



LIEUTENANT GENERAL ADNA R. CHAFFEE.
UNITED STATES ARMY.

WAR DEPARTMENT
OFFICE OF THE CHIEF OF STAFF
WASHINGTON

General Chaffee
125th Infantry
at Camp
at
at
at
at
at





WAR DEPARTMENT,
OFFICE OF THE CHIEF OF STAFF,
WASHINGTON.

Private Young Co 18
12th Regt Light presents
his compliments to Private
Charles Troop K 6th U.S. Cavalry
and asks him to accept
this pair of United States
Shoulder Straps.

Jan 9th 1904

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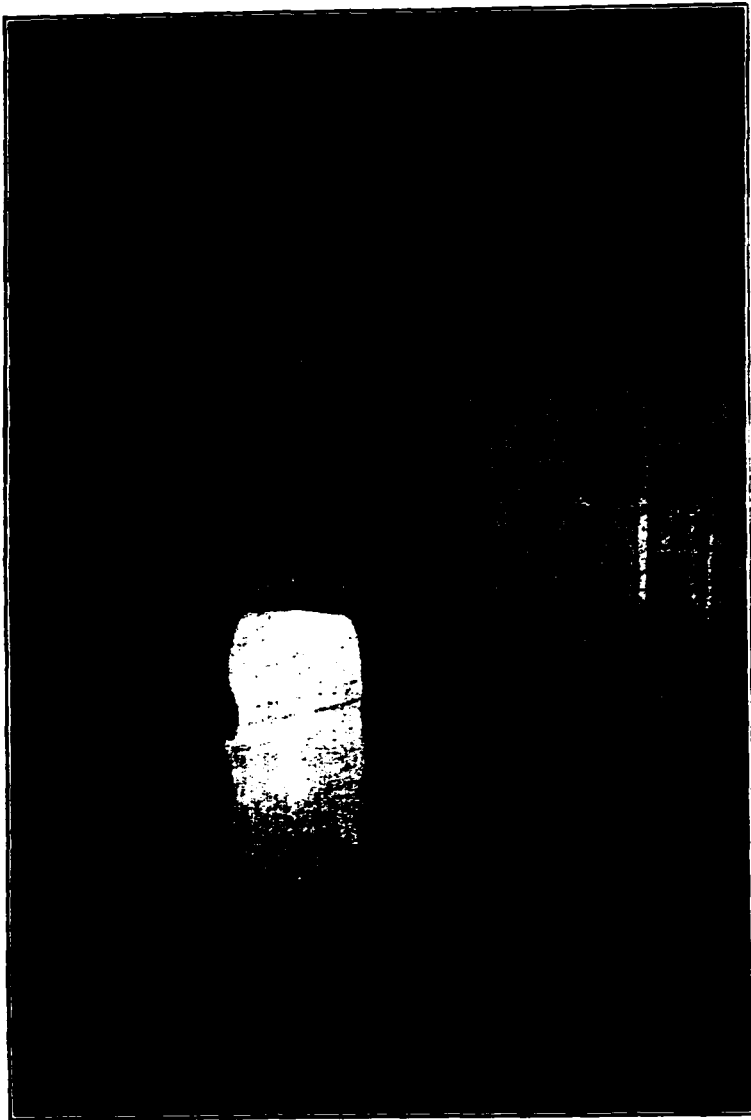
JULY, 1904.

No. 53.

A HURRIED GLANCE AT THE DISTRICT OF BEN-
GUET. ITS INHABITANTS. SOURCES OF
WEALTH. NECESSITIES. ETC.

BY OTTO SCHEERER, GERMAN SUBJECT.
TRANSLATED BY CAPTAIN J. T. DICKMAN, EIGHTH U. S. CAVALRY.

THE district which occupies our attention, forms the most accessible portion of that great region, which is very mountainous and therefore as yet but little explored, lying in the center of the northern portion of the Island of Luzon, commonly called "The Land of the Igorrotes," whose various tribes, well-defined among themselves by language and customs, inhabit, in a more or less savage state, the great central chain of mountains and its foot-hills, beginning in the high "South Caraballo" Mountains and terminating in Ilocos Norte. Our district occupies the southwest portion of this great territory, and its situation will be more clearly understood if we say that while the east side is bordered by valleys like that of Asin, the inhabitants of which do not permit the entrance of any traveler under penalty of being beheaded, on the south and west sides it has for neigh-



IGORROTE WOMAN, SHOWING DRESS.
(Photograph by Otto Scheerer.)



IGORROTE WOMAN OF THE POORER CLASS, SHOWING USUAL DRESS.
Photograph by Otto Scheerer

bors the rich and flourishing provinces of Pangasinan and La Union.*

The principal means of entrance to and communication with the district is by the road which leads from San Fernando de La Union through Bauan, Naguillan and Sablan (the first Igorrote ranch) to La Trinidad, capital of the District of Benguet. There exist besides various less important communications in the way of Igorrote trails towards different points of the plain. And now that we speak of roads, let us call attention to the project of the Spaniards for the construction of a high road of gradual ascent, practically along the route above stated through Naguillian and Sablan, for, whoever may at any time have had occasion to make the journey to Benguet, will readily understand the great importance of such a work for this locality. It is true that the excessive cost of construction—estimated at some \$400,000 by the unreliable engineer in charge, for the twenty-five miles from Bauan to Baguio, with first class work—would not be justified, except from the point of view of the previous Spanish government which contemplated saving the expense of sending its military people home for recuperation by establishing a sanitarium for them in Benguet. However, as you are likely to be intimately connected with the future of the district, it is advisable not to lose sight of at least an improvement of the present road; for, in our humble opinion, Benguet is destined, on account of its natural advantages, to become the first sanitarium of the Philippines. The district was rapidly arriving at this condition before the outbreak of

*The District of Benguet is bounded on the north by the District of Lepanto, on the east by the Province of Nueva Vizcaya, on the south by the Provinces of Nueva Ecija and Pangasinan, and on the west by the Province of La Union. It is surrounded by high mountains, being separated from Nueva Vizcaya by the great central cordillera. Its shape is that of an irregular rectangle, its length from north to south about sixty miles, being twice as great as its average width. Its western boundary is parallel to the sea shore and distant about twenty miles therefrom. The southern extremity is due east of Dagupan, and the northern east of Namacpacan. The northwest corner is drained by the headwaters of the Aringay and Bauang, the remainder of the district by the Agno. The total population is estimated at less than 20,000; the capital is Trinidad, containing about 2,000 inhabitants.

J. T. D.

IGORROTE MEN AT BATHING, IN NIGHT. SHOWS GREAT CORDILLER OF MOUNTAINS NOT AT WORK.
(Photograph by Juan C. Martinez)



the second revolution: rich families of the capital, such as those of Redoreda Battle, Severino R. Alberto, Hidalgo and others had begun to like Benguet. The construction of good houses on the plain was begun and its fame spread far and wide; should this drop into oblivion it would be a pity. In fact it would be advisable to collect all the plans, proposals and other data referring to the Spanish project, so as to make use of them to the extent advisable and to facilitate in every way the arrival of rich people who may desire to use this place as a resort, or who may wish to establish themselves permanently as merchants, farmers, or in other honorable occupations: but on no account should people who, possibly with some minor official position, have no other object than to fraudulently exploit the Igorrotes, thus continuing the scandalous abuses of the previous regime, be encouraged to remain. Such conduct should be closely watched and offenses punished with a firm hand, for with such examples in view, the Igorrote will either go on retiring from civilization or will imitate these vices, but will never become civilized.

The two great obstacles which have up to the present interfered with the arrival of strangers are, (1) the difficulty of transporting persons and their effects, and (2) the difficulty of procuring food during their stay in Benguet.

The question of transportation will continue to present real difficulties as long as no good highway has been constructed, for one is forced to have recourse to the most primitive means of locomotion, the muscular power of the Igorrote. This gives rise to an embarrassing situation: either we impress the Igorrote, paying him little or nothing for the painful labor of carrying up in two or three days (two days are required for the descent) some fifty pounds from the level of the sea to an altitude of 4,300 feet, or we must hire porters willing to serve. The latter are not easily found in sufficient numbers, or when available ask exorbitant prices. This matter will have to be well regulated and to the satisfaction of both parties, inaugurating at the same time a system of transportation by means of beasts of burden (probably mules), as is done in other countries, either by the government or by

IGORROTE IN HAITIAN HAIN COAT.
(Photograph by Bern C. Worcester.)

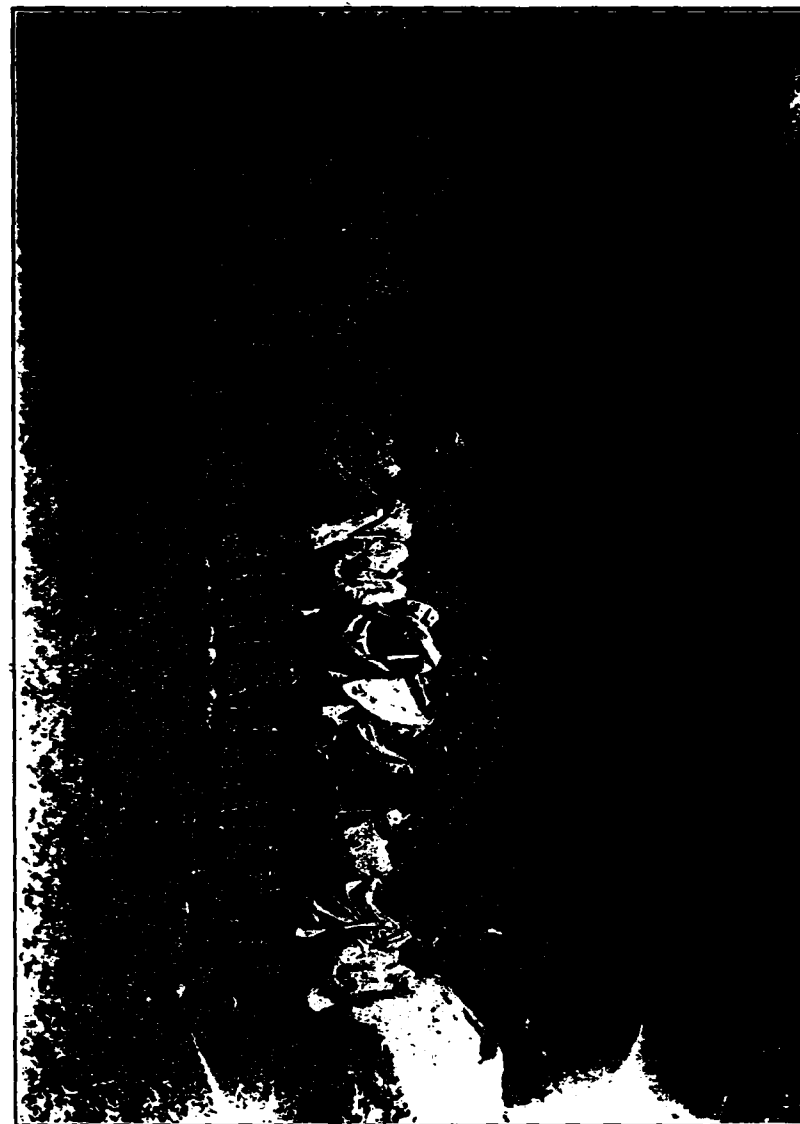


encouraging private enterprise. But to force a poor Igorrote to leave his home, his family, and his mode of subsistence at any moment of the day or the night, and to employ him for nearly a week at the hardest kind of labor, not for the good of the community, which would give him something in return, but for the exclusive benefit of some private individual who orders him to be called by means of the lash, is a bestial and barbarous state of affairs, entirely unworthy of humanity.

The second difficulty mentioned, the scarcity of eatables, exists in appearance only and is the consequence of the despotic manner of ordering supplies through the commander, the captain of the town, or the people of the courts. That this, instead of stimulating agriculture and the raising of cattle, chickens and garden truck, produces only abandonment or hiding of eatables, is so well known and will be so readily understood by the governing authorities that we need not add a single word. The Igorrotes, especially the women, are hard enough workers: they like the gain of money as well as any one else, and they know how to cultivate and produce a variety of things. Why should there not, under normal circumstances, be enough produce to supply a public market in the capital? If one has not been established before now, and if one is not provided in the future, it has been and will be the fault of the governors, not of the governed, for neither the Igorrotes nor anybody else will take his product to a public market with a prospect of being defrauded in the dealing, or of being deprived of more or less produce by deceit. After a public market shall have been established in the capital, we shall have the best means of judging the extent to which public confidence exists in the district.

Leaving the idea that the future of Benguet depends upon its being made the sanitarium of the Philippines, an idea which, after all, is the author's individual one, and therefore probably erroneous, let us investigate the other natural resources of the district. We find that the development and improvement of nearly all industries, with the exception of gold mining only, is hampered by the difficulty of transportation to the coast, without counting the prolongation of that

KORROTI SCHUBERTS, KAHAYAN, IN 1901.

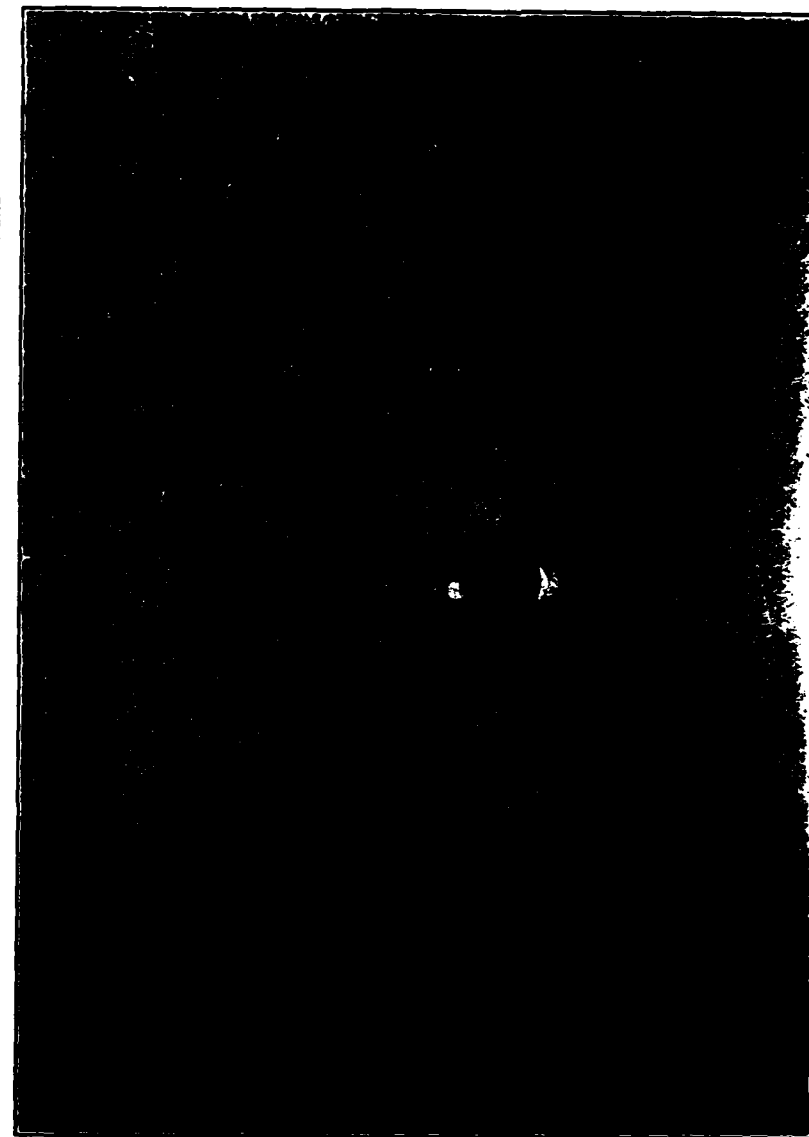


abusive system which makes use of those who are falsely named "forced servers of the government." Besides rice, sweet potatoes, gabe (here called avoa) which is a sort of potato, and some other garden truck of local consumption, there are produced for export coffee, potatoes and rattan cane, the production of the first two permitting of considerable further increase. There is an abundance of pine wood, very good for carpentering, which, although now shut out from the market, would, with easy and cheap transportation, probably form a new article of export. There is not a single sawing machine in the district. In order to encourage the building of houses a good daily rent will have to be guaranteed. It is also to be remembered that pine wood is the first article in the manufacture of matches. Let us therefore protect our pine woods! The Igorrotes annually destroy many young pine trees in order to fertilize the fields and gain new pasture. It is necessary for you to harmonize the interests of the cattle raisers and of the state in this respect, for you cannot and should not be indifferent to the gradual disappearance of our forests. According to the German traveler Schadenberg, there are more to the North, Igorrote savages who plant pine trees, fully aware of their great utility.

