the competition.

SWIMMING.

The first thing that had to be done in regard to this event was to determine the distance that would give a suitable test of strength and endurance. In general, it was considered that a length of 300 meters would be enough, and the proposal was adopted, the distance mentioned being, probably, the most suitable one.

The free swimming style must also be considered as the only one that could be adopted. The event was arranged in heats without any final, the time being the only decisive factor.

FENCING.

A discussion arose as to whether a free choice of weapons (épée, saber or bayonet) should be allowed, or if the obligatory employment of one of these arms should be enforced, the bayonet being, most certainly, the weapon which would be least used. Both plans have their advantages and inconveniences, of course, but it will certainly be acknowledged that to allow a free choice of weapon would lead to many grave difficulties—when judging results in an Olympic competition at least.

Judging from every plausible reason, the choice of one, fixed arm would be the right method, as the judging, in the case of such a competition as this, must be based on a comparison between two opponents of supposed equal capacity. It was a matter of exceeding difficulty, on the other hand, to decide whether the épée or saber should be used, though it must be acknowledged that, in such an event as this, there is much that speaks for the adoption of the former weapon—even if, in many instances, a sympathy for the saber was very noticeable—and it was found that the proposal of the Swedish Committee in favor of the first-named arm was the fittest.

It was determined that the fencing should be determined by three hits of five, and that the encounters should, preferably, take place in the open air, or some fairly level ground, rather than indoors on a wood floor, or on a platform covered with a linoleum carpet.

RIDING.

The determination of the rules for the riding was, probably the question involving the greatest difficulties. From the very first, however, it was determined that the event should be an individual competition from point to point, over a fixed cross-country course with obstacles, as the rider as well as the horse would hereby be best tested. The distance, it was considered should lie within the limits of 3,000—5,000 meters.

In such a competition from point to point, with a number of obstacles at varying distances, too short a distance, however, would not be enough to fully test the skill of the rider, as, in such a case, it would not be necessary for him to pay attention in so high degree to the endurance and power of his horse and, consequently, to hutsband these resources to the utmost.

Another great reason for the non-adoption of the shorter distance was that arising from the unanimous opinion, that a maximum time ought to be fixed which was not to be exceeded. In other respects, no attention was to be paid to the time taken for the competition, but the event should be decided by the points given for form in the execution of the ride, the way in which the obtsacles were taken, etc. In the event, however, of two or more competitors having the same number of points, the result was to be decided by the time taken. In order not to be bound to a distance determined to the very meter—as there would then exist greater freedom to pay regard to the character of the country when choosing the course—it was decided that the distance should not exceed 5,000 meters, a solution of the question which must be considered as the most successful one.

In order to give the riding event a fully field-service character, the leaders of the riding competition were empowered to so arrange the course which was not to exceed 5,000 meters (for which a maximum time of 15 minutes was fixed,) that the height, breadth, character and number of obtsacles would correspond to the demands such service would make. According to this plan, the course would remain unknown to the competitors, who would not gain any knowledge of it from the program and the rules they received, while they were not allowed to ride over the ground before the actual performance of the event on the day of the competition, although the course, as regards its chief features, was to be shown to the riders a day or two before the competition, none of the obstacles then being pointed out, however.

The most difficult point in this event was as regards the procural of the horses. Here there were three points of view, viz.: 1. that each competitor should have his own horse; 2. that the Swedish Olympic Committee should have saddled

horses at the service of the competitors at the starting point of the race, each competitor drawing lots for the horse he was to ride, or, as a compromise; 3. that, if the competitor so wished he could ride his own horse, but that the Committee would provide horses for those riders who could not bring their own. There were advantages and disadvantages attached to each of the three alternatives.

With the first alternative, it would be a matter of the very greatest difficulty to hold the competition for, by the adoption of such a regulation, it would become impossible for all of the competitors to take part in the event; on the other hand the rule would give the greatest advantage to the competitors themselves, although, in such a case, the fundamental idea of the Modern Pentathlon—that an athlete should be able, at any time, to ride across unknown country on a strange horse—would be, in a great measure, lost.

The second alternative reverses the position of the above advantages and disadvantages. In this case, the idea of the Modern Pentathlon is given its right value, but the advantages to be gained by the individual competitor are considerably diminished, in addition to which, there is the disadvantage that it would be a difficult matter to distribute the horses among the competitors quite justly, even if done by means of drawing lots, for it would of course, be exceedingly difficult to provide a certain number of horses all as good as each other even if, during a certain period they had gone through a thorough course of training in steeple-chase-riding. By such an arrangement there would be a diminution in the value of the horse riding event in the competition.

But to eliminate the riding from the Pentathlon on account of the weakness attending these alternatives, and to replace it by another branch of athletics, would considerably detract from the special character of the competition. The question was discussed at the Luxemburg Congress, and it was not before the adoption, as a matter of principle, of the view that horses should be placed at the disposal of the competitors on the course, that the riding event was included in the program. The question was once more debated at the Congress of Budapest and a compromise was adopted—the third alternative

mentioned above—whereby competitors had the right of providing their own horses, but that those who were unable to do so, should have a mount placed at their disposal on the course by the Swedish Olympic Committee. The said Committee afterwards determined that these competitors should draw lots for their horses on the occasion when the course was shown them, as in this way horses and riders would not be altogether strangers to each other.

ATHLETICS.

Finally, it was necessary to choose a branch of athletics from amongst its many forms, which would best be in agreement with the special character of the Modern Pentathlon. The choice fell on cross-country running and the distance was fixed at 4,000 meters.

In order to thoroughly carry out the idea of the Pentathlon as an individual competition, it was determined that the competitors should start one at a time, at intervals of one minute, instead of allowing them to start together, as in the case of ordinary cross-country running.

The event was to be decided by time alone.

JUDGING THE COMPETITION.

As the fundamental principle for judging the competition as a whole, it was determined to adopt a method of calculating points based on the place-numbers in the various sub-events, with the greater number of victories (or the best relative places) as the decisive factor in the event of two or more competitors obtaining an equal number of points. In the case of two or more competitors obtaining an equal number of points and an equal number of best relative places, the result would thus be decided by the competition held last.

In order to obtain a prize, the competitors had to take part in, and complete, all the five tests.

It was determined, with respect to the calculation of points, that the first man in each event should receive one point, the second man two points and so on, and that the competitor with the lowest number of points should be declared the winner.

If any competitor omitted to take part in any of the five events, he was to be considered as having withdrawn from the

competition as a whole but the calculation of points for the other competitors would not be altered.

If two or more competitors obtained similar results in running, swimming and riding, the events were not to be taken over again. If, thus two competitors tied for first place, each of these would be awarded one point, and the next man three points, etc.

Equal points in fencing on the other hand, would have to be decided by another pool (1 hit), while in the shooting, the contest was to continue (the entire series to be fired) until one man proved himself the best.

The rules for the competitors for the five sections were:

Shooting:

The number of hits were to be counted; in the event of an equal number of hits, the points were to be calculated according to the zones. The edge of the shot-hole was to determine the value of the shot.

Swimming:

The time alone was to decide the placing.

Fencing:

The number of hits (3) was to be decided.

Riding:

Each rider was to receive 100 points to start with, from which were to be deducted:

For refusing and bolting the first time	2 points
For refusing or bolting again, each time	5 points
For the horse falling	5 points
For falling off (the rider being unseated), either at the obstacles or between them	10 points
For every period of five seconds or fraction thereof, in excess of the maximum time	2 points

These deductions of points were to be made on each occasion and for each obstacle.

If two or more competitors had the same number of points, the time taken was to decide the order in which they were to be placed.

In cross-country running, the time alone was to be decisive of the event.

PRACTICAL HORSE BREEDING.*

By Lieutenant N. C. SHIVERICK, Late U. S. Army.

HORSE breeding is practical when it becomes profitable, and as an industry which might be common to nearly all agricultural sections of New York State, horse breeding becomes practical in direct proportion to the number of persons who may profitably engage in it. Having thus expressed my views on the subject, it is manifest that this paper concerns itself primarily with the problem of making it practical, hence necessarily profitable for the persons who have one, two or any small number of mares, to breed them, to raise colts and to dispose of them advantageously. By thus becoming intelligently interested in horse breeding, they would realize the real economical value of their horses, and dispose of geldings, keeping only mares for their work animals and breeding them to the best advantage—that is, breeding them to produce the most valuable colt practicable, and at such a time as to least interfere with the business of the farm. The breeder who is extensively committed to the industry is usually independent of outside assistance; he provides his own stallions, develops his own markets, and creates a sphere of sufficient influence to protect his interests by legislation when necessary.

The farmer, on the contrary, to whom the breeding of his few mares is merely incidental to his real business, does not keep a stallion. Indeed he would be foolish to think of doing so. Neither has he time to devote to developing a market for his spare colts to the number of from one to five a year; and being interested in a small way only, and that merely as an incident, he does not concern himself with the business of seeking protective or other legislation with regard to horse breeding. In this he is wrong, because until such legislation is enacted as to permit only sound stallions to be used for public service,

*From the proceedings of the New York State Breeders' Association—Bulletin 59, 1914.

there will be unsound stallions used. This of course, as surely every owner of animals must know, is a most serious menace, since the tendency of unsoundness is transmissible from unsound sires and dams and their forbears. I consider the passage of a wise stallion law the most necessary step in the industry of horse breeding in the state of New York—a law so executed as to make it common knowledge that unsound stallions can not stand in New York State; to give assurance to every farmer that if there is a stallion standing in the vicinity of his farm, said stallion must be sound—nay even more, he must be free from a tendency or tendencies to unsoundness, and this knowledge should be possessed by horse buyers as well as by horse breeders. Surely buyers would be more apt to turn to localities where they would be guaranteed against buying the get of unsound sires, than to localities where they could obtain such knowledge only by personal investigation. The law should also provide for a just and sane but rigid annual examination of all stallions within the state, and certificates of registration should be furnished the owners of sound animals. The unsound one should be condemned and destroyed for the benefit of the horse industry, just as a horse with glanders is destroyed to prevent the spread of a bad influence, so that the mere living presence of a stallion in this state would be *prima facie* evidence of his soundness.