We have mentioned cattle raisers and pasturers. Such animals as the buffalo, cow, horse and dog constitute the wealth of the Igorrotes captains, and they breed them well. During the dry season, when the grass on the plains dries up, there is always likely to be sufficient pasture of good quality in the mountains. Nevertheless, we do not notice a reduction in the price of animals; on the contrary, it appears that carabaos for example, are worth more here than further south.

Regarding the gold mines, we are not competent to give a reliable opinion, which requires special knowledge. The experiences undergone in the Camarines show that it is necessary to proceed with caution before investing capital in enterprises of this kind. There is gold at different points in the district, but only an expert inspection can show whether it would justify operations on a large scale.

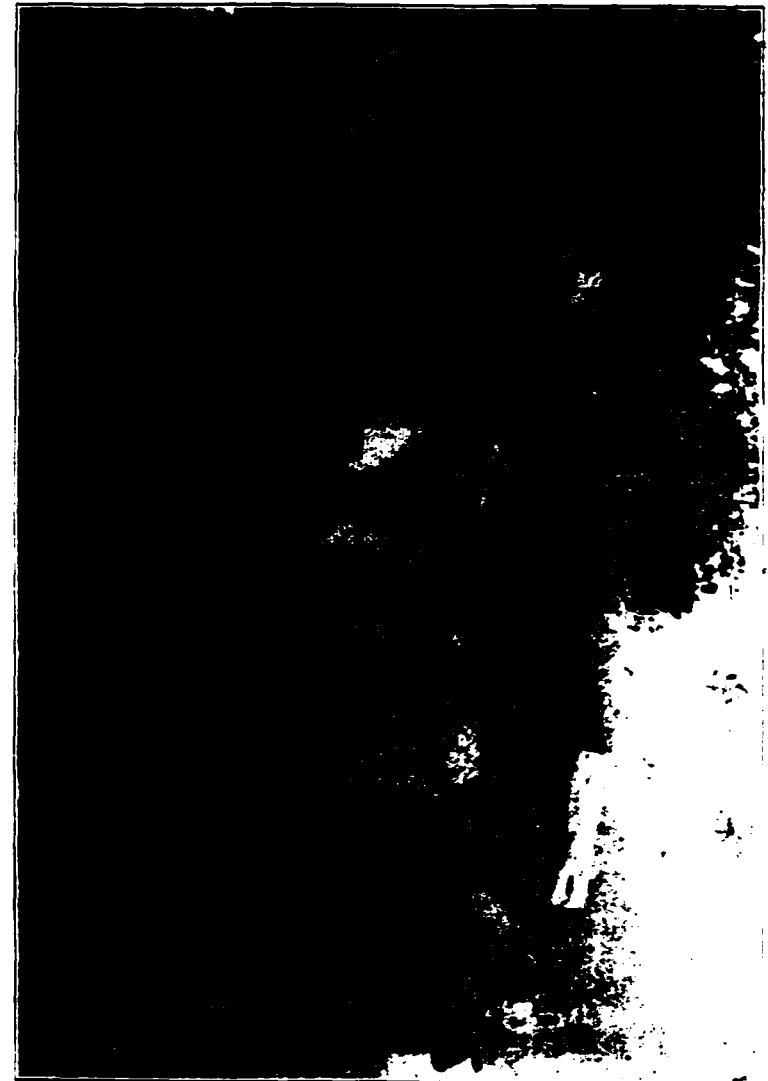
THE IGORROTE HEADMEN OF BUKIAS, REMOVED: AN IGORROTE CONSTABLE IN THE CENTER.



Let us be permitted, in conclusion, to add a few remarks with reference to the Igorrotes. We are not writing a formal study regarding anything; we merely note rapidly our opinion on the most important questions concerning this district, so as to enable you to consider the proper course to be taken in your new office. The Igorrote, on account of his timid character, is submissive and accustomed to the hard Spanish yoke, and will always be easy to govern; but our intention is not only to govern him by laws which are, so to speak, unnecessary, they governing themselves in a patriarchal manner, but to uplift him gradually on the road to civilization. We should see in him, not an inferior being because it is convenient for him, to dress somewhat like the civilized Greeks and Romans of old, but rather a younger brother of ours to whom we owe protection and affection. Laying aside outward appearances and fixing our attention on their natural qualities, such as are observed in their home life, we observe that by the side of various defects due to their ignorance, they have some very fine qualities, such as their integrity, which is recognized by all and which is usually developed only to a small degree among races of simple customs and needs, or among those who live in the midst of civilization and are influenced by more diverse passions.

Among their most apparent defects is their lack of cleanliness and a certain inclination to gamble. Among their customs unworthy of respect is that of having their dead "lying in state" for some days, which may be the cause of infectious diseases. In their feasts and dances, on the other hand, I have never noticed anything worthy of condemnation, being moderate and quiet even in their occasional intoxications. We recognize two distinct tribes of Igorrotes inhabiting this district: those living in the territory extending from the center to the southern limit and who talk in "Nabillol" dialect, and those who live in the north and on some few ranches bordering on La Union Province and talk in "Cancanay." The latter I do not know very well, but I can say that the "Cancanay" Igorrotes, as well as those living on the Buguias Ranch in the north, and those who, under the name

IGORROTE CARRIERS IN BENGUET, LUZON.
A manner of transportation called "ritinol" in Tagalog.



of Bagoú, form the ranches bordering on La Union Province. have the reputation in this district of being robbers.

Spanish writers who have written about Benguet mention the slavery in which the Kailianes are held by their Caciques. We have not seen anything which would deserve this designation.

It is well enough for the rich to have in their service some poor individuals who are made to work, and who receive a certain amount of pay: they are usually well suited and regarded as inferior members of the family, and their fortune is certainly more enviable than that of the poor in Europe. There is no feast in the houses of the rich without some portions of the meat being given to all: it is even sent to houses some distance away. This is a traditional custom, and certainly deserves praise. In exchange for such liberality and as an assistance on occasions of need, the poor lend gratuitous service to the rich after the manner in which the Tagalog is assisted by his neighbors when he desires to move his nipa hut to the other side of the street. Withal, there are also some cases of cruelty and abuse, as may be found in all parts of the world. As for the rest, we have had the satisfaction of hearing more than one Igorrote express the desire that his son be taught to read and write, and this will be more frequent in the future, as it is no longer necessary for him to approach the dreaded Spaniard for this instruction.

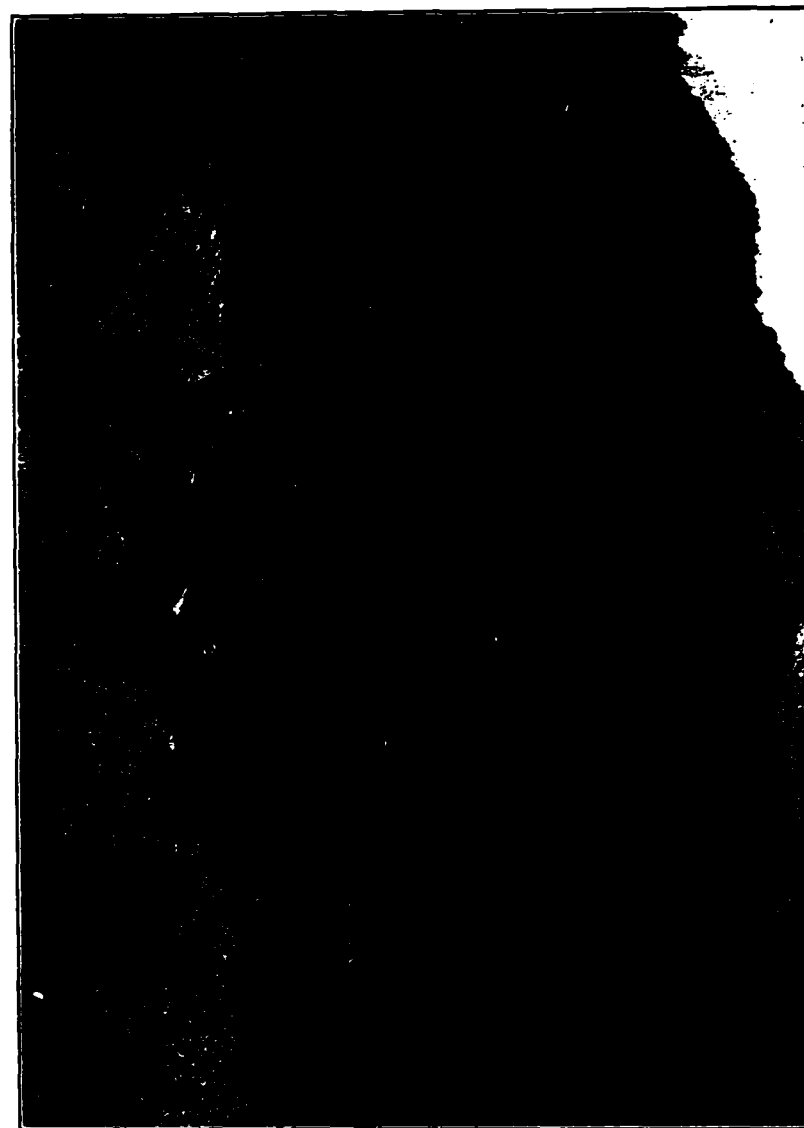
Speaking of the resources of the district, we have forgotten to mention horticulture. While praising Benguet it has always been stated that nearly all the vegetables and fruit trees of Europe are productive here: however, very little indeed has so far been done in this respect. Of the fruit trees a few samples have existed as curiosities, and of vegetables no more have been planted than are already found growing in other parts of the Philippines. There remains, therefore, a broad field for experiment, which may result in supplying our neighboring provinces with cabbage, beans, and other garden vegetables, and Manila with fruit, such as pears, apples, small oranges, etc. The small tea plant should also be grown here, but people from Japan or China would be necessary for its cultivation.

ROBOTE GIRL WITH CARRYING BASKET. THIS CHILD WAS TO BE MARRIED IN A MONTH.
(Photograph by Donat Worcester.)



Judging from all that has been said regarding the Igor-
rotes, you see that it is advisable and of the greatest impor-
tance for us to win their confidence, and to make them under-
stand the real object of the present revolution. It is very
difficult for us to accomplish this, because they are naturally
timid, and they are accustomed to regarding all who do not
belong to their race as enemies, oppressors and prospectors.
I have the profound conviction that from all that they have
seen of the revolution in this district up to the present time,
they have gained the impression that it did not amount to
more than a mere change in persons who are to exploit them;
previously they were Europeans, and now they will be Fili-
pinos. Contributions of war, enforced service and seizure of
supplies, the presence of people in uniform and with guns,
and, after they have put the Spaniards to flight, certain
abuses which it is better to hush up, will be inevitable conse-
quences of each revolution; but it is highly advisable to cause
them to disappear as soon as they are no longer indispensa-
ble. The confirmation by the Provisional Military Chief of
the election in which the people elected their own captains,
or persons of long standing confidence as their future local
governors, has already made a very good impression. If in
addition the position of Provincial President be given to the
most noted of their race, the gain in their confidence will
more than compensate for the probable lack in personal for-
mality, because they will then begin to understand the mean-
ing of the expression: "By the people and for the people;"
while if they see these and other inferior positions held by
unknown people, foreigners, or persons whose bad records
are well known in the district, people whose motto is "An
ebbing river, a gain in fishermen," the contrary will be the
case. We destroy the initial advance to their confidence, and
with this the best methods of their gradual civilization. We
do not lay down our pen without giving thanks and a vote
of confidence to the already mentioned Provisional Military
Chief for his frank and loyal conduct, expressing the hope
of seeing him return to this district with the rank he deserves

IGORROTE RICE-TERRACES, KABAYAN, BENGUET.



for his good faith, and on which we believe all would congratulate him with true pleasure.

This article was written in September, 1898, at Anbebok Farm, Town of Aguinaldo, by Mr. Otto Scheerer, for his friend Don Viscounte Quesada, Provisional Military Chief of the District of Benguet. At this time Benguet Province was under the rule of Filipinos, it being the interval between Spanish and American rule. Later, the United States army took possession of the province, and during their rule everything was quiet. This province was the first one in the Philippine Islands to have American civil rule established, a governor being appointed, who set up his headquarters at Baguio. Mr. Scheerer, the writer of the above article, was the first civil Secretary of State for the province under American rule. He did not retain this position very long.—[EDITOR.]

EVOLUTION OF THE NATIONAL GUARD*

By MAJOR L. H. BOUGHTON, ELEMENTAL CAVALRY

IT does not require a close study of the military policies of the American people to discern that they are by tradition and custom opposed to a large standing army, and that in times of war or other emergency, when the civil government can no longer enforce the laws, they place their main reliance upon what may be broadly termed the citizen soldiery of the Republic.

Centuries of oppression suffered by their European ancestors, traceable to irresponsible power backed by the force of arms, has taught them to safeguard their liberties by limiting the size of the nation's standing army, and reserving to themselves in their sovereign capacity the right to keep and bear arms.

In the Declaration of Independence we find one of the principal complaints of the colonists against Great Britain was that the latter kept up standing armies in time of peace to overawe the people. And when that Declaration had been made a living reality by an appeal to arms extending through eight long years of suffering and death, and a strong, centralized, constitutional government had sprung from the weakness and inadequacy of the Union under the Articles of Confederation, we find the fears of the people crystallized in the second amendment to the Constitution of the new nation:

"A well regulated militia being necessary to the security of a free state, the right of the people to keep and bear arms shall not be infringed."

This was a constitutional expression of a right which the people then enjoyed, and which they not only reserved to

*Read before officers of the National Guard of Missouri at Fort Leavenworth, Kansas, April 20, 1904.

themselves but made its abuse on the part of the new government impossible by this constitutional prohibition. So long, then, as our government is a government of, for, and by the people, so long must its ultimate reliance repose upon the intelligence, integrity, and patriotism of its citizen soldiery; and when that support shall fail, be it through commercial venality springing from selfishness and greed, or through the waning of national patriotism, then we may look to see the Union pass away.

John Quincy Adams, in his message to Congress, March 4, 1825, referred to the militia in these terms:

"The organization of the militia is yet more indispensable to the liberties of the country. It is only by an effective militia that we can, at once, enjoy the repose of peace, and bid defiance to foreign aggression: it is by the militia that we are constituted *an armed nation, standing in perpetual panoply of defense*, in the presence of all the other nations of the earth."

Four years later, Andrew Jackson, in his inaugural message, spoke as follows:

"The bulwark of our defense is the national militia, which in the present state of our intelligence and population, must render us invincible. * * * So long as the Constitution is worth defending, a patriotic militia will cover it with an impenetrable aegis. Partial injuries and occasional mortifications, we may be subjected to, *but a million of armed freemen*, possessed of the means of war, can never be conquered by a foreign foe."

It is true that the people conferred upon the Federal government the power "to raise and support armies" distinct from those that might be formed by calling forth the militia, but they hedged it about with limitations, and their representatives have always jealously opposed any attempt to augment the standing army beyond the minimum number that to them appeared imperatively necessary. After the Revolution the regular or standing army was reduced to eighty men. At the outbreak of the Rebellion it numbered about 18,000. After the Rebellion and until the beginning of the Spanish-American War it was kept at about 25,000.

When a nation situated as is ours, beyond the danger of immediate attack, adopts a military policy to maintain but a small regular establishment, and to depend upon its citizen soldiery, either as militia or volunteers, such policy is not open to criticism. But when a nation with such a policy fails to adequately provide for organizing, arming, and disciplining its citizen soldiery in a manner making it available in times of national crises, such a policy becomes a national menace and invites the destruction of the very liberties it is supposed to maintain.

The Constitution confers upon Congress the following power in regard to the militia:

"To provide for calling forth the militia to execute the laws of the Union, suppress insurrections, and repel invasions."

This provision states all the purposes for which the militia may be called into the service of the Federal government, and makes it impossible for the latter to use this force as a means of conquest or domination of a foreign country. Indeed, according to the weight of authority, the President cannot constitutionally order the militia to invade foreign territory. However, as the best means of repelling an invasion may be by carrying war into the enemy's country, it is conceivable that a liberal construction of the above provision might permit the militia to be so used.

Had the Constitution stopped here it is not difficult to see that the nation in placing its reliance upon the citizen soldiery would have been leaning upon a slender reed. One hundred years of experience has amply shown that had the organization, arming, and disciplining the militia been left to the several States, some of them in all probability would now be without any organized militia at all, and others would have but indifferent forces, differently armed, organized and equipped, and with varied systems of drill regulations. It is unnecessary to comment upon the result of calling such heterogeneous forces together in defense of the Union. Non-fortunately, was this danger unforeseen at the beginning.

* Constitution, Article I, Section 8.

Those great men whose united labors gave us the Constitution (the greatest document probably that has ever emanated from the brain of man) fully comprehended the necessities of the situation and provided for them by incorporating in the Constitution the further provision giving Congress power:*

"To provide for organizing, arming and disciplining the militia, and for governing such part of them as may be employed in the service of the United States, reserving to the States respectively the appointment of the officers, and the authority of training the militia according to the discipline prescribed by Congress."

The provisions cited cover all the power of Congress over the militia, and when fully and intelligently exercised are ample to accomplish the purposes sought. Indeed, few people have ever realized the magnitude of the military power of the Federal government, and have supposed that it was practically limited to raising and supporting the standing, or regular army. But consider for a moment its power in regard to the militia. It can provide for organizing, arming, and disciplining this force equally in times of peace or war. This means that every able bodied male citizen of this broad land may be enrolled in the militia, and that this force may then be organized, as Congress in its wisdom may deem advisable, into infantry, cavalry, artillery, or other branches of the military service, and then armed and disciplined or trained until the whole becomes an efficient military machine, and that the revenues of the nation may be used for these purposes. The limitations are that the States must appoint the officers and train the militia according to the discipline prescribed by Congress. Armed with these powers, it becomes the duty of the Federal government to provide a national militia capable of warding off the "partial injuries and occasional mortifications" referred to by President Jackson. That it has neglected so long to do so must be attributed to a failure to fully comprehend the nature of our government and the necessities of the situation.

The first law under its militia powers was passed by Congress in 1792, but was repealed and superseded by the act of

* Constitution, Article I, Section 8.

1795. This act, however, was but a slight modification of the former, and, with few changes has remained upon the statute books for over one hundred years (having been repealed only last year), notwithstanding the fact that it has long since been obsolete and an object of ridicule to those who have seriously considered the ways and means of a nation's defense. Bearing in mind that we have experienced several wars, and have witnessed the inadequacy of the militia as a means of national defense, it will be interesting to read a section of our militia laws as they stood at the beginning of the twentieth century, when the study of war had become a science, and the nations of the world were bending their energies toward perfecting their military systems.

Section 1628. R. S. repealed January 21, 1903.

"Every citizen shall, after notice of his enrollment, be constantly provided with a good musket or firelock, a bore sufficient for balls of the eighteenth part of a pound, a sufficient bayonet and belt, two spare flints, and a knapsack, a pouch with a box therein to contain not less than twenty-four cartridges suited to the bore of his musket or firelock, each cartridge to contain a proper quantity of powder and ball; or with a good rifle, knapsack, shot pouch and powder horn, twenty balls suited to the bore of his rifle, and a quarter of a pound of powder; and shall appear so armed, accoutred, and provided when called out to exercise or into service, except that when called out on company days to exercise only he may appear without a knapsack. And all arms, ammunition and accouterments so provided and required shall be held exempted from all suits, distress, executions or sales for debt, or for the payment of taxes. Each commissioned officer shall be armed with a sword or hanger and a spontoon."

I seriously doubt if two years ago the militia of this country carefully complied with the above law, or the officers were armed with and understood the uses of the spontoon. At any rate the existence on our statute books of a law long since obsolete and absurd, proves either that we are a non-military people, dazzled by the hallucination of a coming universal peace, or that the development of our military policies has been controlled and hampered by conflicting influences, the dominant one being the ever present fear of creating a military hierarchy.

Coupled with this fear has been the idea, long prevalent, that on account of our territorial isolation and the consequent immunity from foreign aggression, we have little need of armies or of preparations looking to their prompt mobilization. The result has been a conflict of ideas, and until within the last two years an utter inability on the part of our legislators to agree upon any scheme or system competent to render the militia a really efficient force when called into the service of the Union.

Those who have any lingering doubts in their minds in regard to this statement have only to read the military history of our country bearing upon this subject to be convinced of the accuracy of what has been said. The War of the Revolution, of 1812, our Indian wars, the war with Mexico, and the Great Civil War, all bear witness to the weakness of this support which has always been considered the mainstay of the government in times of great national emergencies, a weakness, bear in mind, resulting almost wholly from inadequate National and State laws with the consequent lack of preparation, training and discipline, and not from any inherent defects in those who compose the great body of our citizen soldiery.

When discussing matters of such grave importance we should look facts squarely in the face and seek to remedy evils known to have existed, and which will come again under like conditions and misapprehensions. The popular conception has always been that to make a soldier it was only necessary to put a uniform on a man and place a gun in his hands; or, if the weapon chanced to be a sword, the metamorphosis would produce an officer capable of caring for, controlling and leading men whom fortune had placed under his command. It is difficult to dispel popular fallacies. They become a part of the very lives of the people and sit enthroned in song and tradition while displaced reason vainly struggles to rend the veil and resume her sway over the minds of men. Experience and ridicule alone seem capable of successfully combatting a popular delusion and of arousing a people to a realization of their errors. We are all familiar with the nursery rhyme:

"Early to bed and early to rise
Makes a man healthy, wealthy and wise."

We took it in with the very air we breathed and believed it, though we often burned the midnight oil in conning the morrow's lessons, and wondered why people who retired with the birds and were up with the sun, did not accumulate more of this world's goods, and why they seemed no less free from the ills that flesh is heir to than the rest of us. We took it for granted that they were wise, for the rhyme said so. Then along came some genius with more wit than poetry in his soul and rewrote the rhyme:

"Early to rise and early to bed
Is a sure sign that a man has wheels in his head."

The illusion fell away, and we no longer saw through the glass darkly.

A hundred years of experience has been necessary to dispel the fallacies that have attended the popular conception of what constitutes a free state, and to teach the nation that armies cannot be instantly created by calling together men from their plows and workshops, and putting into their hands weapons they may have never seen before.

In the early history of our government it appears to have been the intention of Congress to entirely dispense with regularly trained troops, and to depend wholly upon militia called out as the emergency arose. At the same time it failed to provide measures for making the militia an efficient force capable of taking the field when called upon. The result has been disaster, disgrace, and an unnecessary expense of blood and treasure.

After the defeat on Long Island, August 27, 1776, Washington wrote to Congress as follows:

"Our situation is truly distressing. The check our detachment sustained on the 27th ultimo has dispirited too great a proportion of our troops and filled their minds with apprehension and despair. The militia, instead of calling forth their utmost efforts to a brave and manly opposition in order to repair our losses, are dismayed, intractable, and impatient to return. Great numbers of them have gone off—in some instances almost by whole regiments, by half ones,

and by companies at a time. This circumstance of itself, independent of others, when fronted by a well appointed enemy superior in number to our whole collected force, would be sufficiently disagreeable, but when their example has infected another part of the army, when their want of discipline and refusal of almost every kind of restraint and government have produced a like conduct but too common to the whole, and an entire disregard of that order and subordination necessary to the well doing of an army and which had been inculcated before, as well as the nature of our military establishment would admit of, our condition becomes still more alarming, and with the deepest concern I am obliged to confess my want of confidence in the generality of the troops."*

A little later he again wrote to Congress:

"To place my dependence upon militia is assuredly resting upon a broken staff. Men just dragged from the tender scenes of domestic life, unaccustomed to the din of arms, totally unacquainted with every kind of military skill which is followed by want of confidence in themselves when opposed by troops regularly trained, disciplined, and appointed, superior in knowledge and superior in arms, are timid and ready to fly from their own shadows.

"Besides, the sudden change in their manner of living, particularly in their lodging, brings on sickness in many, impatience in all, and such an unconquerable desire for returning to their respective homes that it not only produces shameful and scandalous desertions among themselves, but infuses the like spirit in others. Again, men accustomed to unbounded freedom and no control cannot brook the restraint which is indispensably necessary to the good order and government of an army, without which licentiousness and every kind of disorder triumphantly reign. To bring men to a proper degree of subordination is not the work of a day, a month, or even a year, and unhappily for us and the cause we are engaged in, the little discipline I have been laboring to establish in the army under my immediate command is in a manner done away by having such a mixture of troops as have been called together within these few months.

"Relaxed and unfit as our rules and regulations of war are for the government of the army, the militia (those properly so called, for of these we have two sorts, the six

*Spark's Writings of Washington, Vol. 4, p. 72.

months men and those sent in as a temporary aid, do not think themselves subject to them, and therefore take liberties which the soldier is punished for. This creates jealousy, jealousy begets dissatisfaction, and this by degrees ripens into mutiny, keeping the whole army in a confused and disordered state, rendering the time of those who wish to see regularity and good order prevail more unhappy than words can describe. Besides this, such repeated changes take place that all arrangement is set at naught and the constant fluctuation of things disarranges every plan as fast as it is adopted."*

Born of bitter experience and wrung in anguish from the heart of the great commander, these words describe, as no others can, the danger and folly of relying upon untrained troops. Bravery in battle is not enough. Most men are brave, and when their timidity and nervousness are overcome by discipline and familiarity with their arms, their commander has little to fear from them when the shock of combat comes. But the trials of battle are only a fraction of those the soldier is called upon to undergo. It is in the camp, in the bivouac, and on the march that the lack of thorough training and preparation has the most deadly effect, and carries in its wake a grim but fruitful harvest of disease and death. Is it a wonder that Washington protested against the use of untrained troops and officers? The marvel is that with his experience and that of so many others with such troops, we should have delayed a hundred years before taking adequate steps to provide an efficient National Guard. The disparity, however, between trained and untrained troops is lessened when the latter are led by an experienced officer.

The following is quoted from the memoirs of the famous Revolutionary War cavalry leader, Henry Lee, to show the value and effect in battle of trained officers in command of undisciplined troops.

It was at the battle of Camden in 1780, where General Gates with about 4,000 Continentals and militia was defeated with a loss of about 1,800 men.

*Spark's Writings of Washington, Vol. 4, p. 72.

*Out of over 22,000 volunteers raised for the Spanish-American War, 12,000 were killed in battle or died of wounds, while 3,500 died of disease.

The Americans were drawn up with the Continentals on the right and the militia, consisting of two brigades, on the left, supported by a small reserve. At the first onset the militia, with the exception of Dixon's North Carolina regiment, threw away their arms and fled. This regiment, supported by the reserve, not only held its ground for a time, but actually charged the enemy in their front and captured many prisoners. At the same time the Continentals on the right were steadily forcing the British from the field. In the meanwhile, however, the British right finding itself unopposed, on account of the flight of the militia, swung to the left and overlapping the weakened American line, rolled it up and the battle was over. The intrepid Baron De Kalb, who commanded the Continentals, was wounded eleven times and captured, dying shortly after. Had all the militia stood their ground as well as Dixon's regiment, the Americans would have had one less defeat to mourn.

This is what General Lee says:

"None, without violence to the claims of honor and justice, can withhold applause from Colonel Dixon and his North Carolina regiment of militia. Having their flank exposed by the flight of the other militia, they turned with disdain from the ignoble example, and fixing their eyes on the Marylanders whose left they became, determined to vie in deeds of courage with their veteran comrades. Nor did they shrink from this daring resolve. In every vicissitude of the battle this regiment held its ground, and when the reserve under Smallwood, covering our left, relieved its naked flank, forced the enemy to fall back. Colonel Dixon had seen service, having commanded a Continental regiment under Washington. By his precept and example he infused his own spirit into the breasts of his troops, who, emulating the noble ardor of their leader, demonstrated the wisdom of selecting experienced officers to command raw troops."*

Years after, General Lee, while again commenting upon the valor of this regiment, took occasion to express in no measured terms his disapprobation of a policy that sent untrained troops into battle. He said:

*Upton's Military Policy of the United States, p. 20.

"Here was a splendid instance of self-possession by a single regiment out of two brigades. Dixon had commanded a Continental regiment, and of course to his example and knowledge much is to be ascribed, yet praise is nevertheless due the troops. While I record with delight facts which maintain our native and national courage, I feel a horror lest demagogues who flourish in a representative system of government—the best, when virtue rules, the wit of man can devise—shall avail themselves of the occasional testimony to produce a great result.

"Convinced as I am that a government is the murderer of its citizens which sends them to the field uninformed and untaught, where they are to meet men of the same age and strength, mechanized by education and discipline for battle, I cannot withhold my denunciation of its wickedness and folly."

In 1790, General Harmer was defeated in an attack upon an Indian village near the present city of Fort Wayne, Indiana. The evidence before the court of inquiry that investigated his conduct, showed that "amongst the militia were a great many hardly able to bear arms, such as old, infirm men and young boys;" also that there were many "substitutes."

The following year General St. Clair was sent against the Indians with about 1,400 men and was defeated by a nearly equal force with a loss of 632 killed and 264 wounded. The committee of the House of Representatives appointed to investigate this disaster reported that the militia appear to have been composed principally of *substitutes*, and totally ungovernable and regardless of military duty and subordination.†

Disaster may overtake the best trained troops, but had the militia that took part in the above mentioned engagements been trained and commanded as the experience of former wars then dictated, in all probability we would now be spared the humiliation and disgrace of these defeats.

Notwithstanding the bitter experience of the preceding thirty-six years the people still adhered to the popular de-

*Upton's Military Policy of the United States, p. 17.

†Same, p. 77.

‡Upton's Military Policy of the United States, p. 77.

lusion and the nation, at the outset of the War of 1812, found itself wholly unprepared for the coming conflict. The regular army was small and poorly organized, while the militia was such in name only. In enthusiasm the people were not wanting. The cry was, "On to Canada!" as at the beginning of the Civil War it was, "On to Richmond!"

Defeats, disasters, wholesale desertions, insubordination, mutinies, incompetent officers, political jealousies, refusal of states to furnish militia when called upon, and of the latter to cross the frontier, though their comrades were engaged in unequal battle on the other side, national humiliation and disgrace. And these were Americans imbued with the same spirit of patriotism and love of country that actuate us to-day.