As to breeding, I see no reason why state registration should be permitted to any but pure-bred stallions, and all crossbreds should, in my opinion, be either castrated or share the fate of the stallion condemned for unsoundness. It costs no more to feed and care for well-bred stock than it does for poorly bred stock, and the chances for getting mediocrity are sufficiently great in the mating of pure bred stock without increasing the possibility by using sires of uncertain lineage, when it is so well known that prepotency is generally the result of pure breeding.

Another reason for emphasizing the need of pure bred stallions lies in the fact that probably the majority of mares to be served would be of unknown ancestry, although here too pure blood lines would lead to the more rapid development of a high standard throughout the horse breeding in the state.

There seems to be an almost fatal desire on the part of most persons, who do not thoroughly understand genetics, to crossbreed in the belief that by mating this with that a fine foal will result, resembling both parents in their best points; but it so happens that the processes of nature do not conform to the wish of breeders, but seem to delight in queer antics by producing offspring intensifying bad traits and modifying good traits, and it is only when the wise breeder mates pure breds that he competes with nature's subtleties. Even here, however, the stud books show how completely nature dominates the situation. Hence to avoid, so far as practicable, the mismating of crossbred individuals, horse breeding should be made as foolproof as possible, by state legislation, by not permitting crossbred stallions to exist within the state. Of course there have been instances where breeders seemed almost cognizant of nature's intentions with respect to producing certain kinds of horses.

I have in mind the late Major Dangerfield, who superintended the breeding of the late Mr. James R. Keene's race horses at Lexington, Kentucky. Major Dangerfield after nearly thirty years of deep study, of sagacious observation and stupendous patience, backed by enormous wealth, was able to make Mr. Keene's stables the world's greatest winning stables for three consecutive years.

How did he practically produce winners? First he bred his own stallions, and then he mated wisely, and it seems his instinct for this was almost second sight. Here is the reason for my referring to Major Dangerfield: He was successful, hence his methods were practical; the breed of horses was uplifted by his work, in that he bred to produce equine perfection as well as great race horses, perfection not alone in conformation but likewise in disposition. He would not breed unsound animals; no mare or stallion could have been fast enough to tempt Major Dangerfield to breed them if they had unsoundness of body or mind or temper of a tendency transmitting nature. He would not mate animals unless they were in perfect physical condition, and his success vitiates the possibility of anyone considering his methods overdone or crank-like. And it is only this same patient and careful study of individuals, and the

care of them, that will produce for the farmer horses of excellence, be they of draft breed or other types.

The person who breeds but a few mares incidental to his real business has neither time nor inclination for exhaustive study of breeding, it becomes the plain duty of such organizations as the Breeders' Association of New York State to do sufficient careful studying for the small breeder, the result of which, embodied in proper laws, will make it practicable to raise the general standard of horses bred in the state and make it practicable, also, for the small breeder to raise on an averge good, sound, worth-while horses, for which there exists a ready market. The farmer who does this incidental breeding must do his part if he is to share in the benefits of horse breeding, but his part is simple—merely the application of his common sense in keeping his best mares and in giving the young things the proper start in good growth by judicious feeding. He should not be tempted to sell his best young mares, but should always look ahead and have a good young mare or two coming along to relieve his older ones; and here again I suggest that the state spread a protecting wing, by offering handsome premiums to owners of the best brood mares and owners of the best fillies; these premiums to be given as awards at the State Fair, not merely a lone first, second and third prize, but say twenty-five premiums of $300 each for the best 25 brood mares and the same number for the best 25 fillies—these premiums to be given so as to be well distributed; that is, regulate against any one owner getting more than two premiums. Ribbons and a small prize of $25 possibly could be awarded other mares he might have worthy of notice. If New York State made an annual expenditure of $1,000,000 for each of the next ten years to develop the horse breeding industry in this state as it should exist here, it would not be extravagance, it would be genuine economy. It is safe to estimate that not less than $2,500,000 annually goes out of New York State for the purchase of horse flesh. Recently I was informed that less than 10 per cent. of the horses sold in the Buffalo market are New York bred animals.

By wise legislation some states, mostly in the West, have seen fit to protect their horse breeding industries, with results which are most gratifying. With the Chicago market selling

40,000 horses in 1912, you may be sure that Wisconsin, for example, benefitted by the laws which have given that state high standing as one in which good horses are raised in numbers aggregating a large total. In 1913, the United States exported 28,707 horses, valued at approximately $4,000,000—to be exact $3,960,102—and you may be certain that foreign horse buyers know the states where legislation assists in raising the probability of the horse of these states being sound. It is absurd that New York State should be dependent on other sources for its horse supply. Does it not strike you as pathetic that New York State farmers have to go West for their work teams; that car-loads of western horses are brought into this state annually; that hunters are brought from Virginia, Canada, Kentucky and elsewhere; that saddle horses are brought from Kentucky, Virginia and Missouri, and elsewhere?—not a lone horse here or a pair or so there, but the great majority. New York has as good pasture land, as good limestone, water and other advantages for horse raising as other states, and this association should assist in bringing this industry to such a wholesome condition that the idea of taking horses into New York State would be as ludicrous as carrying coals to Newcastle.

In the matter of the state subsidizing the horse breeding industry by premiums, and an effort to have the state fair show of breeding stock the greatest in the world, let me call your attention to the following, namely:

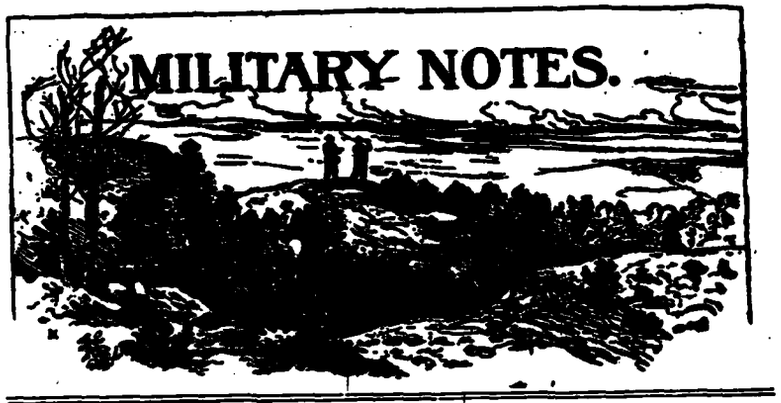
In England there are three societies, the Hunters Improvement Society, founded 1885; the Royal Commission on Horse Breeding, 1888, and the Brood Mare Society, 1913—all acting in concert with the object of improving the standard of light horse breeding. The first efforts made in connection with the Hunters Improvement Society were to secure the services of thoroughbred sires for specified districts, and in order to secure first class stallions a limited number of "Queen's Premiums" of $1,000 each were offered. Since the formation of the Brood Mare Society in 1913, inducements in the way of premiums are offered to breeders to encourage them to retain their young mares at home. In 1904 the Dutch Government took 350 of the best Irish mares out of the country at a time when England

was spending $10,000,000 a year in buying horses abroad; hence we see the reason for the Brood Mare Society, and are not surprised at learning that its work has met with very real and gratifying results.

Strange as it may seem, the motor driven vehicle has not forced down the price of horses; today draft horses, hunters and saddle horses are bringing higher prices than ever before. But the demand is certainly stronger than ever before, and seems constantly growing stronger, for well bred horses of all types.

Given wise stallion laws, worth-while premiums for mares and fillies of excellence, and the natural markets of the state as well as the outside buyers who would be attracted by such conditions to develop the breeding industry, the farmer, of course, on his part, must exercise constant care in a practical, working, common-sense way, in the general care of his brood-mares, their foals, colts and fillies. The necessity of feed and shelter is common knowledge, and no animal owner would expect a mare nurturing a foal, or expect a growing foal to further drain their vitality by seeking food and shelter under difficult conditions, and a weanling must be well sheltered, but never deprived of exercise and fresh air. These last two elements are as essential in the development and health of horses of all sexes and ages as shelter and feed, and the weanling must be fed, and fed, and fed, that he may early acquire the habit of growing as today the market demands bigness of physical development in all kinds of horses. While feed and shelter, fresh air and exercise are most necessary in the case of weanlings, still these elements are of paramount importance in all stages of equine life.

Under such conditions of protection and understanding, with farmers entering into the breeding of horses with the zest of real interest, it would only be a few years before New York State would become, as it should, a truly great horse state.



EFFECT OF ARTILLERY FIRE.

A CORRECTION.

THE JOURNAL for January, 1914, page 559, is likely to mislead readers by the two estimates there given of the effect of artillery fire. The author states that although they are given without good facilities for extension or verification they are correct enough to estbalish the indictment of field gun inaccuracy.

But the figures given are wrong.

The Japanese war ministry has stated that about sixteen per cent. of all Japanese wounds received in their war with Russia were due to artillery fire.

Dr. Schafer (a German staff physician, I think) who was present from the beginning of December, 1914, studying Russian sanitary measures, and two Russian physicians present during the war, state that at least twenty-two per cent. of all Russian wounds for the whole was and for all troops were caused by artillery fire.

The same medical men report that Japanese artillery fire caused thirty-five and one-half per cent. of the fatal wounds and those ending in death, and thirty-two per cent. of the killed among the officers of three army corps for the entire campaign.

Moreover, artillery wounds not fatal caused much longer absences from duty than small arms wounds.

The actual measured effect of artillery fire was, then, much greater than is indicated by the reference. For example, if 400,000 rounds of ammunition were expended at Mukden, if there was one killed to four wounded, if one-third of the killing was done by artillery fire and if each round weighed twenty-pounds, it took 1,200 (not 5,000) pounds of ammunition to kill a man.

Who can estimate the Japanese saved from hostile small arms by the protection of their artillery fire or the Russian losses due to Japanese charges made possible only by artillery fire?

But even these figures are misleading—not correct enough to prove the inaccuracy of artillery fire. The Russians lost enormous quantities of ammunition by abandonment and capture. But it was "*expended.*" The evidence is furnished by their own reports, by the Japanese and by neutral observers.

Probably never will we meet an enemy so poorly circumstanced as were the Russians in respect of artillery service. A new and unfamiliar arm was furnished a lethargic personnel almost on the field of battle. The leaders held their pieces back lest they might lose them. Their ammunition was very imperfect. Shell was lacking. The battery organization was poor. Their fire discipline was inferior. Their continuous retreat led to the otherwise uncalled for firing of ammunition that they could not carry back.