The dark record is not flattering to our national vanity, and our historians, after dwelling upon the one or two land victories that are really creditable to us, turn with relief to the sea, where our brilliant naval operations electrified the world. Yet a study of the campaigns of this war, ending though the majority did in humiliating disaster to our arms, furnishes some of the most instructive lessons in our nation's history. General Lee said that a government that sent un-informed and untaught soldiers into the field was a murderer of its citizens. Read carefully the history of this war and see if he is not right.

The government, however, learned little, or what it did learn was soon forgotten, for we find that when General Taylor, in 1845, was sent to the lower Rio Grande with a small force of regulars to oppose any attempt on the part of Mexico to invade the State of Texas, he was instructed, should his own force prove inadequate, to call upon the governors of the nearest States to furnish contingents of militia. This meant the use of untrained troops again, for neither Congress nor the States had at that time taken suitable measures to place the militia on an efficient basis. But circumstances, which marked the introduction of a new feature into our military policy, rendered this step unnecessary. This was the use of volunteers, a measure growing out of the fact that Congress could not call forth the militia to invade a for-

eign country, and was therefore compelled to raise armies under its general power "to raise and support armies."

But it matters not by what name troops are designated, be it militia, volunteers or regulars, their efficiency and usefulness will be measured, other things being equal, by the amount of military education and training they may have received.

According to all the laws of logic and experience this statement should be axiomatic. Unfortunately to our people, it is not; but to make it as obvious as possible and to emphasize it by lessons drawn from our own experience has been, and is, one object of this paper. We could continue citing instances until this lecture grew into a volume, and the volume into a library. Our annals are replete with lessons striking enough to convince the most skeptical—lessons not confined to the early history of our country, but extending down to the Spanish-American War, where the lack of preparation was so glaring as to arrest the attention of the most casual observer. But enough has been said to show a nation must have some definite military policy, and, no matter what that policy is, one feature must be that *the government should not send into the field inefficient or untrained soldiers.*

We have referred to the inadequacy of our national military laws as they existed from 1792 to 1903. Let us now turn to a brief consideration of the Act of Congress, approved January 21, 1903, which act was passed not only to promote the efficiency of the militia, but with the additional object of somewhat definitely shaping our military policy for the future. As this act is of great importance, we shall take it up section by section, with such comments as appear necessary to a proper understanding and appreciation of the whole. The first section, defining the word "militia" and legally authorizing the use of the term "National Guard," is quoted in full, as are also certain others:

"SECTION 1. That the militia shall consist of every able bodied male citizen of the respective States, Territories and the District of Columbia, and every able bodied male of foreign birth who has declared his intention to become a citizen, who is more than eighteen and less than forty-five years

of age, and shall be divided into two classes: The organized militia, to be known as the National Guard of the State, Territory, or District of Columbia, or by such other designations as may be given them by the laws of the respective States or Territories, and the remainder to be known as the Reserve Militia."

SEC. 2. This section exempts certain persons and classes of persons from militia duty, recognizes that the States and Territories may make further exemptions, and provides that no member of any well recognized religious sect whose creed forbids war shall be required to serve in the militia or any other armed or volunteer force under the jurisdiction and authority of the United States.

"SEC. 3. That the regularly enlisted, organized and uniformed active militia in the several States and Territories and the District of Columbia who have heretofore participated or shall hereafter participate in the apportionment of the annual appropriation provided by Section 1661 of the Revised Statutes of the United States, as amended, whether known as National Guard, militia, or otherwise, shall constitute the organized militia. The organization, armament and discipline of the organized militia of the several States and Territories and in the District of Columbia shall be the same as that which is now or may hereafter be prescribed for the regular and volunteer armies of the United States, within five years from the date of the approval of this act: *Provided*, That the President of the United States, in time of peace, may by order fix the minimum number of enlisted men in each company, troop, battery, signal corps, engineer corps, and hospital corps."

An additional proviso to this section allows certain military organizations that have been in existence since 1792 to retain their accustomed privileges. Section 1661, Revised Statutes, referred to herein, is an act of Congress making an annual appropriation of one million dollars for the purpose of providing for issue to the organized militia any stores, supplies, or publications which are issued by the War Department to the regular army. This amount is apportioned among the States according to the number of Senators and Representatives to which each is entitled, a just proportion

going to the Territories and District of Columbia under regulations prescribed by the President.

As can readily be seen, this section of the militia act defines the "organized militia," and secures uniformity in organization, armament and discipline throughout the armies of the United States whether composed of militia, volunteers or regulars. The necessity for this wise provision is apparent.

"SEC. 4. That whenever the United States is invaded, or in danger of invasion from any foreign nation, or of rebellion against the authority of the government of the United States, or the President is unable, with the forces at his command, to execute the laws of the Union in any part thereof, it shall be lawful for the President to call forth, for a period not exceeding nine months, such number of the militia of the State or of the States or Territories or of the District of Columbia as he may deem necessary to repel such invasion, suppress such rebellion, or to enable him to execute the laws, and to issue his orders for that purpose to such officers of the militia as he may think proper."

The provisions of this section are plain and confer upon the President the power to call out the militia when the emergencies enumerated in the Constitution arise. Formerly it was maintained that in calling out the militia the President should address his order or requisition to the governor of the State, but this view was overturned in the case of *Houston v. Moore** where the law was the same as it is now. In this case the Supreme Court ruled that "the President's orders may be given to the chief executive magistrate of the State, or to any militia officer he may think proper."

The President may authorize the Governor to designate the particular militia to be included in the call, and in all probability this would be the method generally adopted.

"SEC. 5. That whenever the President calls forth the militia of any State or Territory or of the District of Columbia to be employed in the service of the United States, he may specify in his call the period for which such service is required, not exceeding nine months, and the militia so

* 4 Wheaton, 1.

called shall continue to serve during the term so specified, unless sooner discharged by order of the President.

"SEC. 6. That when the militia of more than one State is called into the actual service of the United States by the President he may, in his discretion, apportion them among such States or Territories or to the District of Columbia, according to representative population.

"SEC. 7. That every officer and enlisted man of the militia who shall be called forth in the manner hereinbefore prescribed and shall be found fit for military service, shall be mustered or accepted into the United States by a duly authorized mustering officer of the United States: *Provided, however,* That any officer or enlisted man of the militia who shall refuse or neglect to present himself to such mustering officer upon being called forth as herein prescribed, shall be subject to trial by court martial, and shall be punished as such court-martial may direct."

Until called into the service of the Union the militia is a State force under the Governor, who is its commander-in-chief. It is then subject to such military law as the State may provide. State laws, however, must in no way contravene the paramount laws of Congress enacted under its constitutional power to provide for organizing, arming and disciplining the militia.

But an enlistment in the army does not operate as a discharge from the organized militia or National Guard, and a member of the National Guard in his State who enlists in the regular army repudiates his engagement in said State troops, and by so doing becomes and remains liable to such penalties as may be authorized by the laws of the State in whose military service he has been enlisted.*

The President is by the Constitution commander-in-chief of the militia when the latter is called into the service of the Union.

The word "discipline," as used in the Constitution, has reference to the drill and training necessary in the education of the soldier, and not to "military discipline," as that term is now used.

*Circular 13, A. G. O., 1903. National Guardsmen applying for enlistment in the army are required to present evidence showing discharge from the State or Territorial forces.

"SEC. 8. That courts-martial for the trial of officers or men of the militia, when in the service of the United States, shall be composed of militia officers only.

"SEC. 9. That the militia, when called into the actual service of the United States, shall be subject to the same rules and articles of war as the regular troops of the United States."

With the single exception, therefore, that courts-martial for their trial must be composed of militia officers only, members of the National Guard, when called into the service of the Union, are subject to the same military law that governs the regular forces.

SECS. 10 and 11. These sections provide that the pay and allowances of the militia, when called into the actual service of the Union, shall be the same as those for the regular army, and shall commence on the day of their appearing at the place of company rendezvous.

SEC. 12. This section provides for the appointment of an adjutant general of each State, etc., who, in addition to the usual duties of such officer, will make returns and reports concerning the militia to the Secretary of War. Abstracts of these returns and reports will be transmitted to Congress by the Secretary with his annual report.

SEC. 13. This section provides for the issue, at the national expense, of such number of United States standard service magazine arms, accoutrements and equipments as may be necessary to arm all the organized militia of the United States. It also provides for the exchange of old ammunition for new, the turning in of old arms to the Ordnance Department, and requires the Governors of States and Territories to make annual returns for the property received under this section.

This provision enables the States and Territories, without expense to themselves, to at once arm and equip their National Guard the same as the regular forces are armed and equipped, and renders possible the immediate cooperation of the two forces when the former are called into the service of the Union.

SEC. 14. This section provides for an annual inspection of the National Guard by an officer detailed by the Secretary of War, and when the report of such inspection shows the National Guard of any State, Territory or of the District of Columbia is sufficiently armed, uniformed and equipped for field service, it authorizes the Secretary of War to turn over to such State, etc., so much of its allotment made under Section 1661, Revised Statutes, as shall be necessary for the payment, subsistence and transportation of such portion of the organized militia as shall engage in actual field or camp service for instruction. The pay and allowances in such cases are the same as those of regular soldiers under like conditions.

This provision enables field and camp instruction to be given to at least a part of the National Guard of each State every year, provided the State officials take steps to properly arm, uniform and equip it for field duty.*

SEC. 15. This section provides for participation of the National Guard in the field maneuvers and encampments of the regular army. In this case, the pay, subsistence and transportation of the militia so participating are the same as those provided for the regular army under like conditions, and are defrayed from the appropriation for the pay, subsistence and transportation of the army. The wisdom of this provision is apparent and needs no comment.

SEC. 16. This section provides that when an officer of the organized militia pursues a regular course of study at any military school or college of the United States, such officer shall receive from the annual appropriation for the support of the army the same travel allowances and quarters or commutation of quarters, that a regular army officer would if attending the school or college, and also commutation of subsistence at the rate of one dollar a day while in actual attendance.

Under existing orders the officers' school at posts, the special service schools, and the General Service and Staff College at this place are open for instruction to officers of

*Circular No. 9, War Department, 1903.

the National Guard, *i. e.*, to officers of the organized militia. But to entitle them to receive the allowances prescribed in this section, their attendance at the school or college must be authorized by the President on the recommendation of the governor of the State, Territory, or the commanding general of the District of Columbia, as the case may be.

The War Department is now preparing suitable regulations for a general system of progressive instruction for officers beginning with the officers' schools at posts and ending with the War College. These regulations will undoubtedly prescribe the qualifications necessary for admission to the more advanced schools, and should be consulted by officers of the National Guard who contemplate taking a course of instruction.*

SEC. 17. This section broadens the provisions of Section 1661, Revised Statutes, so as to make the money therein annually appropriated available for the purpose of providing for issue to the organized militia *any* stores and supplies or publications furnished the army. It also authorizes the States, Territories and District of Columbia, with the approval of the Secretary of War, to purchase from the War Department like property for cash, with cost of transportation added.

SEC. 18. This section provides that each State or Territory receiving aid from the Federal government under this or former acts shall, during the year next preceding the annual allotment of funds, require each company, troop or battery of the National Guard not excused by the governor to participate in at least five days instruction in camping or practice marches, to assemble for drill or target practice not less than twenty-four times, and to be inspected by an officer of the National Guard or of the regular army.

SEC. 19. This section provides for the detail of one or more officers of the army on the application of the Governor of a State or Territory, to attend encampments of the Na-

*See also Circular 21, War Department, 1903. Mileage is paid at the rate of seven cents a mile over the shortest usually traveled route. Commutation of quarters amounts to \$24.00 for a lieutenant, \$36.00 for a captain, and \$48.00 for a major.

tional Guard, and to give instruction as may be requested by the Governor. The officer or officers detailed make reports to the Secretary of War, and the latter furnishes a copy to the Governor.

SEC. 20. This section provides for the detail of one or more army officers, on the application of a Governor of a State or Territory, to report for duty to the Governor in connection with the organized militia. Such details may be revoked at the request of the Governor or at the pleasure of the Secretary of War.

SEC. 21. This section authorizes the issue of ammunition for target practice to the militia when encamped at any military post or camp. The instruction, however, must be carried on under the direction of some officer detailed by the proper military commander.

SEC. 22. This section extends the benefits of the pension laws to the militia when they have been called into the service of the United States, and to their widows and children.

SEC. 23. The object of this section is to ascertain the names of specially qualified persons who will be available for appointment as officers in any volunteer forces other than those composed of organized militia, that may be raised by the Federal government in future years. A list of such persons is to be formed and kept on file at the War Department, the test of availability being examinations by boards of officers convened by the Secretary of War at the various army posts throughout the United States.

Applicants, besides possessing the attainments necessary to pass such examinations, must have served in the regular or volunteer army, or in the organized militia, or, being a citizen of the United States, he must have attended and pursued a regular course of instruction in any military school or college of the United States, or have graduated from some educational institution to which an army or navy officer has been detailed as superintendent or professor pursuant to law, after having creditably pursued the course of military instruction therein provided. In addition, successful applicants before being commissioned must pass a physical examination.

Those who have successfully passed this examination may be authorized by the President to attend any military school or college of the United States other than the Military Academy, and to receive from the annual appropriations for the support of the army the various allowances and commutations provided in this act for the organized militia.

This section may stimulate to some extent an interest in military matters throughout the country, but the benefits promised are too remote and uncertain to arouse any great enthusiasm. In the first place there is no surety that volunteers will ever be called out during the active lifetime of any person who would like to see his name enrolled on this waiting list, and in the second he has no absolute guarantee that he will be commissioned even when such forces are called out. Political exigencies may interfere.

Moreover, these uncertainties are increased by the progressive age limits which the act imposes upon the granting of commissions, limitations that would be valuable if applied to the regular army, but are of doubtful utility in volunteer forces that are called out for short periods of service only—two years at most as the law now stands.

To receive a commission as second lieutenant under this section a person must not be over thirty years of age; first lieutenant not over thirty-five; captain not over forty; major not over forty-five; lieutenant colonel not over fifty, and colonel not over fifty-five. Nor can they be commissioned in any National Guard organization that volunteers for service in a body.

The War Department has already issued regulations for carrying the provisions of this section into effect. These regulations set forth the necessary qualifications which the applicant must possess, the scope and character of the examinations for officers of different grades, arms of service, or corps, and contain a form which applicants must follow in applying for examination.*

SEC. 24. This section provides that the volunteer forces called out in future by the Federal government shall sub-

*General Orders No. 6, War Department, 1902.

ject to the preceding section, be organized in accordance with the law approved April 22, 1898. This was the act creating the volunteer army at the outbreak of the Spanish-American War, and authorized, it will be remembered, the volunteering of organized militia in bodies. With the National Guard organized, armed, equipped, and disciplined the same as the regular army, which this act now requires, the raising of volunteers in the future will be a comparatively easy matter, and will not be attended with all the confusion and ill results that followed the calling out of these forces in 1898.

SEC. 25. This section repeals the century-old militia laws that have encumbered our statute books so long and rendered any real efficiency in that branch of our national forces well nigh impossible. In laying them aside, however, we should remember that they are a part of our history, and unite us with the long forgotten past, when our great-grandfathers in colonial times marched with the "train bands," and on training days turned out in their best attire to indulge their vanities in military pomp and display, and thus kept alive the military spirit that animated the Minute Men of 1776, and which still lives in the patriotism and valor of the National Guard to-day. But they have served their usefulness, and, like all human institutions subject to the eternal changes that mark a nation's progress, have passed away to give place, let us hope, to laws more in consonance with our present needs.