Our cavalry has a right to demand from our artillery, and reason to fear from hostile artillery, an enormously greater effect than might be concluded from the imperfect data given above.

E. F. McGLACHLIN,
Lieutenant Colonel, Third Field Artillery.

CAVALRY REMOUNTS.

ONE of the most pressing needs of our cavalry service at present is a sensible and adequate system of issuing and training remounts to replace the present lack of system and heterogeneous collection of ideas and methods of training now in vogue.

We have an excellent system of procuring remounts for the service in the present remount depots of the Quartermaster Department. While perhaps not all that could be desired, they are certainly a tremendous advance over former methods, and the officers who have brought them to their present state of efficiency deserve the greatest credit. They have not had time as yet to do more than get a good start and it is very much to be hoped that Congress will not neglect their needs and thus allow the good work so well begun to be wholly or even partially lost. With our appropriation methods and ever changing cabinet members, who barely have time to learn the needs and requirements of their respective Departments before giving way to successors who have it to learn again, there is a deplorable lack of permanent policy or what may be termed "continuity of ideas."

But what is the present system of issuing the remounts to the troops from the remount depots? Apparently there is no "system" worthy of the name. The method, as everybody is aware, is for the organizations to requisition for horses from time to time as needed. After approval these requisitions are filled by the remount depots. This is all very well except for one most important provision which is wholly neglected at present in our service, though scrupulously provided for and carried out in the European mounted services.

I refer of course to the need for having all remounts received at the same time each year by the organizations requiring them, instead of getting them in driblets as at present. As an illustration, the case of a certain squadron may be mentioned which

has received three separate shipments of remounts at various intervals during the period from March 1st to June 10th this year. The inevitable result being that it is now necessary to work these horses in three separate squads as regards their training and conditioning, with the certain prospect of having to establish a fourth squad for those that are held back by sickness, lack of aptitude or other reasons.

Also the time of year for receiving remounts should be most carefully considered and decided upon. To my mind the spring is the worst possible season as the remounts will either have to be left back in the post when the outdoor work of the open season commences, or, as is generally the case, they will be taken on practice marches and maneuvers before their condition warrants it, thus breaking down prematurely a large precentage of perfectly good horses which could have been saved—and their training is never completed.

For many and obvious reasons the fall season is the proper time of year to issue and receive remounts. Their breaking training, and conditioning can then be carried on gradually through the winter or closed season when under normal conditions there is the least chance of field service. By the time the practice marches and other field service take place the following year the remounts will have had at least six months conditioning and training. While this is far from sufficient, it is much better than nothing. I do not pretend to be an authority on the development and training of young horses; neither have I space here to discuss the matter, but in this connection the following quotation from the Manual of Equitation of the French Army for 1912 is most apropos: "The education of the young horses lasts two years. The absolute necessity of this rule has been shown by experience under present conditions of raising horses, and no one has the right to disregard it, except in case of mobilization." (p. 45.) It goes on to say that the remounts are received when either four or five years old, the first year is devoted to breaking with the object of physical development and the second year to training with the object of getting complete submission to the aids.

Since the French seem to be at present our mentors in

matters of equitation and training, and justifiably so, it would seem that we might profit by their experience and words of wisdom in this respect also.

It is such a simple matter to arrange that it seems a great pity to neglect it longer. A War Department order providing that requisitions for remounts necessary to filll up each regiment or squadron will be made on the 1st of September of each year, and filled by shipment from the nearest depot before the 31st of October (the total number required for each post to go forward in one shipment) would be all that is necessary. An officer at present in charge of one of the remount depots, and therefore in a position to know, states that this method would also simplify the work of the depots to some extent, enabling them to concentrate all work connected with filling requisitions during a definite and limited period of the year.

In regard to the other phase of the matter, the training of remounts, I have some very definite ideas and views of what we need to correct the faulty methods in use at present. There are so many others in the service better qualified to speak with authority on this subject that I shall refrain from expressing my views. I understood some time ago, while at the Mounted Service School, that an American manual of equitation was in course of preparation, and have been looking forward to its publication with eagerness and even impatience. I trust the plan has not been abandoned. An authoritative manual on this subject is as much needed as a Small Arms Firing Regulation or Saber Manual, if not more so. If, as we are taught, the horse is the cavalryman's most important weapon, we should certainly have a deatiled method of preparing such an expensive and valuable weapon to give the best service, and of teaching our men how best to use it. No one I think will dispute the statement that "The training of the rider presumes a trained horse; the training of the horse presumes a trained rider,"* yet how often we see the two confused and attempts made to train remounts with untrained riders, or conversely, to teach recruits to ride on untrained or partly trained horses, often resulting in the practical ruination of several thousand dollars worth of

*French Manual of Equitation, p. 11 and 12.

good horseflesh and the failure of the recruit to ever become more than a very mediocre horseman.

If the matter is of any importance at all, it is certainly worthy of the best efforts of our best horsemen. Why is it not possible to have a representative board of our recognized experts detailed at once to prepare a manual of equitation and horse training, to be promulgated as soon as possible, and then require all officers charged with the responsibility of training remounts to conform to such standard and uniform methods as may be prescribed.

C. W. STEWART,
First Lieutenant, Fifth Cavalry.

SHIPMENTS OF REMOUNTS.

EXPERIENCE seems to show that too little attention is paid to our remounts when they are shipped to regiments. Two batches of new horses have been sent to the Ninth Cavalry within the last month. The first consisted of forty-eight horses sent to headquarters at Douglas, Arizona, twenty-four more were sent to the first Squadron Headquarters at Hachita, N. M., but no data is at hand concerning these and the second consisted of sixty-eight horses. Of the first lot of forty-eight, thirty-one were sick when they arrived and two have since died; of the second lot of sixty-eight, thirty-eight were sick when they arrived but so far none have died.

From the writers' experience this same condition has existed in our service for the last twenty-five years. The question may then well be asked why are not steps taken to correct such an evil? The only thing that is done now that was not done twenty-five years ago is to inocculate the horses against shipping fever before they are shipped from the depots or purchasing points. This is unquestionably a wise measure and it may be due to this inocculation that only thirty-one

out of forty-eight and thirty-eight out of sixty-eight horses were sick upon arrival at the regiment. It must be safe to say that inocculation kept some from being sick and some sick ones from being sicker or dying. Nevertheless a deplorable condition exists and further and more rigorous steps should be taken to correct it.

We make much of our present day knowledge and practice of sanitation and we are justly entitled to do so. Many soldiers are spared from sickness and death due to this knowledge and present regulations, but we do not yet seem to have awakened to the necessity for protecting our horses in like manner. When they arrive all must be isolated for two or three weeks and the sick ones probably much longer. If at a post there may be a veterinary hospital where this can be properly done, but in the field as we are now, the facilities are nothing. They may be tied away from the other horses but they get loose and run among the old horses and soon we have the same disease appearing among them.

We have at present six old horses in one troop sick with this fever due to its spread from the new ones. Extra details of men are required to care for these sick horses; it is several weeks before their training can be commenced; there is always the danger and in our case the existence of the spread of the disease to the old horses; add to this, the death of such numbers as may succumb and we have a picture of this evil which we are too placidly tolerating.

Most of the horses referred to above have the influenza or pink eye but some have shipping fever or strangles. Of the sixty-nine cases that have arrived here sick, sixty-six had influenza and only three strangles—temperatures ranging from 100° to 106°. They have been given every care possible with the facilities at hand; they have been further inocculated and with the sicker ones this is repeated from day to day until they show marked signs of improvement.

The horses of the first lot were in very poor condition when they arrived, having been eight days on the road from Kansas City. Whether this delay was due to unloading or to side-tracking I know not, I can only say that their condition would indicate that it was due to the latter. In the first ship-

ment a larger per cent. were sick and the sickness was more difficult to control, hence the deaths of two.

I believe that an Army Veterinary Surgeon should be sent with each shipment of a car or more of new horses. He should know the laws as to the care of stock en-route and should see that the railroads conform to them. I doubt if the usual civilian quartermaster employee sent with these shipments is competent to see that they get proper care. The horses that have died from the first shipment arriving here, cost the government $326.00; add to this the loss due to deterioration in all of the horses and their enforced rest for probably six weeks and it appears that it would be economy to spend considerable to stop this evil

I believe that experience shows that the horses that come from the horse markets of Chicago, Kansas City, St. Louis, etc., are in much worse condition than those that come from the remount depots. The first source of trouble then is the horse market or stock yards where officers of the Quartermaster's Department, are buying. How these are to be purified is more than I can say but surely if the Federal Government would take hold of them through its agents in the Agricultural Department a way would be found to solve the question.

I understand that Texas or tick fever is pursued by these agents and whenever cattle are found afflicted with the disease, all sources of infection are destroyed with most satisfactory results.

Unquestionably the second source of infection for our new horses is the stock cars in which they are shipped. Again I am unable to say what precautions are taken by the railroads or the Quartermaster's Department to prevent infection from this source. I never heard of a railroad disinfecting its cars before or after use—nor of the Quartermaster's Department disinfecting the cars before shipping horses.

Another phase of the question is that in time of war, if a regiment in the field was to be supplied with such a lot of infected horses, they might better turn them over to the enemy to infect their horses rather than be tied down to such a lot of

invalids with the probability of infecting what good horses they had. Again in time of peace let us prepare.

MALVERN HILL BARNUM,
Major Ninth Cavalry.

BORAX FOR CAVALRY STABLES.

RECENT experiments by the U. S. Agricultural Department show that a small amount of ordinary borax, sprinkled daily on manure, will effectually prevent the breeding of the typhoid or house fly. Borax will not kill the adult fly, but will sterilize the fly eggs, whether found in manure, garbage, refuse, toilets, or crevices in floors. The moderate use of borax on manure has been found to have no injurious action on the subsequent use of the manure for agricultural purposes; the results of a more extensive use of borax in this connection has not yet been determined, but is being studied. This phase of the question is however comparatively unimportant to the cavalry officer. The main issue is whether it will decrease the number of disease bearing flies about a cavalry camp, and this seems to have been proven beyond a doubt.