This completes the review of the new militia act, commonly known as the Dick bill, from the name of the gentleman who assisted in framing it, and who was instrumental in securing its adoption. It had its origin in an agreement between the War Department, representing the regular army, and the National Guard of the States, represented by a convention that met in Washington in 1902, in regard to provisions that were necessary to give vitality and effectiveness to our militia system.* This agreement was presented to Congress and resulted in the drafting of a bill which, with some changes, was finally enacted into the present law.

* Report of the Secretary of War, 1903, p. 338.

The necessity for some such provision has long been apparent, and was recognized as early as the time of President Jefferson, who recommended the separation of the militia into active and reserve forces. But the Federal government has never provided for a really organized militia until the adoption of this bill. It is true that what was termed the National Guard had existed before, but only as a creation of the States and to be used primarily as State forces. Under these conditions uniformity could not exist, nor could be expected where each State was proceeding upon its own lines and with little conformity to progressive military standards.

Now, however, the National Guard has a national status and becomes a recognized national force. It receives aid from the Federal government, conforms to army standards, and when called out will form with the regular army one homogeneous force. In its enlarged sphere its importance cannot be overestimated.

But this act is not limited to its effect upon the National Guard, and while it energizes that force, gives it a national habitation and a name, and provides means for placing it on an efficient basis, it also crystallizes our heretofore nebulous and unformed military policy into definite shape. The parts to be played by the various actors have been mapped out, and with the energy and enterprise that characterize the American people we may hope to see at no distant day our military forces so organized, armed, equipped, and disciplined that the nation will ever have ready at its command an army of freemen—the dream of former days—capable of defending its honor, its flag and the liberties of its people.

In brief this policy may be outlined as follows:

First. For all ordinary emergencies and needs of the government where military force is required, a small but highly efficient regular army.

Second. For greater emergencies where an additional force is required to suppress insurrection, repel invasion, or to execute the laws, the regular army to be supported by a well trained National Guard similarly organized, armed, equipped and disciplined.

Third. For still greater emergencies, or for foreign service, or when the call is for a longer period than nine months, dependence must be had on volunteers. In this case the organized militia will probably not be called out as such, but will enter the armies in organized bodies as volunteers, which the law now authorizes.

Our regular army in time of war, or when war is threatened, may be increased to 100,000 men. The organized militia or National Guard now number 116,000 men, and are increasing. In war, then, the nation will have an organized force of over 200,000 men available for immediate action. Behind these stand the millions of reserve militia, many of whom will have served in the regular army, the National Guard, or been instructed in military schools. Our country is not without defenders.

In this lecture an attempt has been made to emphasize the fact that all military forces, whatever their nature, should be thoroughly trained before being called into *actual* service, and that the failure to observe this military truism during the century and a quarter of our national existence rendered the militia, upon which the country depended during that period, an inefficient and expensive force. An unformed policy, confounding military resources with military strength, and leading to imperfect and ill-digested legislation, is mainly responsible for this. But experience is the great teacher, and to day our people seem to realize that the military profession is indeed a profession, and that soldiers cannot spring into existence panoplied for war as did Athena from the brain of Jupiter.

From untrained militia the States have gradually evolved trained forces which they called the National Guard. But they were not in reality national forces, though they might be called into the service of the Union as militia. There was no uniformity, little cohesion, and a lack of system, with the consequent inability to effectually cooperate with the regular army, which should form the nucleus of all. Then comes the new militia act, the Dick bill, and the National Guard of the States becomes the National Guard of the nation. Our military policy takes form, a system is

evolved harmonizing discordant elements and enabling all to work for one common end.

But the picture is not entirely without shadows. The way has been blazed, but much work yet remains to be done. It will be observed that the provisions of the new militia act are operative mainly upon the States, and not upon the National Guard direct. Aside from requiring on the part of the States certain cooperative work as a condition precedent to their receiving allotments of money, the law is without sanction. Whether or not this is an element of weakness remains to be seen.

The duty of the States is plain. Their legislation concerning the National Guard should be along the lines laid down by the Federal law. Otherwise confusion and lack of harmony must follow. For the National Guard only such men should be enlisted as would probably pass the mustering officer when they are called into the Federal service. So also the State codes of discipline, their military law, should, so far as possible, be assimilated to that governing the regular forces. The reason for this is obvious. Simplicity begets efficiency, the real test, the watchword of the army.

Officers detailed to inspect or on duty with the National Guard, or with any troops, should hew close to the line regardless of criticism. The military profession is not a pastime, and praise should be bestowed only when honestly earned.

A word more to my brothers in arms of the National Guard and I am done. Laws and regulations can call armies into existence, but cannot alone mould them into shape. After all has been said and done, the real test of the efficiency of a military establishment is found in the ability, zeal and integrity of its officers. It is they who breathe into the legal organism the breath of life and make of it a living potentiality. The future of the National Guard is in the hands of its officers. They are the guardians of the trust, the nation the beneficiary, and the people are watching how the duty is performed.

TROOP "M" SIXTH CAVALRY IN THE CHINESE RELIEF EXPEDITION OF 1900.

BY CAPTAIN DE R. C. CABELL, FIRST U. S. CAVALRY.

THE First and Third Squadrons of the Sixth United States Cavalry were assembled at San Francisco the latter part of June, 1900, with orders to sail on the *Grant* July 1st to Nagasaki, there to receive orders for the Philippines or for China. About 250 horses had been sent from Jefferson Barracks to Vancouver to go on a horse boat from there; the remaining horses left San Francisco July 1st on two horse boats.

There was considerable hurry and some confusion in loading the property, as it was desired to send the regiment forward as early as possible. Twenty-five sets of the horse equipments of my troop had gone with that number of men to Vancouver with the horses of my troop and were to go on the horse boat from there. When the order was received to place the remainder of my horse equipments on one of the horse boats sailing from San Francisco with the horses of other troops, I endeavored to get it changed, and tried to show that if we went to China and there was need of getting quickly into shape for work, it would be easier and quicker to get the men, horses and equipments from two boats than from three. For some reason this change was not allowed, and I sailed with my horses on one boat with part of the horse equipments, the rest of the equipments on another, and seventy-five of my men on a third.

The *Grant* arrived off Taku the morning of July 30th. None of the horse boats had arrived and none came until August 2d or 3d. Seven troops of the regiment went ashore August 1st. My troop was left aboard the *Grant* with orders

TROOP "M" SIXTH CAVALRY

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to remain there till I had succeeded in landing all the property of the regiment and then to promptly join the regiment at Tien-Tsin.

As we lay out ten miles or more from shore, and boats could cross the bar only at high tide, thus making but one round trip a day, and above all, as lighters were very few and far between, this was a job that appeared well nigh endless.



WHERE SIXTH CAVALRY LANDED—TAKU.

The next five days were unhappy ones, filled with efforts to beg or borrow lighters, distracting rumors from Tien-Tsin, thirty miles inland, that the Relief Expedition was expecting to start daily from there, and finally that it had actually started, and that we of "M" Troop were hopelessly out of it. Then we heard that the Sixth had been left at Tien-Tsin to await its horses and equipments.

The 3d of August passed with no more lighters, probably for several days, and a large part of the property still on the *Grant*. That night, through the courtesy of Captain Byron, the quartermaster on shore, I was promised the use for one trip of a small steamer engaged by him and expected next morning from Hong Kong, provided I caught the steamer

before he did. So, early in the morning I took the steam launch and cruised among the sixty or more war ships and transports looking for my steamer. Fortunately I got it first, took it to the *Grant* and began its loading. The last of the three horse boats had gotten in the night before. I went to the one carrying my saddles, etc., and fortunately found most of them stored on deck. I took them in a row boat to the *Grant*.

We reached Tongku with the last of the regiment's property, my troop and part of the equipments at 11 o'clock P. M. August 4th. Next morning we boarded some flat cars on the small railroad managed by the Russians and reached Tien-Tsin at 11 A. M., having met on the road a telegram from the Colonel ordering me to remain at Tongku till all the horses of the regiment had landed. As the trains in passing did not stop long enough to change cars I had to go on to Tien-Tsin.

Leaving my troop at the station I walked two miles out to camp and reported the facts.

I was told to remain and unload a number of cars containing heavy boxes of artillery ammunition. Seeing this could not be done that day with my men I sent out and rounded up one hundred coolies, who were glad to work for food, though they had to be guarded to prevent the troops of other nations seizing them. With their help the cars were unloaded by dark. When I was at the camp at noon I had asked for transportation to take my troop baggage to the camp, and was told that all available transportation but one wagon had gone with the Relief Expedition which had left the day before. However, I took out a load on the coolies. Next morning all my coolies, whom I had been ordered to turn over to the quartermaster, had escaped. Getting permission to go down to the station to see what I could do towards getting the rest of my baggage out, I sent out and secured the service of one hundred and fifty more coolies, and started them on regular trips to camp with my lighter baggage. In the meantime, by arrangement with Captain Byron, my troop set up eight wagons which had been shipped "knocked down," he allowing us to use them for one trip in

return for this work. By these means I succeeded in getting all my horse equipments and all of my light baggage which had arrived, out to camp.

The baggage of the other troops was at the depot at Tien-Tsin and Tongku. I now needed only my horses to have one troop of cavalry ready for business, and they began to come in on the 6th by rail from Tongku. At 6 P. M. on the 7th I reported to Colonel Wint that I had sixty-five men mounted and equipped for the field. He asked me how many horse equipments there were in the other seven troops, and on investigation I found sixteen sets. Colonel Wint then told me to take all of my troop that was ready, and the sixteen men to whom these equipments belonged and start next morning to join the Relief Expedition.

This expedition had left Tien-Tsin August 4th, and fought the battle of Piet-Sang, ten miles from Tien-Tsin, early on the 5th, and the next day fought the battle of Yang-tsun, twenty miles from Tien-Tsin. In this battle the Americans had borne the brunt of the fighting and had lost some eighty men, killed and wounded, and had driven the Chinese headlong from the field in the direction of Peking. The Relief Expedition driving the Chinese towards Peking consisted of about 10,000 Japanese, 3,000 Russians, 2,500 Americans and 2,000 British. The Japanese had some field artillery and a little cavalry. The only other cavalry with this expedition was a squadron of Bengal Lancers with the British.

After the battle of Yang-tsun the Chinese retreated rapidly and were pursued by the allied army on the road along the Pei-ho River.

The Japanese, having so much the larger army, were given the post of honor at the front, followed by the Russians, Americans and British on the same road.

On the morning of August 8th the troop left Tien-Tsin in high spirits at the prospect of joining the army at the front. They had worked hard and faithfully for a week to get ready for this start, and were happy that their labors had been rewarded by this opportunity, so they left Tien-Tsin whistling, singing and laughing. This joyful frame of mind

continued until we neared the battlefield of Piet-sang, where the sight and smell of numerous bloated carcasses of Chinese and horses scattered along the road, caused a sudden silence to fall on the troop, and there was no more whistling or singing that day.

After nooning at Piet-sang, where we found a company of the Ninth Infantry under Lieutenant Coleman and a detachment of Japanese left to guard the bridge of boats across the Pei-ho, we went on ten miles further to the battlefield of Yang-tsun, where we camped for the night.

The weather was extremely hot, the roads cut up and dusty from the passage of so many troops and trains, and this, added to the fact that my horses were just twenty four hours off the transport and were very leg weary, made the march a hard one.

There had been considerable discussion at Tien-Tsin as to whether it would be possible to get forage on the way to Peking, and although I had been given but seven pack mules to carry the rations of my seventy-eight men, I had loaded one of these mules with grain. Besides this, Colonel Wint had sent a spring wagon with me to go as far as my first camp with one day's grain, and then return. Our apprehensions were greatly relieved when we found, as we proceeded, that the country was flat and level for miles on each side of the Pei-ho, and was practically nothing but one immense corn field, covered with the finest growth of Indian corn and kow-ling I have ever seen. It is true the corn was still not ripe and therefore not the best forage for horses.

In all directions over this great plain were scattered at intervals of two or three miles small villages, and in some of these we found dried corn. It was not always possible to get this dried corn, because the Chinese army had doubtless destroyed all it could, and the allies had used all of the rest that they could lay hands on.

My troop was divided into four well organized squads, and to save time and to prevent confusion and to give every man his fair share of the work, I had arranged the duties of these squads so that on arriving at camp each squad knew just what it had to do, and it was not necessary to stop at



GENERAL CHAPMAN AND STAFF.

any time and make details. For instance, on arriving at camp the leading squad, which had been the advance guard, at once posted themselves as outposts and proceeded to locate the water and wood. This squad formed the camp guard that night. The second squad, after putting their horses on the line, went out and got the forage; the third squad got the wood and the fourth squad the water. If it happened the forage was very scarce or hard to get, all the other men of the troop assisted in bringing it in, for I had made it a rule that no man should eat his supper or breakfast until his horse had been fed with the best obtainable forage, and I saw personally that this rule was enforced all the time. The result of this distribution of duties was that we got into camp quickly and with the least fatigue to men and horses.

Neither men nor horses rested much the first night. It was hot and the mosquitoes were in clouds. I saw some men sleeping with their saddle blankets wrapped around their heads.

Next morning we crossed the Pei-ho again on a bridge of boats, and at noon overtook the pack train of the British contingent.

This train consisted of a large number of small mules. The drivers and packers were East Indians and seemed to manage their mules well. On looking at their pack saddles and carts it struck me that there was too much iron about them, making them unnecessarily heavy and very noisy. The pack mules were driven along the road in strings of threes, the lead mule being led and the second and third hitched to the saddle of the mule in front of it. I saw no runaways, no straggling, and there was always a man right on hand to adjust the pack if one slipped.

The carts also seemed to be efficient transportation, except that they were too heavy, and therefore the mules attached to them could not pull much besides the cart.

The idea of having carts instead of heavy wagons like ours struck me as a good one, for if one cart became disabled it was so much easier to pull it out of the column, unload it, fix it up, and reload it than it is with one of our big wagons. The pack mules seemed too small to be very serviceable.

Late this afternoon we also passed a portion of the Japanese transportation. This consisted of a long train of light two-wheeled carts, drawn by one pony in shafts; sometimes a second pony was hitched by ropes in front. Each cart had a driver, and was piled high with baggage, rations, etc., done up in small, neat, compact bundles.

Occasionally I would see one of these carts turn out of the road to repack or to adjust the harness, or something of



CAPTAIN CABELL, SIXTH CAVALRY.
LIEUTENANT GUINEY, SIXTH CAVALRY. TIEN-T-ING.

that kind, and it was noticeable that this accident to one cart did not perceptibly delay the train, and that the driver, assisted if necessary by one or two of the train guards, could quickly unload and reload the cart, when he promptly fell into place in the train.

Occasionally I would pass stragglers of the various armies. An American seldom had anything but his canteen, sometimes his gun, but a Japanese soldier who fell out was invariably seen with all of his arms and equipments, and when he rejoined his company he must have taken his whole equipment.

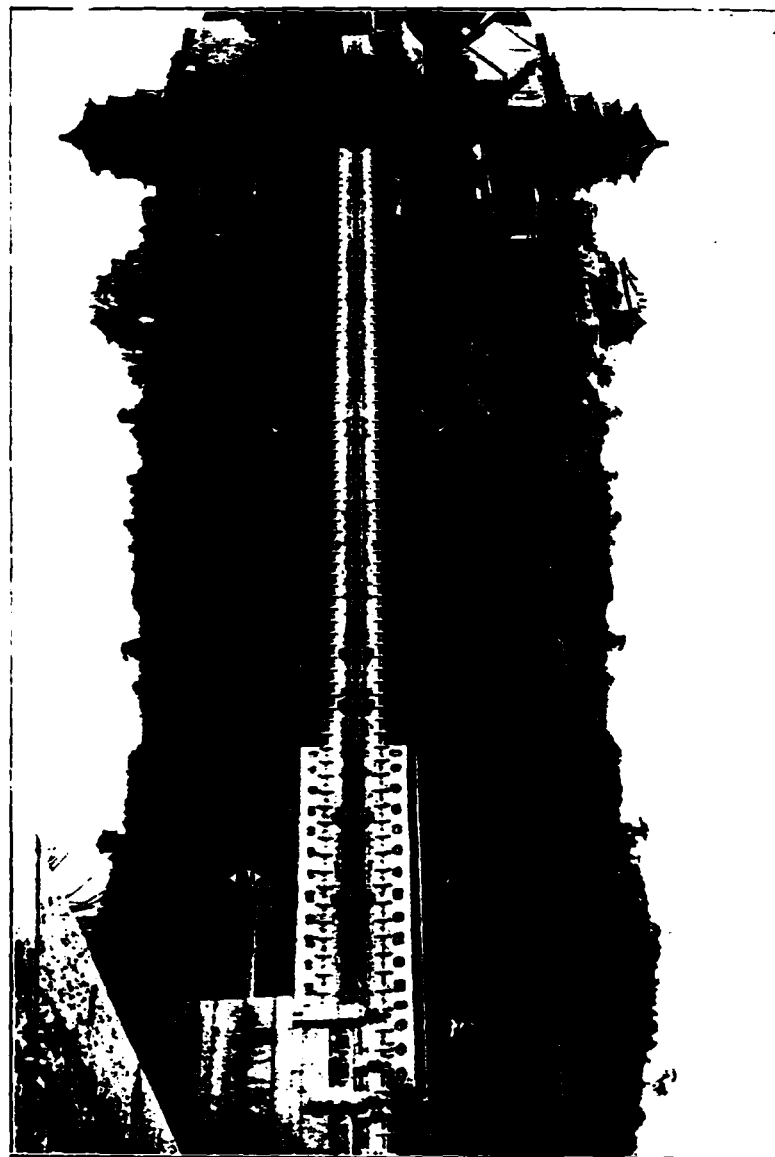
We saw for the first time how a camel might be used to lighten the hardships of such a march. Where the road passed up a hill in a narrow cut we came upon a camel, led by an Indian sikh, and loaded with two or three hundred canteens of water, which covered his back and sides like clusters of grapes.

At sunset that day I reported to General Chaffee at Pehmoon, near Ho-Si-Wu, just half way from Tien-Tsin to Peking. He had with him the Ninth Infantry, two battalions of the Fourteenth Infantry, Reilly's battery field artillery, two battalions of marines, and a detachment of the Signal Corps.

The American transportation consisted of fourteen four-mule wagons, fifty pack mules, and another pack train of fifty mules loaded with ammunition. One pack train did not join General Chaffee until two or three days later. We were told that the Japanese army were ahead of us, keeping in touch with the Chinese. They were followed by the Russians, and we were to follow them.

August 9th, for ten miles we marched along in rear of the Russians and I got my first sight of these soldiers on the march. They were heavy, stolid looking men, who straggled little and seemed to stand the heat well. The company just in front of me had a large kettle mounted on two wheels and drawn by two small horses. They managed to keep a fire under this kettle and so boiled water all day while marching on. I filled my canteen once or twice from this kettle and found the water good. It is true it was hot water when I first got it, but it was soon as cool as the water in the other canteens exposed to the sun. I was told that this kettle with hot water in it was, on its arrival in camp, used to make the soup which constituted the main part of these soldiers' supper. It would seem a most excellent thing for us to get one of these kettles and see what Yankee ingenuity could do to improve it and then give one of them to every one of our companies.

The Russians wore a white cotton uniform and a white cotton cap. The first day I saw them they struck me as being the dirtiest looking soldiers I had ever seen, and they



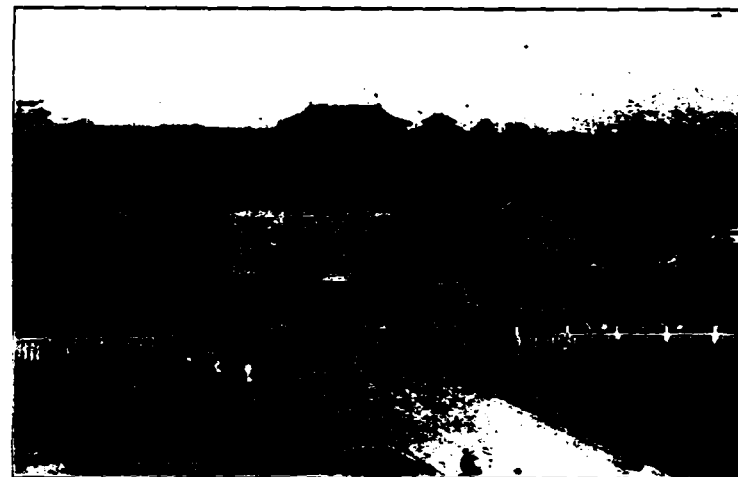
SUMMER PALACE.

continued to look dirty until one day when they stopped a few hours near water. Next day these men turned out in immaculate looking white: that is, they were made to wash their clothes whenever they had an opportunity, and I never saw them in anything like a permanent camp but what they had exceedingly clean looking uniforms.

About 5 o'clock of the afternoon of this day we made camp in a village several miles off the main road, after marching sixteen miles. The main road here made a big bend and we cut across a chord of the arc. The wagon train did not get into camp that evening. At 10 o'clock I was directed to send a squad back a few miles to locate it. This squad reported back at 12 not having seen the wagon train. I was then directed to take the rest of my troop and go back to our camp of the night before to look for it. When we reached the place, about six miles back where we turned off the main road, I carefully examined the road for marks of the passage of our wagon train, but there had been so much travel over this road that there was absolutely no sign of its having passed, nor could I hear anything of it from any of the numerous stragglers whom I saw along the road. I therefore continued on back to Peh-moon, where I got breakfast, but saw nothing of the wagon train except the tracks where it had turned into the main road.

When I left Tien-Tsin I had been unable to obtain any map of the country between Tien-Tsin and Peking. I had been given permission to copy a map of this road. This copy was made by Lieutenant Guiney of my troop, with a lead pencil in a very short time at night by the light of one flickering candle. The map was poor, indistinct and inaccurate in the first place, so he copied only enough of it for us to reach General Chaffee by its aid. We had no other map, and so the country ahead of us was absolutely unknown to me. Seeing and hearing nothing of the wagon train at Peh-moon, I started back to the front again, searching the roads on each side for evidence of the train leaving the main road. There were many roads which led off the main road, each of them so much traveled and cut up that it was impossible at times to tell which was the main road. I traveled

along until about sundown without having come upon any sign of the wagon train. I had overtaken parties of Japanese soldiers, and for this reason thought I must be near the front, and therefore concluded, as I had no rations, to go back to our camp of the night before. I reached it in eight miles, as we traveled in the dark through corn fields and villages where there were no roads, being guided only by a small



ENTERING CASTLE

-Troop "M" Sixth Cavalry. 8:30 A. M. to 1:15 A. M. August 1900.

compass in a wrist watch, and what I kept in my head of the different distances I had marched that day. We camped this night without rations or shelter, and in some rain. Next day I overtook the army at Tung-chow, sixteen miles from Peking. We had been in the saddle almost continuously thirty-six hours.

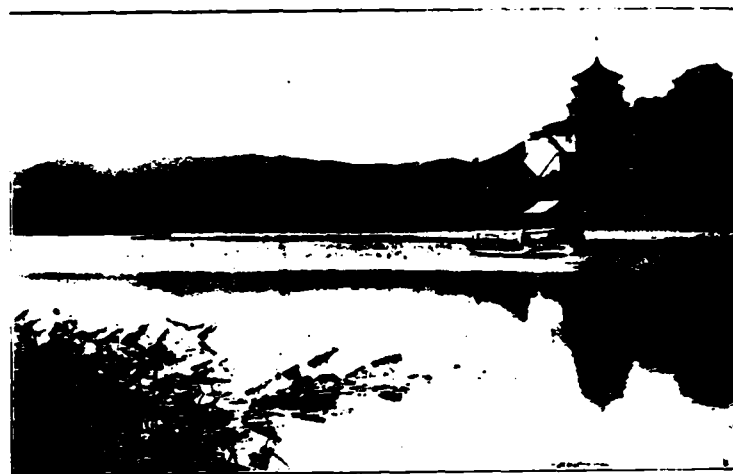
From Tung-chow to Peking there extends a large canal running due west and in almost a straight line. There are four roads running parallel to this canal, each leading into a gate in the wall of the city of Peking. These roads are about a mile apart, two on each side of the canal. It had been decided that from Tung-chow to Peking the four armies

should march abreast, one on each of these four roads. The Japanese were on the right, then the Russians, Americans and British. The country was still perfectly flat and covered with a dense growth of high corn. Numerous crossroads intersected the road that we traveled. To keep up the normal formation of an advance guard in this country and explore it thoroughly and fast enough not to impede the march of the troops behind was not possible, because the horses traveling through the high thick corn and forcing their way through it where there were no roads, soon became exhausted; therefore I improvised a formation for my advance guard which I had never seen used before. Lieutenant Guiney, with one squad of eighteen men, was sent forward as an advance party. Of these men he kept a small detachment in the road and sent the others in twos, threes or fours, along the crossroads to the right and left, with orders after exploring the road for half a mile or so to return to the main road by the same route and to fall in in rear of the troop.

As soon as one squad began to be much depleted I sent another squad forward from the support at a trot to replace it. In this way every horse had an equal share of the fatigue of the march, and we made eleven miles to camp in about three hours and a half, having covered the country completely for half a mile or more on each side of the road and without seriously fatiguing any horse. We saw no Chinese troops, and only occasionally a few unarmed Chinese or men who had just thrown away their arms.

About 10 o'clock we reached a village about five miles from Peking. Shortly after we arrived at this place General Chaffee told me to take six men and go to the road a mile and a half to the left, upon which the British were advancing, connect with them, and then use the six men as an outpost. I went along through the high corn until I got near where I expected to find the road, when I could see trees which indicated a village. At the same time I heard a great chatter in Chinese, and dismounted with a sergeant to slip up on the place and see what was there. When I got within about a hundred yards of the village I saw about eight or ten Chinese soldiers who, on seeing me, set up a shout and ran back into the

village. I could see thirty or forty others hurrying from one side of the street to the other with their arms. I ran back to the horses and dismounted, and knowing that it was useless to longer try to conceal our movements, and yet not knowing just what was in the village, I determined to charge through it. This we did in column of files, firing with our pistols as we went. There were some two or three hundred Chinese soldiers in the village, but they were too frightened



MOUNT WANG-SHO.

to do us any harm or make any serious attempt to stop us. As soon as I got back to camp I was sent with my troop and two guns to attack the village, but the Chinese had fled.

We were told that it had been agreed that the four armies were to lay over on this line the next day, August 14th, so as to bring up everything from the rear and get in readiness for the attack on Peking, for it was expected there would be a hard struggle.

At 5:30 o'clock on the 14th I was ordered to take my troop and make a reconnaissance toward Peking, going until I met with some resistance or until I reached the wall, and then to return to camp. I expected to be back by 8 o'clock. After going about three miles the advance guard reported to me

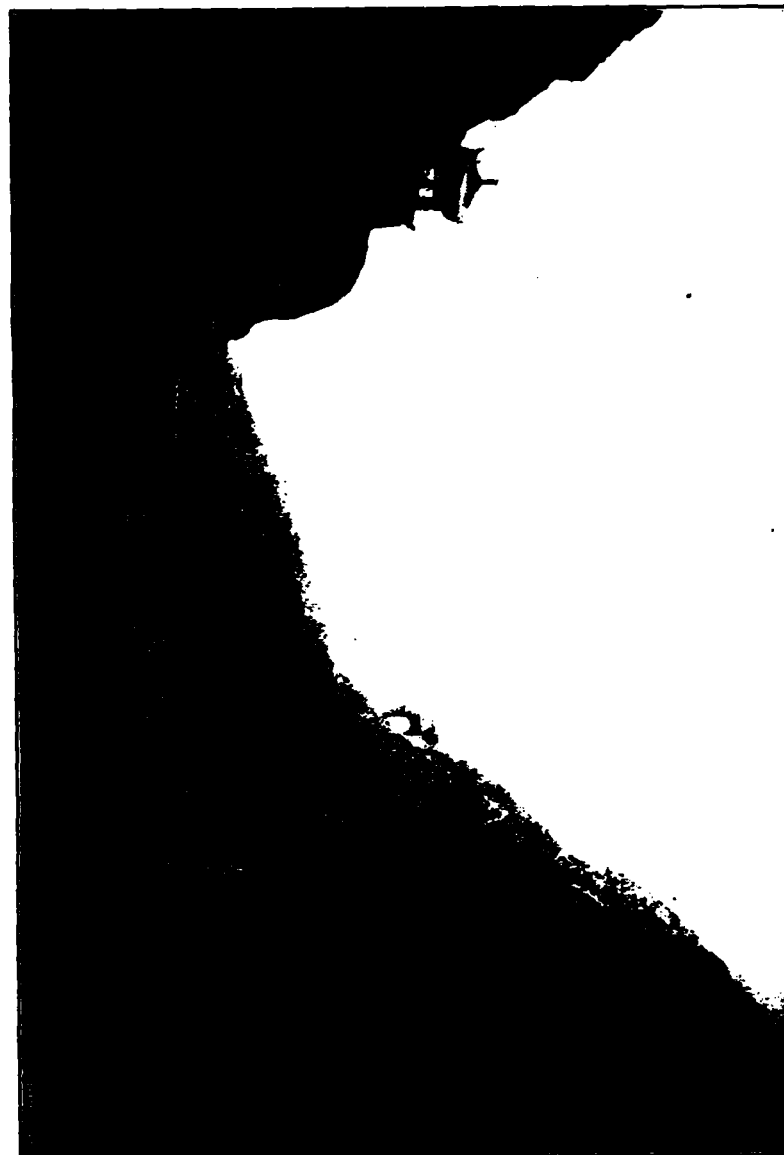
that they had just seen a British lieutenant, who stated that he and his forty men had just been driven back. I sent word to him to turn back and that we would see what was in front of us. I do not think this message reached him. Soon after this, we were fired on from the left front and our advance party driven in.

The firing was in volleys and from apparently several hundred men. I dismounted the troop, put the horses under shelter, and took up a position which was sheltered from the left front, and returned the fire, sending a mounted squad under Lieutenant Guiney to make a short reconnaissance and with orders to retreat around my flank if he found any considerable body. He developed a party of infantry and some mounted men and then joined me. After some twenty or thirty minutes of this firing we got several volleys on the right rear, and I mounted and withdrew about five hundred yards to where I had seen a strong compound, and I sent word back to General Chaffee that I had been attacked and would stay where I was.

A civilian interpreter had accompanied me that morning, and as soon as the firing began he fled back to camp and reported that my troop was surrounded by Chinese infantry and cavalry, and was being cut to pieces, whereupon General Chaffee had promptly come forward with his force. When he reached my position and saw the wall of Peking he formed his line and advanced on it, and in a short time a company of the Fourteenth Infantry had scaled the wall.

During this attack on the wall my troop was covering the left and front, and was for some half an hour or more engaged in the clearing of a gate by dismounted carbine fire. At 11 o'clock the night before we had heard a heavy cannonading, which continued all night, and thought it must be the Chinese attacking the legations, but when the Americans reached the wall they found that most of this firing had been by the Russians and Japanese, who had advanced the night before and attacked the wall. It was said that the Russians had in fact succeeded in taking the gate and gotten in the city, where they were ambushed by the Chinese and driven out with a loss of a hundred men.