The experiments of the Agricultural Department were carried on at Arlington, Va., and New Orleans, La., and proved that 0.62 of a pound of borax or 0.75 of a pound of calcined colemanite (crude calcium borate), would kill fly-maggots in eight bushels of horse manure. In garbage cans and refuse piles, two ounces of either of the above substances prevented flies from breeding.

The method of using the borax or colemanite is as follows: It should be sprinkled in the quantities given above around the outer edges of the pile of manure, through the use of a flour or other fine-meshed sieve. Immediately after, the manure pile should be sprinkled with water, in the proportion of two or three gallons to eight bushels of manure. It is very desirable

that a little borax be sprinkled daily, as manure is added to the pile, instead of waiting until a large pile has accumulated, as in the latter case the borax will not act so promptly or effectively on the new laid fly eggs. As fly magggots congregate at the outer edges of manure piles, most of the borax should be sprinkled there.

This use of borax or colemanite should be a very effective aid to cavalry officers as well as all sanitary officers in fighting the disease carrying fly, for at a cost of five or six cents a pound in 100 lb. lots, it has been estimated by the Department of Agriculture that the cost in city stables should not exceed one cent per horse per day. Hitherto the use of iron sulphate and potassium cyanide has been too expensive to allow of extensive use.

The discovery is so new that reports of the use of borax or calcimed colemanite in private stables have not yet become available, but the exhaustive tests of the Department of Agriculture seem to be absolutely final. It would be interesting if troop commanders would experiment with this chemical in their summer camps, particularly in those along the Mexican border where flies are very numerous, and report the results of their tests through the columns of the CAVALRY JOURNAL.

C. D. RHODES,
Major, Fifteenth Cavalry.

ARE ARMY BANDS NECESSARY?

WHERE economy can be practiced, and something saved, by all means let us do it, and under this head would come:

BANDS.

If there is one element in the cavalry in which the Government fails to get its money's worth it is the mounted band. The rendition of high class music and the performance of

kitchen and stable police do not go well together, and the proper maintainance of the band is the source of more petty squabbles in a regiment than almost any one other administrative feature, and places the Regimental Adjutant between two fires.

To maintain a good band he must make concessions to musicians, and men must be detailed away from their troops and prisoners employed to relieve bandsmen of the drudgery of the duties above referred to. This the troop commanders, whose troops are already too small, resent either covertly or openly. Should the Adjutant take the other horn of the dilemma and insist that every bandsman groom the horse that he rides and take his regular turn at cook's and stable police, his most accomplished musicians will decline to re-enlist and will go to bands where their duties are entirely musical.

The music of the band not being up to the mark, the Adjutant is criticised on all sides, particularly by the non-combatants of the garrison. The result is that he usually determines to have a good band, making the bandsmen perform the duties for which enlisted if possible—but, by whatever means, have a good band.

Now as a matter of fact the need of a *mounted* band is by no means one of daily occurrence—indeed, were tab kept on all cavalry bands for a year, it is doubtful whether their turning out mounted would average more than once a week.

The writer begs to observe, therefore, that the original cost and expense of the upkeep of the mounts of the band is too much considering the real military use that is made of it.

When the Ninth Cavalry was at the Division Maneuver Camp at Fort Sam Houston last summer it had a trumpet corps which was a delight to hear, and it is understood that years ago the Seventh Cavalry had a similar one.

This seems to point a way to the solution of the vexed question. Let us drop our expensive cavalry bands except the Chief Trumpeter and possibly the Drum Major, a bass drummer and a snare drummer and a couple of cornetists. The Chief Trumpeter should be a warrant officer with initial pay of $65.00 per month. Let the Chief Trumpeter devote his time exclusively to the training of the trumpeters, especially in

working together as a trumpet corps, thus forming within the regiment, at a relatively trifling expense, field music which no regiment need be ashamed of, and which will answer all the practical purposes of a mounted band. This would not mean that our men would never hear a military band by any mean , for the infantry and field artillery, with which cavalry is usually stationed, have bands whose music is ample for concerts and serenades, and the rendition of high class music which all delight to hear. If we ever have a post garrisoned exclusively by a brigade of cavalry, let there be established there a *post* band. Even under these conditions it is doubtful whether it would pay to have it mounted.

To get a rough estimate of what our music costs, I asked this morning to see the last pay-roll of the ——— Cavalry Band. Excluding the pay of the Chief Trumpeter, the pay-roll foots up $718.00. During the past three months I have given rather more attention than formerly to the duty performed by the Band, and for about one and one-half months (November 2d to December 14th) it was with us in camp at ——— ,where we went for target practice, and, therefore, under close observation. February 2d will make three months and from now till then I assume that the band will play about as often per week as it has since November 2d.

Roughly speaking, I should say that during the three months under consideration the band has or will have played, mounted, about twelve times. Dismounted about thirty-six times. I fancy our band works about as much as the *average* band—no more or no less.

Now let us see what it has cost:

Pay for 3 months at $718.00 per month	$2154 00
Forage for 28 horses—hay at 1 cent per lb., grain at 2 cents, and feeding 10½ lbs. grain and 14 lbs. hay (no bedding)	901 00
Rations for 28 men for 92 days at 22c per ration	566 00
Clothing	190 00
Total	$3811 00

Now let us assume that during this period of three months the band has played forty-eight hours, i. e., every time it has turned out it has played an hour, including intermissions. This is not excessive work. Where the band has turned out for say one half hour at guard mount, two of these will count an hour. Band *practice* not to count, for that is indoors and troops get no benefit from it.

$$\frac{\$3,811}{48} = \$79.00$$

Or in other words, even if we neglect all such items as cost of horses, barracks, fuel, light, medicines and numerous incidental expenses, our band has cost us about $80.00 for every time it has turned out.

Are we not paying too much for our whistle?

W. C. B.

CAVALRY RECRUITS.

How can better and quicker results be obtained?

OFTEN has the inadequacy of the training of recruits been forced on me, and I presume on many others.

To all, has the poor horsemanship in our army been apparent; glaringly so of the troopers out of ranks; when attempting the simple school movement; or trying to control their horses, when running or cutting at heads etc. *Why?*

Now many will immediately answer that the horses were improperly trained when they were remounts. The poor training is freely granted. But should there not be a few, sufficiently well trained men in each organization, fit to turn out well trained horses, from the few remounts received during the course of each year? Some sixty or seventy men in each troop, many re-enlisted cavalrymen, yet hardly none found fitted for turning out a really first class horse. *Why?*

Of course some will say: "Look at the horses they have to train: common, cold blooded fellows, with their light draft-like appearance; with heavy, coarse necks; heads badly set on;

and the whole mechanical conformation wrong for a galloper." True, the horses are not ideal. But are the best results obtained from the material on hand? Decidedly no. *Why?*

They are greatly improving the horsemanship of the officers, thanks to the "*Mounted Service School*," but are these results fully, and thoroughly, transmitted by them to the enlisted men? At least at that period of their instruction when the greatest benefit would be derived, viz., when recruits. *If not, why not?*

Now I think all these questions can be answered by the one fact that recruits are not properly trained in the first place.

The remounts are assembled in the regiment, when practicable, and put under the care of a Riley graduate. *Good!* But from where does he get his horsemen? From the one time recruits, badly trained. We will begin with the horses now being furnished. They are, to repeat, put under a Riley graduate, his assistants being selected men. The recruits, joining about this time, are put under whom? Probably some non-commissioned officer known as a good drill master, because he crawls the poor recruits, and has the ability to get them confused, and has a few old service explanations and methods at his finger tips. In reality he is probably gruff, harsh, cursing, intolerant of mistakes within his vision, not knowing the meaning of good hands, a well balanced seat, and strong leg control.

Now the trainers of the remounts of few years hence, where do they come from? From the recruits just spoken of, whom, from the very beginning were mismanaged, wrongly trained, and chucked so full of equestrian imperfections that they would have to be taken apart, sorted, sifted, and put together again before they could ever be taught properly.

So the poor officers, training remounts, have a monumental task on their hands; more horses than they can properly supervise at one time, and a poor lot of assistant trainers. How can you expect good results? Yet it is because the poor recruits are put, not under the very best and most skillful instructors but are put under a junior officer, or an old, "inculcated-full" of wrong ideas N. C. O.

Of the two, the training of the remounts should be the easier, yet they are put under men especially trained in that line of work, and the recruits under the least trained, or nearly so.

I would not attempt to say just how recruits should be trained, this is only to call attention to the fact that, at present, it is totally wrong. It is for the regimental commanders to work out a system of perfect instruction, fitting not only the general mass of recruits received, but fitting each case separately and distinctly. One thing is sure, and that is that one officer can not supervise the instruction of over fifteen or twenty recruits, unless aided by thoroughly capable assistants, (once recruits,) for each recruit must be individually corrected; when a seat becomes dearranged, the whole squad must be stopped, and the seat rearranged; the natural mental and physical adaptability of each recruit must be considered.

When I say the regimental commanders are the ones to devise the scheme of instruction, it is understood that he personally can not do the instructing, but he can watch their progress, observe the short comings of the instructors, make necessary changes, and do much generally for their advancement.

At present the results, especially in horsemanship, and riding, are very meager for the time and energy spent. It is a big problem, lying at the root of our cavalry fitness in its ranks, and well worthy of the most minute and painstaking study and observation.

Personally I would like to hear of methods and means for obtaining better and quicker results.

And now, with the recruits coming only two or three times a year, and being in bunches, is a golden opportunity to get them properly started in their training; with a solid, well founded nucleus of ideas, as to how their parts should be performed; a right and intelligent idea of the necessity of the little things, apparently trivial, yet so necessary to be correctly executed, if they are to build on a solid foundation; a foundation allowing them to be developed into better and more efficient cavalrymen. But if started out badly, given wrong ideas, and impressions, their very root of instruction twisted, how can they progress beyond the mediocre?

Remember that their first impressions are the "stickers."

Their whole future horizon is shadowed, or lightened by these first impressions. They must be started rightly, or else their after development will be curtailed.

It is only some fifteen years since I saw my recruit days but how some of the impressions still stick. How hard it is for all of us to throw away the old drill ideas, and to accept the new ones without shadowing them with impressions of the old ones, though perhaps at variance with the new. So, how hard it must be for a recruit started wrongly by a man whose ideas he is taught to respect, to change his views and manner of doing things later on. It is hard to teach an old dog new tricks, and harder still to break him of well grounded ones.