TAP-SING CHIO ON ROAD LEADING TO GREAT WALL.



It was this same gate that was taken by the Americans about 11 o'clock the morning of the 14th, just after they had scaled the wall.

Though the Americans were the first in the city by several hours, they were not the first to reach the legations, having no guide who knew the streets. The British who entered by the gate which my troop had cleared of Chinese, marched straight to the wall of the Tartar City near the legations, and going under this wall by the water gate, entered the legations without a fight, the Americans being a short time behind them.

About 1 o'clock I left my troop dismounted under the wall at the corner where it had been scaled, and walked along the wall outside for about 200 yards, when I came to the Tung-pien gate. This gate and the narrow street leading from it into the city were jammed with three or four hundred Russian infantry. There seemed to be some dispute or misunderstanding between them and the Americans as to which were entitled to possession of the street. The Russians were not firing nor making any other use of the street but were just standing in it. They were very ugly as I passed through them.

A hundred yards or so from the gate I saw General Chaffee's staff and two guns of Reilly's battery. The latter were in position on an open stone bridge, firing at an immense tower on the wall of the Tartar City, at a distance of one hundred yards. This tower was filled with Chinese riflemen, but the men at the guns did not seem to mind the bullets that were flying around them, and continued pegging away at the tower.

When I went back through the Russians at the gate they were still ugly, and were venting their spleen by the pleasant pastime of murdering women and children. I saw a Russian soldier pick a woman up by the waist, turn her feet up and mash her head against the pavement, and another take a small child by the ankle, swing him around his head and dash his brains out the same way. Whether there were officers with these troops I do not know, but it is presumed there were.

That night we camped between the moat and the wall of the Tartar City. It rained, and we had no covering or bedding. Lieutenant Guiney and I stuck our sabers in the ground and rested one end of the guidon staff on these sabers, the other end on the ground, and stretched a piece of matting which we found across this, and so got some protection from the rain.



JAPANESE AND AMERICANS AT TAKU.

Next morning at 7 o'clock my troop followed the artillery through the Chien-men gate of the Tartar City, into a flag-paved court, just inside this gate. I went up on the gate, which was about fifty feet high. There were four guns of Reilly's battery up there. Two of them pointed toward the palace and were not firing, and two of them pointed west along the wall of the Tartar City, firing at the gate on this wall a mile off. They were doing fine practice, hitting the gate at nearly every shot. About this time a heavy firing of small arms was opened on the gate from one of the gates of the palace, about seven hundred yards to the north of us. We could see the Chinese, who were using all kinds of small arms, smokeless and black powder, Mausers, Remingtons,

jingals, bows and arrows, and as Major Quinton expressed it, every weapon known to modern and ancient warfare.

General Chaffee stood looking coolly at this sight for a few minutes, and soon opened on the enemy a heavy fire from infantry and marines posted on the Chien-men gate and wall on each side of us, and a wall in front of it, while part of the Fourteenth Infantry advanced on the gate, which was soon taken. I rejoined my troop in the court below, and we sat there holding our horses and talking to some companies of the Ninth Infantry, which at this time were also in reserve. This sounded more like a battle than any I had seen. The four guns of Reilly's battery were firing just over our heads, as were some five or six hundred infantry and marines. The wall just in front of me was filled with infantry firing, and a touch of reality was given by the sound of a few Chinese shots that were striking the stones of the court. Lieutenant Corcoran, Sixth Cavalry, in command of a Gatling gun detachment, brought his gun up at a trot through the gate where one of his men was killed, and opened fire on the Chinese. He was vigorously cheered by our waiting troops, to whom the sound of his firing was a welcome one.

The fight was over by 2 o'clock, when the Americans had taken the four gates in succession and had driven the Chinese off the gate over the door of the palace.

It was said the fighting was stopped at this time by the Allies, who were unwilling for the Americans to occupy the palace, and they insisted on the Americans withdrawing from the Imperial City, which was done at 5 o'clock, and we camped this night in the same place we camped the night before. The assaulting columns had captured a large quantity of flags, which were sent back to me to keep, so that when my troop marched out of the Imperial City it looked like a troop of lancers, each man carrying a Chinese flag. These two days' fighting, resulting as they did in the relief of the legations and the capture of the palace and the whole city of Peking, virtually ended the campaign, though there were a few minor affairs later at other places.

The next day the French troops relieved the Pei-tang Catholic Cathedral in the Imperial City, which had been held

for two months by fifty French and Italian marines under the leadership of Bishop Favier. This cathedral was so large a compound that it would have required several hundred men to have properly defended it against a courageous foe, yet these fifty marines had held it against the daily attacks of thousands of Boxers and Imperial troops, who had never once effected an entrance, though they had exploded



MEETING OF THE POWERS' REPRESENTATIVES.

seven large mines under different parts of the enclosure and had killed or wounded between thirty and forty of these defenders.

If the holding of the legations by seven hundred soldiers was a great thing, the holding of this place by fifty men when it was in the heart of the Imperial City and subject to assaults from all sides, is almost unparalleled in history.

THE JAPANESE SOLDIERS.

Of the sixteen thousand troops composing the Relief Expedition, the Japanese had between eight and ten thousand. It was said that these were the picked troops of Japan, and

that they had been told that any man who misbehaved before the nations would not be allowed to return to Japan. They were, therefore, the very best that Japan could do, and there were no better. They were brave, active, hardy and uncomplaining soldiers. No risk, nor even the certainty of death kept them from doing their duty. It was said that, on the night of July 13th, when the attack on Tien-Tsin had failed and it became necessary to blow up a gate of the walled city or abandon the attack, early next morning twenty Japanese soldiers volunteered to blow up the gate, though this had to be done in the actual presence of hundreds of Chinese immediately over them on the wall, and they must have known that few or none of them would return alive from the attempt, and yet they successfully blew up the gate, and nineteen of the twenty were killed or wounded. Again at Peking a similar attempt was made to blow up a gate. After the fuse was lighted the Chinese opened a small postern gate and sallied out and put the fuse out.

The Japanese seeing this, returned, relit the fuse and stayed right there until it exploded, some being blown up with it.

One great advantage these people had as soldiers over our men was, that they could live on so little and so simple fare that the commissary trains were very small. Whether they would make as successful soldiers against a braver enemy remains to be seen, but there was nothing that I saw that would lead me to doubt it.

THE RUSSIANS.

The difference between the Russian officers and soldiers that I saw, was more marked than that between the officers and soldiers of any other nation. Many of the officers seemed educated, polished gentlemen, and were doubtless accomplished soldiers.

The men, on the other hand, while strong, hardy and possessed of plenty of brutal courage, were, nevertheless, stupid, dirty and brutal looking. The impression we got of the Russians as a whole, was that if they were holding a

GREAT WALL.



position and under control of their officers, they would probably stay there as long as a man was left, but in an attack when the individual qualities of the men would be called into play, that they would show up poorly.

THE FRENCH.

The French had no troops with the Relief Expedition until Peking was reached, and they took no part in the two days' fighting, except a squad of twenty men who were with me on the morning of the 14th.

This squad was well handled and did good work. Later the French had some thirty thousand troops in China, among them some Chasseurs d' Afrique, who were fine looking soldiers.

THE BRITISH.

The British troops were composed of various tribes of East Indians and some English artillery. During the advance I saw little of them except of some native Indian lancers. These men made most excellent scouts. They went in small patrols of four or five well to the front, covering a large extent of country. It was said that each mounted man had a native servant to take care of his horse and equipments, and there was no cleaner looking, neater appearing soldiers on the march or on parade than these lancers. Their horse equipments were always in perfect condition, and I never saw better groomed horses. The latter were half Arabian and neat, clean limbed, small animals that stood the march very well, but they had many sore backs and did not carry near the weight that our horses did.

The English officers and soldiers fraternized with our officers and soldiers, and it was a common remark that we, meaning the American and British, were the only decent people there.

THE GERMANS.

The German soldiers did not arrive until after Peking was taken, so they had no part in the fighting. The Chancellor of their legation had been killed at the beginning of

the uprising, and they seemed to feel that they ought to do something, so they sent out numerous expeditions into the country and there were frequent rumors of battles in the country around Peking long after everybody else had gone into winter quarters.

The German soldier makes a magnificent appearance on parade, but he seemed entirely unsuited to a campaign in a hot country, and where he had long distances to march: nor did he seem to know how to care for himself well in the field, for it is said that there were more sick Germans in China than of all the other nations together.

THE AMERICANS.

We all know what our soldiers are, so it is useless to remark upon them. They were the same independent, careless, slouchy, but brave and intelligent men that we have in our army to-day.

The slouchy appearance of the American soldiers in Peking, as compared with the foreigner, was caused by the fact that the Americans in permanent camp were required to wear good, clean looking uniforms all the time as long as they had them. They had but two or three suits of blue, and in the dust of Peking these all became dirty, and there was no way of cleaning them.

The soldiers of the other nations took off their best clothes as soon as they returned from a parade or ceremony, and went around camp in their oldest clothes, so whenever they were turned out for a ceremony they excelled our men noticeably in the neatness and cleanliness of their dress.

THE METHOD BEST SUITED IN THE UNITED STATES ARMY FOR IMPARTING PRACTICAL INSTRUCTION IN "SECURITY AND INFORMATION" TO THE NONCOMMISSIONED OFFICERS OF A TROOP OF CAVALRY, INCLUDING A SCHEME FOR PROGRESSIVE EXERCISES IN THAT SUBJECT.*

BY FIRST LIEUTENANT MALIN CRAIG, FIFTH CAVALRY.

WE are taught that "cavalry is the arm par excellence for patrolling," and it is apparent that the security and information of any body of troops, will depend more upon the efficiency of its patrols than upon all the other means of gaining information combined.

Let us, therefore, dwell at considerable length on patrols and upon the individual members of a patrol, inasmuch as the success of the patrol depends upon the scouts, and the success of the force sending out the patrol depends in turn upon the success of the patrol, and so on, up to the main force.

The members of a patrol are scouts, hence we will examine into the necessary qualifications of a scout in order that we may tell our men what is needed. Not every man has these qualifications, nor can every man acquire them.

A good scout should be naturally fearless and energetic, he should have good vision and hearing, and have plenty of audacity tempered with judgment. He should be a good horseman, full of resource and expedients. He should be ever prepared to rely upon himself alone, and should never

*Subject of thesis required at the General Service and Staff College, Department of Tactics, in connection with the course in Security and Information.—[EDITOR.]

allow himself to be captured as long as he and his horse are not disabled by wounds or by accident.

A scout may add to the above essentials, certain other qualifications which may be considered as accomplishments, (such as, for instance, being a good shot, or conversant with the language of the inhabitants of the theatre of operations, or a military topographer) and his value as a scout will be accordingly increased.

Some degree of familiarity with topography is almost a necessity for a patrol leader, since information supported by a map, a mere sketch even, is more reliable, and conveys a far more accurate idea than can be obtained from a man who relies upon his unaided memory.

It is certainly to be conceded that a man in his first enlistment is fully occupied in learning the routine duties of a soldier, and it is with men who have previously been thoroughly grounded in their drill, horsemanship, etc., that we should work to gain the success that is demanded.

We will suppose then that our noncommissioned officers are well grounded in the routine duties of a soldier: that they are well instructed in troop drill, equitation, guard duty and fire discipline. They will have had, also, some instruction in the estimating of distances, signaling, camping expedients, and perhaps a smattering of elementary veterinary science.

Our subject should be then divided into its technical headings, as understood by the recognized authorities on the subject, and progressive instruction given under these headings.

Among the technical headings under which authorities ordinarily consider military methods of gaining information and security for an army are: "Reconnaissance in Force," "Special Reconnaissance," and "Patrolling." We shall discuss the last named first on account of its very great importance.

In instructing our men, we should assemble the whole troop for an informal lecture. The means to be taken will arouse the interest of nearly all the men, and give an opportunity to make necessary preliminary explanations, and comprehensively illustrate them.

It seems that the average enlisted man can gain a more

complete understanding of oral explanations and instructions when his eye is afforded opportunity to assist his ear. Knowledge acquired through the combined senses of sight and hearing is much more thoroughly, clearly and easily impressed upon the memory than that which comes through the sense of hearing only. For these reasons illustration of instruction is exceedingly valuable, hence desirable.

This can be accomplished by the use of large diagrams, as is shown by the various plates in "Security and Information"—on a blackboard, or by the use of pegs stuck in the ground and marked "sentinel," "vedette," "picket," "support," "reserve," "patrol," "scout," etc. Another method, better than any other expedient for illustrating instructions in minor tactics, we will designate the "Terrain Table," which consists in taking an ordinary table (the larger the better), and nailing boards vertically around its edges to a suitable height. Then fill the enclosed space with sand to a convenient depth. If the sand is moistened, it may be so manipulated as to represent almost any kind of terrain. Natural features are easily improvised—woods by sprigs of evergreen or twigs, farm houses or villages by blocks, roads and streams by strings or pieces of small rope, soldiers in patrol, outpost, advance guard, or any desired formation, by matches or toothpicks.

Here then we have the terrain, and it is right here that the men can be taught the theory of minor tactics and their own positions under various conditions. The instructor can explain and illustrate as he proceeds. Every man should be taught to find the points of the compass, and each should know what is required of him under any and all circumstances.

When the men have gained a general idea of the subject, and have learned to think of the table with its improvised natural features as a miniature terrain, a noncommissioned officer should be called upon to conduct a patrol from a designated point to some position indicated by the instructor. The movement should be made as it would be under natural conditions, keeping out of sight of a supposed enemy in a particular direction or directions, at the same time examining

all places likely to afford concealment to the scouts of the enemy, ascending all heights near the route for the view that is afforded (at the same time keeping concealed as much as possible), and in general, carrying out all the principles laid down in "Security and Information" for the conduct of a patrol of the kind used.

Individual men may be required to proceed in the same way until they understand what is required regarding the method of procedure of scouts; they may be then excused, and particular attention paid to the noncommissioned officers, who in the natural order of things will be the patrol leaders.

It will soon be found practicable to send out two, and later several patrols on the miniature terrain, sometimes with the same, sometimes with different objects in view. It will be apparent at once that the men are taking great interest in the work, and the noncommissioned officers in learning their own parts will unconsciously prepare themselves for the imparting of instruction to the other members of the troop. They will in addition gain familiarity with the particular duties of each man of a patrol, such as point, flanker, rear guard, etc.

The noncommissioned officers should be required to construct upon the terrain table models of well known ground, and later of territory recently scouted over, with a view to educating their memories and training their powers of observation in a way that will assist them later in the instruction in map making.

To this instruction should be added, without fail, exhaustive detailed practice in the writing of messages, and in the understanding of the essentials of military messages, viz: accuracy, legibility, and the separation of facts from surmises, etc. Also the method of recording the time, place of the sender, the address, signature, and methods of sending, all of which are so thoroughly explained in "Security and Information."

In connection with the formation to be taken by patrols, under various conditions of terrain, it may be well to state that the tendency at present is to use the skirmish formation, with flanks slightly refused, under nearly all conditions. By

means of this formation more front can be covered than in any other way, hence more opportunities are afforded for the gaining of information.

It will be a difficult matter to surround and cut off or to ambush a patrol in such formation, hence one or more men will always be able to get away in case of sudden attack. Thus all the requirements of a proper formation are maintained.

In a close country, it may be objected, this formation cannot be maintained. This is also true of the normal formation, and in such a case I would suggest the formation of a column or of columns of troopers, with a suitable distance between the men, the usual formation to be taken at the first opportunity (ploying and deploying where necessary).