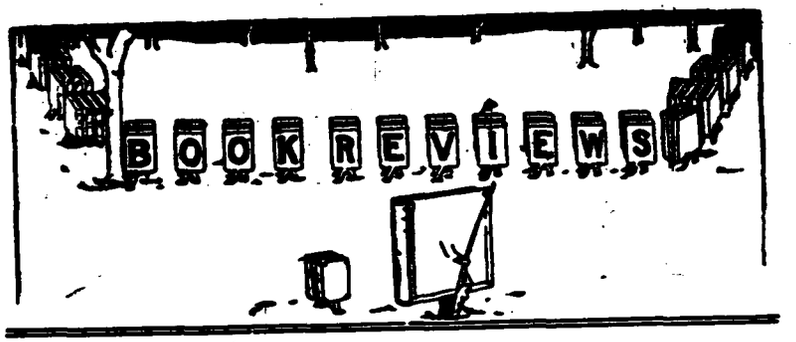
Our cavalry should be as finely trained as any in the world. They speak of the importance of "leadership" in cavalry, granted, but how about the "followship?" Whom does he lead? Who are to make or mar his leadership? The poor rookie of a year or so past, taught wrong methods, given wrong impressions, wrongly developed, wrongly incapable of the development that might have been.

Why not properly start at the bottom and build up? Why crowd the best and only material we have, into a distorted, "misdeveloped" cavalryman?

It is time, that we change it a bit. The results are around us. We can see them every minute of the day. If our brains are so ossified that we are unable to see the mistakes made in recruit training; if our energy and capacity are so small that we can not get out of the old rut, then lets get out and make room for somebody else. That at least would be patriotic.

Come on with your ideas as to how recruits should be trained. Let us be especially favored by those who were sent, at government expense to foreign countries, and can and should tell us in detail of recruit training in Europe.

X.



Balck's Tactics.* A translation into English, by First Lieutenant Walter Krueger, Third Infantry, U. S. Army, of the fourth revised and enlarged edition of Volume II of "*Tactics*" by Balck, Colonel German Army, has just come from the press of the U. S. Cavalry Association.

The original work, as is well known, is published in six volumes: I. Infantry. II. Cavalry and Field Artillery. III. War Organization; Reports; Orders; The Service on the March. IV. Railroads; Sea Transports; Outposts; Shelter; Reconnaissance; Subsistence. V. The Science of Tactics; Tactics in General; The Battle; Retreat and Pursuit. VI. The Science of Tactics; Night Combats; Wood and Village Combats; Combat for Defiles and River Lines; Mountain Warfare; Minor Warfare; The Service of the Line of Communications. (In previous additions Vols. II and III were entitled "Applied Tactics").

The part of Vol. II, relating to *Cavalry*, is presented in six sections: I. General. II. The Formations. III. The

* "TACTICS." By Colonel Balck, German Army. Volume II. Cavalry, Field and Heavy Artillery in Field Warfare. Authorized Translation from the German by First Lieutenant Walter Krueger, Third Infantry, U. S. Army. Fourth enlarged and completely revised edition. With numerous plates in the text. U. S. Cavalry Association, Fort Leavenworth, Kansas. 1914. 535+xvi pages. Price $3.00, postpaid.

Combat Operations of Cavalry. IV. Cavalry versus Cavalry. V. Cavalry versus Infantry. VI. Cavalry versus Artillery.

The part relating to the Artillery is presented in nine sections: I. Armament, Mobility, and Organization. II. The Formations. III. Employment of Artillery in Action. IV. The Attack. V. The defense. VI. The Retreat. VII. The Employment of Artillery according to various Regulations. VIII. Mountain Artillery. IX. Horse Artillery.

Regarding the present day rôle of Cavalry, the author states in the Preface to Vol. II: "In proportion as the cavalry in the operations in the Balkans, in South-Africa and in Manchuria, was unable to reap successes with the 'arme blanche,' it is the more necessary that the science of war, as such, should point out that cavalry need by no means abandon shock action; that in spite of all the mechanical improvements in fire arms, saber and lance have not yet ceased to play their rôle. As highly as I value the importance of fire arms, I am nevertheless firmly convinced that the days of the charge are not yet passed." To this principle considerable prominence is given in the book.

Referring to the Field Artillery he makes the following remarks: "The employment of heavy artillery has, of course, received thorough treatment in these pages. The events of the Russo-Japanese War give but a faint idea of the power of the modern rapid fire gun although the latter's shrapnel was so effective as to force the artillery on both sides into covered positions and to very materially protract the combats. * * * The lessons of the Russo-Japanese War, however, are applicable only to guns without shields. * * * Gun shields will impart an entirely new character to the artillery combat of the future * * * *New Weapons, New Tactics*; Tactics can not wait for the events of the next great war, but, looking ahead, must endeavor to divine these changes. Nevertheless we will not be spared surprises. These will be the greater the less we have studied, in time of peace, the characteristic properties of modern weapons, and the less we have appreciated these weapons at their true value."

Especially interesting and instructive are the sections on Heavy Artillery, the importance of which arm is fully recognized by the author.

The same treatment and arrangement of the subject matter is retained in Vol. II as in Vol. I, of the 4th and of previous editions. The treatment represents the principle that tactical lessons must be deduced from human nature, from the effect of weapons, and from experience in war, proper regard being had for national characteristics and historical transmission. *Tactics is psychology.* The arrangement is based on a comparison with other armies, and is amplified by numerous examples from military history.

The volume contains a very detailed table of contents and a most complete index, the historical examples cited in the text being separately indexed. These features enhance its value to the military student.

The paper, typography, illustrations and binding are very good.

The translation of Vol. I appeared in the spring of 1911. Due to the importance of the subject, its masterly treatment by the author and the excellence of the translation, it soon became extensively and most favorably known by the military profession here and abroad.

The equally excellent translation of Vol. II, eagerly looked forward to by all arms, but especially by the cavalry and field artillery, now makes its appearance at a most opportune time in view of the gigantic armed conflict raging in Europe.

Much credit is due the able translator for this most excellent volume.

CHARLES MILLER,
Major, Seventh Infantry.

Seventy Problems.* This is the modest title of a book of 564 pages, comprising seventy problems and their solutions as given out by Colonel Morrison to the various classes at the Army Service Schools while he was head of the Department of Military Art at that Institution.

These are *all* Colonel Morrison's *own problems* with his able solutions and characteristic comments. They cover a wide range of subjects, from patrols to a division of all arms. Together with them are bound copies of three of Colonel Morrison's lectures: "*Patrolling*," "*Infantry Tactics*" and "*Small Arms Ammunition Supply*."

The problems are typically American, use American units and American terrain and are by the recognized American authority on the military art. They need no further recommendation.

Nearly every officer of the army has at one time or another solved some of these problems. The value of the present book is that it puts into convenient form a variety of excellent problems, covering the widest extent of tactical subjects and so arranged that a problem of any desired nature can be readily selected for study whenever wanted. They will be found most valuable for officers preparing for a detail at the Army Service Schools, for study in Officer's Garrison Schools and for the instruction of the National Guard. Colonel Morrison's many admirers will want a copy for their own satisfaction.

The text is sold either with or without maps, thus enabling those who are already provided with the 2-inch and 4-inch maps of Leavenworth and the 1-inch and 3-inch maps of Gettysburg to buy the text separate. Those who own part of the maps can also purchase separately the additional maps required.

Great pains has been taken to render the workmanship of the book perfect. The printing is clear, easily read and of good size; the paper used is so thin that the volume is not the least bulky, and the neat olive green cover makes a very attractive appearance.

ELTINGE.

* "SEVENTY PROBLEMS." Infantry Tactics. Battalion, Brigade and Division. By Colonel John F. Morrison, U. S. Infantry. U. S. Cavalry Association Fort Leavenworth, Kansas, 1914. Price for text only—$2.00, postage paid. Maps, unmounted in case, bound to match the text—$1.25 per set. Maps, mounted on cloth in a roll, the roll case being bound in same style as text, $2.10 per set. All or any of the maps will be supplied without the case or roll, at actual cost, including postage. Considering the style of binding, printing and paper and the number of pages, this is the cheapest book ever published in this country. The object of the author has been to get the book into the hands of our officers at the lowest possible price and get out even.

Japanese in Manchuria.* As the author says the work is not a history of the great war in Manchuria but a military "*study*."

Nevertheless the two volumes give a very good historical sketch of the war from its commencement to the close of the battle of Liao Yang. The work is an excellent strategical and tactical study and a fair and impartial critique of the work of both sides. Where the reader is not willing to accept the author's opinion he finds a subject for thought and study although he will as a rule agree with the author. The author's opinion of the two commanders, Oyama and Kuropatkin, I think most students of the war will accept as fair and just. Kuropatkin as he says would have made a fine chief of staff for a daring general. To bring the comparison home to us Kuropatkin was a second McClellan.

The author emphasizes the fact that professional learning may make a chief of staff but character makes the general.

Oyama had the character, Kuropatkin the learning.

The author's comparison of the troops of the two countries is correct and just:

"The Rûsso-Japanese War is of very special interest in this connection, because of the splendid infantry on each side. If we were required to be comparative in our admiration we might be inclined to rank the Russian infantry the higher of the two, for the confidence in success which makes men brave, was all

* "THE JAPANESE IN MANCHURIA, 1904." By Colonel E. L. V. Cordonnier. Translated by Captain C. F. Atkinson, Unattached List. (Infantry University of London, O. T. C.) Volume II, Part II—The March to the Battle. Part III—The Battle. Hugh Rees, Ltd., London, 1914. Price nine shillings, net.

on the side of the Japanese, who had so many wins to their credit already, whereas the Russians had suffered defeat after defeat." (P. 252).

Both these armies were composed of fighting men; he does not seem so sure of others, he says, p. 150: "In our days of prolonged peace and ever spreading luxury, the fighting value of an army is practically an unknown quantity."

The discussion of operation orders is very fine and worthy of careful study by all officers—p. 160 *et seq.*

The same is true of what the author says of battle fronts—p. 165.

The author differs from the majority of writers, apparently on the use of dismounted fire action for cavalry.

"One consequence of the Russo-Japanese War has been that we in Europe have conceived an unhappy passion for dismounted cavalry fighting. * * * But it now seems as though we [France] have remounted and that fighting on foot is once more becoming what it ought to be—an exceptional incident in the life of the horseman."

"In several places the author treats of organization and training and their vital importance. If our law makers could only read and grasp it we might be saved from great misfortune.

"It is the peace-time organization of the masses, the peace-time training," etc.

"If the ante-bellum citizen had made a greater effort he would have saved his blood and money. The total effort would have been smaller."

The work is especially a study in strategy and higher troop leading.

It is not "right-line" work, but is practical clear and strong. Where the author draws a conclusion you can grasp his reasons.

The book is well worth careful study by our officers.

One lesson we can all get is the importance of team play, no one arm is much by itself. Page 258 should be carefully read.

The book, like all of Hugh Rees books, is well made. The maps are numerous and good.

J. F. M.

La Cavalrie.*

Colonel de Cissey published this study in the *Journal of Military Sciences* from July, 1913, to January, 1914. Before the publication was completed the dispositions which he advocates were formally adopted by the French Army by the decrees of October 28th and December 2, 1913.

Broadly, the author advocates a more complete tactical organization of the mass of the cavalry, in one theater of operations, into a large body under a single head for the purpose of obtaining a coördination between all parts of the cavalry command and for a complete separation of cavalry for local protection from cavalry for the securing of information about the enemy.

He would reduce the cavalry assigned to Army Corps (The French have Corps Cavalry and not Divisional Cavalry), for local protection to a minimum and localize its employment, utilizing the regiments thus saved to increase the force organized under the Cavalry Commander and used by him under the direct orders of the Commander-in-Chief.

In arguing this point, he takes up a critical study of the use of cavalry by the German armies around Metz, early in August, 1870, going over much of the ground covered by Pelet-Narbonne in "Cavalry on Service," but with less historical detail and more discussion and analysis of the lessons to be learned. He follows the German Army historically from day to day and points out the many times when the German leaders were obliged to make momentous decisions on a mere guess because the service of their cavalry was so poor that no reliable information had been obtained.

He also shows that von Moltke had originally intended to use his cavalry in a far different manner.

The study is strongly written and will well repay any officer for the time spent on it.

It is accompanied by sketches and maps, the latter being photographic reproductions and rather hard to read.

*"LA CAVALRIE dans le groupe d'armes, l'armee et le corps d'armee." By Colonel de Cissey, French Army. Librairie Militaire de Chapelot, 1914. One volume, with two maps and seven sketches in the text. Price four francs.

The same reasons of probable size of armies to be put into the field and probable character of roads and terrain to be used which impelled us to dispense with Army Corps in our organization must be considered in applying conclusions drawn from this study to our own service.

E.

Principles of War.*

Volume I of this work constitutes the text and Volume II the maps, of which there are five, all relating to the Russo-Japanese War.

Volume I has, including the index and an introduction by General Sir Horace L. Smith, G. C. B., D. S. O., A. D. C. General, 440 pages, clearly printed in large type on unglazed paper which makes it unusually easy on the eyes and especially adapted for reading at night.

The book seems to be mainly an elaboration of the principles of the British Field Service Regulations and other manuals and, as such, will be very useful to those interested in following the trend of thought and teachings in the various foreign armies.

The work commences with a very readable chapter on "Factors of Success in War," of which the author recognizes three essentials: (*a*) Certain moral qualities as courage, energy and determination; (*b*) War Preparations; (*c*) Skill in applying the power produced by the combination of (*a*) and (*b*), the author's conclusions being supported by references to the American Civil War, the Franco-German War of 1870, and the Russo-Japanese War.

This is followed by chapters on the characteristics of fighting troops, each arm being separately considered.

Then follows two chapters on means of communication and inter-communication and orders, ending with some remarks on movements by land and sea and on billeting.

At this time, when the vast schemes of mobilization and concentration scarcely completed in Europe, and Great Britian

*"THE PRINCIPLES OF WAR." By General E. A. Altham, C. B., C. M. G. The Macmillan Company, New York. Price $3.50.

participating therein, the chapter on movement by land and sea, which treats of the mobilization and strategical concentration and deployment, will be particularly interesting. Whatever may be the outcome of the great struggle now going on abroad, this book will be most valuable in showing the direction of English teaching along these lines, before the war and will thus give a suitable background for the study of the works that will surely follow the close of the present military activity in Europe.

To the critical reader, the historical allusions are not always convincing, but this could scarcely have been remedied in a single volume. The author gives references which will pave the way for such readers so that, if they have access to a suitable library, they may test the accuracy of the author's statements and the justness of his conclusions for themselves.

It is believed that this book is well worth careful study, especially at this time, as a preparatory step to the study of the present war, which study, of course, cannot be pursued at the present time.

W. G. S.

Campaign of 1814.*

This work appears to be a translation of Houssaye's Compaign of 1814, sixty-sixth edition, published in Paris in 1911.

In rendering the volume into English, Major McClintock has, unfortunately, left out all footnotes and references. In these days of improvement in historical research, this would be considered by many as a serious defect but, notwithstanding this omission, the work is a readable one. Houssaye never fails to be interesting. He is also accurate.

It is easy to see that the author has endeavored to truly record all that occurred, but it has evidently been impossible for him to conceal his partiality for Napoleon. Few, indeed,

*"NAPOLEON AND THE CAMPAIGN OF 1814." By Henry Houssaye. Translated from the original French, by permission, by Brevet Major R. S. McClintock, Royal Engineers. Hugh Rees, Ltd., London, 1914. Price eight shillings, six pence, net.

have been able to entirely resist the fascinations of his mighty genius, even in writing of his deeds years after his death.

The story of the Campaign of 1814 is one of absorbing interest. No one can read it and doubt for an instant that the Emperor possessed military ability of the highest order. But, notwithstanding, the wonderful efforts which his intellect put forth, he was beaten.

There were a number of causes that contributed to this. Youthfulness and lack of training of a large part of the French Army; frequent failures of the marshals and other leaders of the larger units to arise to the occasion in critical situations; disloyalty of a number of these leaders; and faulty tactics on the field of battle, were some of these causes.

Time after time we find the French arriving at the critical point of combat by detachments. Each is crushed in succession before the next one arrives and finally the contest ends in a defeat or in a barren victory. The allies committed the same mistakes but as their forces were numerically superior to those of Napoleon, they generally had a detachment or two left after his were used up.

We must confess, though the Emperor's strategic conceptions were brilliant, the execution of his projects was often execrable. Nor, is he himself entirely blameless. He often risked battle when his military mind must have known that there was no hope of victory. His impatience led him into grave errors in this respect. He could not well continue himself in a defensive campaign. His nature and genius were essentially of the offensive type.

The work is well printed on good paper and has excellent maps.

If one wishes a readable book this is a good one to get and Houssaye's well known ability as a historian will make the book one to be relied upon.

N. F. M.

Army Orders.*

This is a work by Captain Jas. A. Moss, 29th Infantry, of 651 pages—5¼ by 7½ inches—655 pages of text and 86 pages of index—which gives in a single volume a compilation of all War Department general orders, circulars and bulletins that have been issued during the last twenty years and that are still in force.

The dead matter from all this mass of orders, etc., has been eliminated so that the book gives a residuum of the living or useful information under these heads.

A new edition of this work will be issued every year, soon after January 1st, so that the officer having a copy of the latest edition will have at hand a ready reference book which will prove a time saver and which may frequently prevent his having some ancient order sprung on him, the existence of which otherwise may have been unknown to him.

It is printed on thin paper of medium quality and in very small type. While this saves space and weight in the make-up of the book, yet it will require young eyes to read it.

* "ARMY ORDERS." By Captain James A. Moss, 29th Infantry. Geo. Banta Publishing Co., Menasha, Wis. Price $3.00. A special offer is made of the book for two years for the price of a single copy to those who order the same at once.

Editor's Table.

GENERAL CAMILLO C. C. CARR.

While it was occasionally done in the earlier days of the Cavalry Association, it has not been customary to notice in the CAVALRY JOURNAL the death of any of its members however distinguished they have been as cavalry soldiers. Yet it is deemed eminently proper to take such action in the case of the late Brigadier General Camillo C. C. Carr, who died at Chicago on July 24th last.

For the nearly thirty years of the life of the U. S. Cavalry Association, General Carr was one of its staunchest supporters, in addition to having been one of its original organizers and for many years an officer of the Association. He was the Chairman of the Commitee that drafted the first Constitution and also of the one that, a few years later, revised the same, which revised Constitution is practically the same as the one now in force. He was for several years the Vice-President of the Association, while General Merritt was its President, and he was a member of the Executive Council during the entire time that he served at Fort Leavenworth, after the Association was organized. He served as Editor of the CAVALRY JOURNAL from June 1890 to September, 1892.

General Carr was a soldier in the Army of the United States for nearly fifty-two years, during which time he served in every grade of the cavalry service from private to general officer with honor and distinction.

He was three times brevetted for gallantry in action, the first being for his service in the battle of Todd's Tavern, Va.,

the next for that at the battle of Winchester and the last for that against the Nez Perce Indians at Camas Meadows, Idaho, in 1877.

He was the translator from the French of General F. De-Brack's work on "Cavalry Outpost Duties," which book has been the standard authority on that subject in this country for many years.

A CHANGE OF HEADQUARTERS.

Three or four times in recent years the suggestion has been made by several members of the Cavalry Association that the headquarters of the Association should be located in Washington as being nearer the Headquarters of the Army, and, therefore, in closer touch with the workings of the General Staff as regards the welfare of the Cavalry service. However, no formal proposition has ever been made to carry this idea into effect and these sporadic suggestions have come to naught.

Very recently, a new proposition as to the location of the headquarters of the Association has been advanced and in such a shape that, under the Constitution of the Association, it must be considered. Some time since, a communication was received from Major Rhodes, Commandant of the Mounted Service School at Fort Riley, advancing the idea that Fort Riley was the proper place for the headquarters of the U. S. Cavalry Association and requesting that the matter be considered by the Executive Council.

Inasmuch as one of the later suggestions as to Washington being the proper place for our headquarters was received by one of the members of the Executive Council at about the same time as was the letter from Major Rhodes, the Council directed that both parties be notified as to the proper manner in which the question could be brought before the Association.

Later, the following letter, accompanied by proposed amendments to the Constitution of the Association, duly signed by the required number of members of the Association, has been received:

Secretary,
United States Cavalry Association,
Fort Leavenworth, Kansas,

My Dear Colonel Fuller:

1. Referring to our previous correspondence on the subject, I am submitting herewith, in accordance with Article XIII, Section 1, of the Constitution, certain proposed amendments to the latter, changing the headquarters of the Association from Fort Leavenworth to Fort Riley, and increasing the members of the Executive Council from five to eleven—the additional members being officers equally divided between the Army Service Schools and the Army War College.

2. It is almost unnecessary to state that I have drawn up these proposed alterations in the Constitution, only after much careful consideration, and conversations covering a number of years, with members of the Association; and that the best interests of the Cavalry Association have alone been the determining factors in asking that the matter be submitted to our arm.

3. It is believed that a strong feeling exists in the service towards removing the headquarters of the Association from Fort Leavenworth, for the principal reason that, while an admirable spirit exists at that station towards the mobile army, it is in no sense a cavalry post or a center of cavalry interest and enthusiasm.

4. I am most willing that the question of whether the headquarters of the Association shall be removed to Fort Riley or to Washington, shall be determined by the Association itself; in either case a serious error will not be made. But in favor of Fort Riley is the fact that for many years it has been the focus of interest to the mounted service, and with the development of the Mounted Service School and the probable stationing of a brigade or division of cavalry at Fort Riley, its importance as a center of cavalry interest will increase from year to year.

5. At the same time, discussions of tactical and strategic questions pertaining to the cavalry are so intimately connected with the Army Service Schools and the Army War College, that the usefulness and value of cavalry officers stationed at those educational institutions, should be utilized to the fullest extent in promoting the policies of the Association.

6. These amendments have therefore been drawn up with the idea in view that the interests of the Association and of the JOURNAL may be safely intrusted to cavalry officers on duty at the *Army War College*, the *Army Service Schools*, and the *Mounted Service School*, with headquarters at Fort Riley, Kansas.

7. I cannot bring these remarks to a close without expressing my personal gratitude to you for your work of the past few years in promoting as Secretary and Editor the interests of the Cavalry Association and of the CAVALRY JOURNAL respectively; and that should the headquarters of the Association be moved to Fort Riley, nothing would give me greater satisfaction than to have you here as our Secretary and Editor.

C. D. RHODES,
Major, Fifteenth Cavalry.

PROPOSED AMENDMENTS TO THE CONSTITUTION OF THE U. S. CAVALRY ASSOCIATION.

The Constitution of the United States Cavalry Association shall be amended as follows:

ARTICLE II.

OLD.	NEW.
The headquarters shall be at Fort Leavenworth, Kansas.	The headquarters shall be at Fort Riley, Kansas.

ARTICLE VI, SECTION 1.

The regular meetings of the Association shall be held once each year at Fort Leavenworth, Kansas, on the third Monday in January.	The regular meetings of the Association shall be held once each year at Fort Riley, Kansas, on the third Monday in January.

ARTICLE VII, SECTION 1.

The elective officers of the Association shall be: A President, a Vice-President, and five members of the Executive Council. Their terms of office shall be one year, or until their successors are elected, and all except the President shall be residents of Fort Leavenworth. Kansas.	The elective officers of the Association shall be: A President, a Vice-President, and eleven members of the Executive Council. Their terms of office shall be one year, or until their successors are elected. The Vice-President and five members of the Executive Council shall be residents of Fort Riley, Kansas—three of them being officers on duty at the Mounted Service School; three members of the Executive Council shall be officers on duty at the Army Service Schools, Fort Leavenworth; and three members of the Executive Council shall be officers on duty at the Army War College, Washington.

ARTICLE VIII, SECTION 1.

The Executive Council shall consist of the President, the Vice-President, the five elected members, the Editor and the Secretary and Treasurer. But when the President is not a resident of Fort Leavenworth, he shall for all purposes be considered as not belonging to the Executive Council, unless actually present.	The Executive Council shall consist of the President, the Vice-President, the eleven elected members, the Editor, and the Secretary and Treasurer. But when the President is not a resident of Fort Riley, Fort Leavenworth or of Washington, D. C., he shall for all purposes be considered as not belonging to the Executive Council, unless actually present.

ARTICLE VIII, SECTION 2.

The Executive Council shall meet from time to time at the call of the chairman, who shall be the senior member of the Council present at the headquarters of the Association.	The Executive Council shall meet from time to time at the call of the chairman, who shall be the senior member of the Council present at the headquarters of the Association; provided, that members of the Council at stations other than the headquarters of the Association shall be given ample opportunity to vote by mail on all matters of policy and other important questions.

ARTICLE VIII, SECTION 3.

Five members shall constitute a quorum for the transaction of business. But if, through the removal of officers from Fort Leavenworth or other cause, the Council be reduced below five members, such number as remain shall constitute a quorum for the purpose of filling vacancies, but for this purpose only.	Five members shall constitute a quorum for the transaction of business. But if through the removal of officers from Fort Riley or other cause, the Council be reduced below five members such number as remain shall constitute a quorum for the purpose of filling vacancies, but for this purpose only.

ARTICLE VIII, SECTION 4.

It shall require a majority vote of all members of the Council to carry any proposition except an adjournment, which shall require a majority of those present.	It shall require a majority vote of all members of the Council to carry any proposition dealing with matters of policy, all other propositions may be carried by a majority vote of those present.

(Signed) C. D. RHODES, Major 15th Cavalry.
(Signed) H. R. RICHMOND, Captain 13th Cavalry.
(Signed) JOHN ALDEN DEGEN, 1st Lieut. 12th Cavalry.
(Signed) H. H. MCGEE, 2d Lieut. 2d Cavalry.
(Signed) W. J. SCOTT, 1st Lieut. 6th Cavalry.
(Signed) J. K. BROWN, 2d Lieut. 2d Cavalry.
(Signed) INNIS P. SWIFT, 1st Lieut. 2d Cavalry.

The following proposition to amend Section 3, Article V, of the Constitution has also been regularly proposed by the members of the Executive Council and will be submitted for the vote of the *regular*, *active* members:

Amend Section 3, Article V, by striking out all of the section and substituting therefor the following: "The subscription price for the JOURNAL of the Association shall be fixed by the Executive Council."

This change is suggested and recommended for the reason that the officials of the Post Office Department have claimed that the old requirement did not make the subscription to the JOURNAL a free and voluntary one and that, therefore, it did not come within the terms of the law in order to be transmitted through the mail as Second Class matter. They have threatened to cancel our entry of the JOURNAL as Second Class mail unless our Constitution was changed in this respect.

Furthermore, the old section did not allow, strictly speaking, the giving of discounts to subscription agencies, nor did it allow the clubbing rates that have been given to members of the other Service Associations, although both practices have prevailed for several years.

The following are the provisions of the Constitution of the Association relating to proposed amendments of the same, and the method which shall prevail in publishing them to the Association:

"The Constitution may be amended by a two-thirds vote of the *regular*, *active* members present or properly represented by proxy, at an annual meeting of the Association. Proposed amendments shall be furnished the Secretary in writing, signed by five or more members, not less than four months prior to the meeting at which they are to be acted upon. The Secretary, under the direction of the Executive Council, shall publish such proposed alterations to the Association not less than three months prior to said meeting."

"Due notice of any regular or special meeting, or of any proposed action to be taken at such meetings shall be deemed to have been given when such notice shall have been published in the JOURNAL of the Association and a copy of the same mailed to each member at the last address furnished the Secretary, or, in case of officers of the regular army, the address given in the last Army List and Directory, at least three months in advance of such meeting."

In accordance with the above quoted provisions of the Constitution notice is hereby given that the next regular meeting of the U. S. Cavalry Association will be held in Grant Hall, at Fort Leavenworth, Kansas, on the third Monday in January, 1915, and that at that meeting action will be taken on the above proposed amendments to the Constitution of the Association.

Blanks for voting on the proposed amendments will be furnished all *regular*, *active* members of the Association, those only being entitled to vote on proposed amendments to the Constitution. *Regular*, *active* members are those regular members who are on the active list of the Regular Army.

CAVALRY DRILL REGULATIONS.

It is understood that orders have been issued by the War Department that, after November 1, 1914, the use of the Tentative Cavalry Drill Regulations will be suspended and that the old Drill Regulations will be again in force. Also that all Field Officers of cavalry will submit a report, on or before the same date, on the Tentative Drill Regulations that have been tried out during the last few months.

Such being the case, now is an excellent time to revise the old Drill Regulations and it is hoped that our Field Officers will take advantage of this opportunity to make their recommendations accordingly.

Several suggestions along this line have been received from our members and it is believed that there never will be offered a better chance to ask for and obtain the much to be desired revision. At the same time, those who have experimented with the Tentative Drill Regulations should carefully consider the good points of the same and emphasize them in the reports about to be rendered.

In order that this most important question for our arm may be thoroughly considered, it has been suggested that each regimental commander obtain the consensus of opinion, if

practicable, of his regiment, not only for the compilation of his report, but also that a synopsis of the same may be submitted to the CAVALRY JOURNAL. This, it is hoped, will enable our officers to come to some general understanding as to our needs as regards up-to-date Cavalry Drill Regulations.

Every one agrees that the Drill Regulations need revision along many lines and now is the time to make an united move to secure the very best that can be obtained.

THE DEMAND FOR HORSES.

Difficult as it has been to procure suitable horses for our mounted services, the indications are that it will be impossible to obtain enough to supply our actual needs in the very near future.

The agents of England and France are now buying horses by the thousands for the armies in France where the losses in horses have been wholly unprecedented in warfare. The horse markets of Chicago, St. Louis, and Kansas City are now doing a thriving business in supplying these agents with horses and every horse that is at all suitable for military purposes is being purchased and at good prices.

It is reported by one of the daily papers that the British War Office has ordered their agents in Canada and the United States to secure one hundred thousand head of horses and that France will take an equally large number out of the United States if they can be found.

It is fortunate for our mounted services, that our country has established remount depots and that they purchase young horses that are not now suitable for service in war. But even with this source of supply of young horses that will require a couple of years for training and developing into suitable mounts and draft horses, the outlook for the future supply is far from being favorable.

All this goes to show the wisdom of the start that has been made in this country, although a small and inadequate one, to encourage the breeding of horses that are suitable for the needs of our army, and the necessity of entering into this business on a much larger scale.

In this connection, the following extract from the *New York Herald*, of September 20, 1914, will prove interesting:

"Though the war in Europe has been in progress only about six weeks it is now all but certain that the horse is just as important as ever he was in the equipment of a successful army notwithstanding the invention of automobiles, aeroplanes and dirgible balloons since the last great war was bought out in Europe. In reviewing the fateful campaign in Northern France the *Herald's* military critic has repeatedly drawn attention to the vital part played by the cavalry of the Allies in constantly harassing the exposed right flank of the German army and hastening its retreat by threatening to get in between General von Kluck's command and the main army.

"The use of mounted troops in heavy masses is declared to be every whit as effective as it was in our Civil War, when the brilliant and telling exploits of Sheridan, Stuart and other cavalry leaders made them popular heroes of the day. Aeroplanes and automobiles now supplement the work of the horse by locating the forces of the enemy and by transporting troops and supplies from point to point, but neither of these mechanical inventions seems to take the place of the horse in anything save the minor functions of the cavalry.

"Thus far the artillery has played a more important part than ever before in both the French and the German army, and here again everything depends on the adequate supply of suitable horses to move the guns and ammunition in advance and retreat. Reports from the theater of war last week stated that the invading Germans were in a bad way for fresh artillery and cavalry horses after their wonderful succession of forced marches from the frontier toward Paris and back again. That such work would exhaust the best horses in the world can be readily believed when it is remembered that unusually hot weather marked the period of advance and that heavy rains succeeded the heat. The wastage of horses by gun-fire and overwork must have been terrific in both armies, under these conditions, but the Germans doubtless suffered most besides having to bring fresh animals from a long distance to take the place of those killed or disabled.

"It has been said that nearly one-half of all the horses in the invading army had been destroyed or worn out when the German advance reached high water mark, on September 6th. Making due allowance for the exaggeration which accompanies so many reports from the seat of war, it is reasonable to believe the losses have been very serious to a vast army so actively engaged and so far from its base of supplies.

"The French are reported to be buying heavily in Mexico and South America as well as in the United States and the English are taking thousands of horses from Canada, Ireland and Great Britian. Germany cannot at present bring in any horses from abroad, unless Norway, Sweden or Holland, where there are comparatively few, and she must therefore look to her own supply and that of Austria.

"The whole number of horses in Germany, according to the latest available statistics, is about 4,500,000, and in Austria and Hungary about 3,800,000. France has about 3,200,000 horses and 200,000 mules, the British Isles about 2,500,000 horses, and Russia about 25,000,000 horses. Comparatively few of those in England, France or Germany are well adapted to cavalry work, and Russia could doubtless mount more troops acceptably than all the rest of Europe put together. When it comes to efficient horses for the artillery and the transportation service, however, the Western nations possess far better horses than Russia has in any considerable numbers. As an indication of the importance of artillery in the present war it is worthy of note that England's first call for horses took 74,000 gunners and draughters as compared with 56,000 for the cavalry."

AIRCRAFT IN WAR.

While the news being received from the great war now going on in Europe is unreliable, contradictory and garbled, yet enough is known to lead to the conviction that the expectations as to the usefulness in war of the aeroplane and dirigible, particularly the latter, have not been fulfilled. It is true, however, that certain reports from the seat of war would lead to the conclusion that aeroplanes have proved useful as scouts in detecting and reporting the movements of large bodies of troops, but still not to the extent that was predicted would be the case.

It is possible that the later and complete reports of this war, to be brought out long after the war is over, will show that the aeroplane and dirigible have proved themselves to be of more value than present indications would seem to warrant.

In this connection the following extracts from a report by Mr. Herbert Corey, a London war correspondent, may be of interest:*

*From the *Kansas City Times*.

Aircraft have utterly failed to justify themselves as instruments of battle in the great war. As instruments of reconnaissance they have been of great value. This formula was suggested to me by an officer of the British flying corps:

"One howitzer is of greater value than two score of dirigibles. One aeroplane may conceivably be of greater value than a squadron of scouts."

Confirmatory opinions have been obtained from two of the leading flying men of France. M. Bleriot, the first man to fly the English Channel, and now one of the leading aeroplane makers of France—his factory is at work day and night turning out aircraft for use in the war—made this statement:

"The dirigibles have done nothing. The aeroplane has been useful—but the last word remains with the guns."

AIR SCOUTS MUST GUESS.

M. Pegoud, who has figured in several daring exploits, is quoted as follows:

"From an aeroplane one sees—but one does not always know what it is one sees. The airman may see that the enemy is in possession of territory; but the work of developing in what strength it is held must still be carried out by cavalry or motor scouts."

Little has found its way into print as to the details of the work done by dirigibles or planes in the war. Gossip from the front, heard in London and Paris, is that innumerable attempts at aggression have been made by the aircraft of both sides. In one case a German "dig" floated over the city of Brussels and discharged nine powerful bombs. From the airman's viewpoint conditions for this savage raid were ideal. There was no wind, and the motor balloon was maneuvered over the city as easily as a catboat in a breeze. The bombs fell upon a densely thronged city, thereby assuring the maximum of cost to life and property.

Only twelve persons were injured. Of these only five were killed. The total damage amounted to the shattering of the upper story of a house and to the excavation of a saucer shaped hole in the ground in which a man might lie down comfortably. One shell from a 6-pounder would have wrought infinitely more ruin, and, falling in the same space, would have cost more in life. The Germans were at the time within ten miles of the center of the city of Brussels at one point of their line. The siege howitzer of today has an effective range of more than twelve miles. A projectile discharged from such a gun would have absolutely demolished any building upon which it fell.

SIEGE GUNS MORE SUCCESSFUL.

To the objection that a howitzer is a heavy and unwieldy piece of artillery, and it is therefore not fitted for field operations, it may be pointed out that the Germans are using a new siege gun which is equally heavy and unwieldy. These guns are drawn by teams of from twelve to thirty horses, and are so immensely heavy that ordinary country bridges are often rebuilt before an effort is made to cross them. Their shells are charged with a new high explosive, of which little is known except that its effect is appalling. It is to this gun that the German success in reducing forts which had been considered practically impregnable to attack is due.

Another unsuccessful attempt at war from the air was that exploit of which M. Pegoud was the hero. With one companion he flew over a series of German encampments near Gravenmacher, in Belgium. His machine was the largest and most powerful Bleriot-Gnome in the French lines. Most war aeroplanes are armored beneath to protect the operators from bullets. Because of the tremenduous load of "incendiary" shells, hand grenades and explosive bombs, Pegoud carried, the armor was stripped from the machine before the start. Otherwise it could not have lifted from the ground. As it was, Pegoud was unable at the outset to lift the machine more than 500 feet in the air. That fact aided his aim in the discharge of the bombs, but also made his plane an excellent target. As a measure of self-protection he flew at night. In lack of exact knowledge, gossip has it that his load of bombs weighed 500 pounds. He discharged every one before he returned.

The net result so far as it can be ascertained, was that the frightened Germans blanketed their fires so that the aeroplanist could not find his target. "It was at first stated that two convoys of ammunition were destroyed by his bombs. This has not been confirmed. It is highly likely, of course, that if an ammunition caisson were struck by an explosive projectile it would be destroyed. It does not necessarily follow that the next wagon of ammunition would suffer. The "incendiary" bombs he carried would unquestionably cause a conflagration if they fell among city houses. They are almost harmless—as harm is counted in this war— if they fall among the tents of an encampment.

"Granted a new high explosive which would produce the effect desired when dropped from a plane, one has still to hit the mark." Said the British officer heretofore quoted. "At a height of one thousand feet the hangars of Aldershot seemed about the size of one's finger nail. At two thousand feet it is quite impossible to distinguish a body of khaki clad troops against the ordinary earth background. Only by the merest chance could a bomb hit the target aimed at."

The French are believed to have something like seven hundred aeroplanes and the Germans about five hundred—or so the numbers were at the outset of the war. This is an estimate only, for neither side has made public any pertinent fact. It is definitely known that each side has been continually engaged in experiments upon the other by means of bombs. The French, at least, have indicated they will give this up as a bad job. Even the moral effect has worn off. In the daytime marching troops have had no difficulty in avoiding the dropped bombs. Bomb throwing at night is highly harassing to those thrown at, but the animated targets have the consolation that, like lightning, an aeroplane never strikes twice in the same place.

STILL NEED CAVALRY SCOUTS.

"Our reports from Belgium are that in broken, wooded, hilly country an airman is quite unable to distinguish with any certainty the numbers or disposition of the troops beneath him," said the British officer quoted. "He might make a fairly accurate estimate of what was going on upon a plain beneath him. Even so, in the present state of development he would only be able to report that a certain number of 'small' or 'large' bodies of troops were under way in a given direction. Such reports have been of great value to us, but they must be supplemented by feeling out the country by cavalry scouts."

Nevertheless, the countries engaged in this great war are adding to their aeroplane squadrons as rapidly as possible. It is conceded that they have not justified the high hopes that were entertained of them before the war began. But they are one of the great dice of war, and they will be thrown again and again, in the hope that at least there may turn up a winning hand.

It is believed that very few have had any idea that the aeroplane or dirigible would prove of service as an offensive machine in time of war but many have thought and still think that the aeroplane would be an invaluable auxiliary for scouting purposes but for that alone. A British officer who said, in commenting on the chances of hitting any definite object by dropping a bomb from an aeroplane or dirigible, under the most favorable circumstances, that the believers in such rot should attempt to hit a shilling lying on the side-walk by spitting at it from a second story window, was correct in his judgment as to the service of aricraft in that line.

There should be no fear that the aeroplane will replace cavalry in this or any other war, but there is no doubt, that this style of aircraft, when made more stable and safer and manageable in all kinds of weather, will be of service and valuable service as an auxiliary to the cavalry by saving horse flesh, by locating troops and their direction of march and in otherwise keeping the advanced cavalry posted as to the maneuvers of the enemy.