If our men learn well, in theory as indicated, the duties they are to perform, and are then put through a course in the actual terrain, similar or better, identical with that which they have learned in theory, they will be far better equipped for their duties than the men who have had practical work only.

A scout may be a private soldier or he may be an officer, but regardless of his rank, the value of his work will depend on his natural ability, improved by training, study and practice. This is why I lay so much stress on the scout, and on the necessity for his being well trained, on the fact that it is on him that the success or failure of his patrol depends, and by regular gradations we find that the commander himself is dependent on the scout for information concerning the terrain, resources of the country, movements, strength and position of the enemy. The scout is, in general, the only man who can supply the above information in time of war and in the face of the enemy.

A special reconnaissance may be considered as a patrol, generally large, but at times small, and which has a particular object in view. Its commander will be, in general, an officer, and the success of the reconnaissance will depend upon the thoroughness of the instruction of the members in their duties as scouts. The importance of their duties cannot be too strongly impressed upon the individual scouts.

The line which marks the difference between a special reconnaissance and a reconnaissance in force is often a small one. The object in view is often the only difference. The troop should have practice in both kinds of reconnaissance, outlining an enemy where necessary.

In no kind of instruction does satisfactory success with the advanced portions more depend upon the thoroughness with which elementary principles have been taught than in field exercises. In such elementary instruction, therefore, too much care and study cannot be put upon efforts to impart to all a complete and intelligent grasp of the spirit of the principles involved. From the very nature of the work, few definite rules can be announced for its government. Success depends upon the prompt exercising of good judgment. This is why instruction should be directed toward creating an interest in the work, and producing an intelligent appreciation of its principles.

Noncommissioned officers and intelligent, selected privates, good horsemen, who habitually take good care of their mounts, preferred, should be carefully drilled and instructed in the duties of patrol leaders, scouts, etc. They should be required to study, and where practicable to recite prior to the practical instruction of the day, on the portions of the text which relate to the exercises of the day.

Some forms of compensation may well be given to men who show great interest and who do extra study, by according them whenever possible such privileges as naturally fall to patrol leaders and scouts, such as marching in pairs on the flanks, in the advance and in the rear of the column, whenever on the march. Strict maintenance of distance and position should not be exacted of them except during instruction.

A troop commander can make thoroughly efficient patrols of his men, certainly of a majority of them, by first giving them the illustrated theory as previously explained, then supplementing by practical work, as indicated hereafter in the progressive schedules.

As our drill regulations contemplate dismounted work by our men, the course of instruction should include some dis-

mounted work. The general conduct of mounted and dismounted patrols is to a great extent the same. Distances vary considerably, as do some of the means of examining houses, villages, enclosed places, marching on great roads, etc. At any rate, the men should be so trained as to be of value to the service in case of loss of horses, or as has been the case in our service lately, when cavalry regiments have been temporarily dismounted for service. The men should feel that dismounted they are the equal in every respect of infantrymen, being armed the same (with a revolver in addition) and mounted, considerably at an advantage, due to superior mobility.

Advance and rear guard duty should be first understood from the illustrated instruction, then by doing practically what has previously been explained and illustrated. The duties of constituent parts of the advance and rear guards can be readily taught, using the whole troop for the lines of observation and resistance, and indicating the reserves, and if necessary even the supports, by flags or other suitable mark.

The necessity for active, able scouts and patrols is especially apparent in the rear guard duty, where cavalymen are in demand on account of their ability to fight a delaying action, and then mount and get away in a manner that could not be successfully attempted by dismounted troops.

In the theoretical instruction in advance guard duty, given at the terrain table, the men can see how each patrol, flanker or point, guards the larger bodies which follow from surprise, and enables them to prepare for action.

In advance guard duty I would again advocate the skirmish formation in preference to the normal one. It preserves the integrity of the subdivisions under their own leaders; it covers more ground, therefore causes an enemy who would allow the advance party to get by and then deliver a few volleys into the flank of the support or reserve, or of even the main body, to keep at a greater distance than he otherwise would. In close country the skirmishers would close in and be in fully as effective a position as though they were in the normal formation. At any rate, the troop should

be well drilled in both formations. The training should cause each man to move to his position at command, almost automatically, yet all the while using his faculties for observing, and at the same time keeping himself concealed as much as is consistent with seeing all that can be seen.

Outpost duty in practice is but the expansion of what the men have learned from the instruction given at the table on the terrain of sand. They may consider the various bodies of the outpost as stationary patrols, with moving patrols here and there, to supplement with what information they may be able to obtain the security given to the main force by the stationary bodies.

The sentinels are merely performing guard duty under new conditions. They have more to remember in the way of special orders. Here the use and necessity for signals is taught and understood. The value of a good point of observation for the vedettes is pointed out—on high ground by day, below the sky line by night. All can be well illustrated by detailing patrols and scouts to represent an enemy: let them attempt to crawl up on the vedettes: let them run the gauntlet of a patrol or two. In short, let them compare their positions to those of a game stalker, always remembering that the game is stalking them at the same time, and that any carelessness on their part may cause the game to deliver a disabling blow from the limits of long rifle range.

I have merely touched upon the various headings, believing that the practical instruction will follow the illustrated. It seems to me that the method of the table and sand representing the terrain will give *more* than theoretical instruction, for it combines at least the elements of practice with the theory. The men *see* what they are to do before they do it, and they will involuntarily look upon their work in the field as they did at the table, only the table will be larger and they will be what was represented by the matches and toothpicks.

Before proceeding to the progressive scheme for instruction I wish to note that, where possible, it is advisable to give auxiliary instruction to selected men in topographical reconnaissance. The instruction should be given in detail,

practically conventional signs, map reading, map making, no matter how rough, road sketching, and most important, report writing.

After the men have practiced copying conventional signs and simple maps, they should be taken, dismounted, along a road for a mile or so, pacing and estimating distances, taking bearings with a compass, or estimating them, or both. After some proficiency is shown in the above, simple sketches may be made, showing courses of roads and streams, the men familiarizing themselves with the character of surrounding features which have military importance. Then other trips should be made over the same routes, the instructor pointing out such objects as should be described and explaining what features require mention, and giving reasons.

This instruction will teach the men to supplement their sketches with descriptive reports. The written reports should be carefully gone over by the instructor, omissions supplied, improvements suggested, and then the whole rewritten. As the men progress, exploring patrols may be sent out under them, a sketch and written report being required on return. The work should be checked and corrected.

A troop commander who is interested in his troop, can easily find time to get in the instruction above indicated, during the ordinary open season for the practical work, and during inclement weather for the theoretical. After the foregoing theoretical illustrated instruction, the troop is ready for the field work, in the sense that the men can work intelligently, having a good idea of what is wanted, and not being dependent upon hurried and often incomplete verbal instructions, given at the last moment just before they are to be put into execution. Where they are in doubt the non-commissioned officers will be capable of straightening them out. All will be eager to learn; their interest has already been aroused and is ready for the stimulation that properly conducted field exercises will bring. They will look upon their duty as a pleasant relaxation from the dull routine of drill.

The following schedule seems to more fully meet the requirements of our service and to be more thorough and prac-

tical than any other of which I know. It has been found successful in the few instances where tried. All depends upon the troop commander; if his interest is sincere that of his men will follow.

SCHEME FOR PROGRESSIVE INSTRUCTION IN MINOR TACTICS (CAVALRY.)

PATROLLING.

Explanation:

Division of patrols:

- (a) Large.
- (b) Strong.

Strength of each.

Classification and purpose for which each is used:

- (a) Officers (small or strong).
- (b) Reconnoitering (small or strong).
- (c) Exploring (small or strong).
- (d) Harassing (small or strong, generally strong).
- (e) Expeditionary (small or strong, generally strong).
- (f) Visiting (small).
- (g) Flank (always strong).
- (h) Covering (always strong).
- (i) Connecting (always strong).
- (k) Pursuing (small or strong).

In the general formation of the patrol, note especially the composition of the point.

General conduct of patrol with reference to:

- (a) Moving to the front.
- (b) Moving to the rear.
- (c) Great roads, villages, inhabited places.
- (d) Halting.
- (e) Meeting a friendly patrol.
- (f) Civilians from direction of the enemy.
- (g) Questioning country people.
- (h) Civilians going towards the enemy.
- (i) Guides.
- (k) Concealment while reconnoitering.

Methods of reconnoitering:

- (a) Across roads.
- (b) Heights.
- (c) Defiles.
- (d) Bridges and fords.
- (e) Woods.
- (f) Inclosures (gardens, parks, cemeteries).
- (g) Houses.
- (h) Villages.
- (i) Cities and towns.
- (k) Enemy in position.
- (l) Enemy on the march.

Practice.

The troop should be divided into small reconnoitering patrols, and territory assigned to each. After giving special instructions to each leader, he should be directed to inspect his patrol, to designate a place of assembly, to give special cautions and to instruct the men in signals.

The patrol should be started out after questioning the leader and members to ascertain whether duties are thoroughly understood. Where possible, an officer should accompany each patrol, otherwise an especially well qualified noncommissioned officer, to make corrections of mistakes and to point out omissions. On completion of what orders require, the patrols should return to the starting point or post and report to the commander. It is assumed that all instruction will be consistent with the principles enunciated in the text for the conduct of cavalry patrols.

Repeat the foregoing instruction until it is thoroughly understood and comprehended. Too much care cannot be taken to see that the points, flankers and scouts do not go about in a purely mechanical manner, due to ignorance and lack of proper appreciation of the spirit and purpose of the duty.

Impress upon the men the fact that the typical formations given in the text are examples only, taken under normal conditions, and that they cannot govern *rigidly*; that all formations of patrols will necessarily vary, according to

their object, the nature of the ground, and the character and position of the enemy.

Teach the leaders that "the patrol must always be so formed as to facilitate the gaining of information, and to insure, if possible, the escape of at least one man in case the patrol should be cut off."

PATROLLING—*Continued.*

Explanation:

The commander explains:

Significance of signs:

- (a) Boats and bridges.
- (b) Flames and smoke of campfires.
- (c) Rumbling vehicles.
- (d) Neighing horses.
- (e) Braying mules.
- (f) Barking dogs.
- (g) Noises made by troops on the march and the distances heard.
- (h) Reflections of weapons.

Distances that different objects are visible.

Conditions tending to mislead judgment of distance.

Significance of:

- (a) Trails.
- (b) Abandoned camps and bivouacs.
- (c) Manner of inhabitants (hostile or friendly).

Reports:

- (a) When sent.
- (b) How sent.
- (c) Indispensable qualities.
- (d) Form.

Now divide the troop into expeditionary patrols (better small), and fully explain:

Proper procedure of patrol when its object is to:

- (a) Capture sentinels.
- (b) Capture patrols.
- (c) Capture prisoners generally.
- (d) Destroy roads, railroads or telegraphs.
- (e) Tap a telegraph line.

Considerations touching prisoners:

- (a) By whom questioned.
- (b) Best time for questioning.
- (c) Relative value of different grades.
- (d) Questioning enlisted men.

Practical.

The commander gives his instructions, the patrol leader then gives his, and makes his inspection of the men and horses. The patrols now start out, accompanied where practicable by an officer, in other cases by a well qualified non-commissioned officer, who points out to the leaders subjects for patrol reports, these to be written out in proper form (under supervision until proficiency is attained) and sent back by a member of the patrol.

In the absence of subjects, appropriate as far as regards sufficient number and variety, they should be assumed, and surrounding conditions should be suggested, to afford opportunity to instruct and test the knowledge of patrol leaders.

Reconnoitering patrols should now be detailed to operate against each other, using distinctive clothing to distinguish the members of the patrols at a distance. Care should be taken to prevent any actual combat. Signaling by firing should be done only when absolutely necessary, and other firing should be in some way limited, as for instance to the occasional exchange of shots by detached scouts.

Instructors are present with the patrols where possible, and an umpire should be present to comment on errors and failure to take advantage of opportunities to maneuver to advantage.

Expeditionary patrols should be operated against each other, and in all cases instructors and umpires should use every effort to have the operations conducted on tactical principles, with proper caution and restraint. Foolish and ridiculous sham fights with blank ammunition should be immediately stopped, and the exercises terminated for the time being, or else the patrols should be sent back to begin all over again.

ADVANCE GUARD DUTY.

Explanation:

The troop commander explains what would be the result of an attack upon troops marching in a body, and goes to the examination of the object of an advance guard.

Customary division of troops while marching:

- (a) Main body.
- (b) Advance guard.
- (c) Flanking guards.
- (d) Rear guard.

Duties of the advance guard.

Divisions of the advance guard:

- (a) Vanguard.
- (b) Advance party.
- (c) Support.
- (d) Reserve.

Disposition, movement and relative distances of constituent subdivisions of the advance guard.

Conditions influencing distance from the main body.

When the advance guard should be formed normally,

and when it should be disposed as a skirmish line.

Use of signals and connecting sentinels.

Precautions against firing.

No complements rendered.

Practical.

After the above points have been well explained and are understood by the men, the troop is exercised in the various formations in the order in which they have been considered. Use roads which afford the greatest variety and number of opportunities for illustrating principles of advance guard duty. Where necessary, halts should be made for the purpose of corrections and explanations.

Noncommissioned officers should be given practice in commanding a vanguard.

ADVANCE GUARD DUTY—*Continued.*

Explanation:

The commander explains:

How the formation is modified by the terrain. This illustration should have especial reference to the duties of the flankers.

How a town is passed through—illustrate.

Conduct on encountering the enemy.

Practical.

The entire troop, properly divided, now forms and acts as advance guard to an assumed main body following in rear. (This latter may be represented by a man carrying a flag.)

To give opportunity for practice, a strong patrol, clothed in some distinctive uniform to personate the enemy, should be detailed to operate while slowly retiring in front of the advance. The patrol should not retire from successive positions, until forced to do so by superior forces or by flanking parties.

In this work the opposing patrol should be taught that its only object is to delay the march of the advance guard and to avoid destruction or capture.

The advance guard should in turn understand that it is not to change the complexion of the exercise by an ill considered and precipitate pursuit of a weaker force, but should content itself with a cautious advance sufficiently rapid to avoid delay of the march of the main column.

Flanking operations should be preferred to direct advances on positions held by the hostile patrol when the latter entails considerable disadvantages and much sacrifice. Always insist upon the observance of the proper principles.

Dismounted action and direct advances should not be resorted to when turning movements are practicable.

OUTPOST DUTY.

Explanation:

The commander explains:

What outposts are, and the duties with which they are charged.

Classification of duties:

(a) Observation.

(b) Resistance.

General shape of the line of outposts.

Two systems of outposts:

(a) Cordon.

(b) Patrol.

and the combination of the two.

Subdivisions of the outposts:

(a) Sentinels (vedettes).

(b) Pickets.

(c) Supports (illustrate both systems).

(d) Reserves.

Line of

(a) Observation.

(b) Resistance.

by whom occupied.

Proportionate strength of subdivisions.

Dispositions and relative distances from each other of subdivisions.

Positions of outposts:

With reference to the main body (distance from) and with reference to the army in general.

How natural features determine the location:

(a) Ridges.

(b) Rivers.

(c) Woods.

Most favorable position—best and worst.

Special disposition where line of outposts is along:

(a) A wood.

(b) An obstacle with few passages (stream, canal).

Considerations governing relative strength, position and duties of:

- (a) Pickets.
- (b) Supports.
- (c) Reserves.

Use and duties of connecting and picket sentinels.

Practical.

The troop is divided into reserve, support and pickets, and the latter is divided into reliefs by the picket commander after reaching the position assigned to his picket.

The commander now, gives in the presence of all:

Detailed instruction to his subordinate commanders.

Instruction in posting and in the duties of sentinels and vedettes.

For purposes of illustration and further instruction, the outpost should be posted in the prescribed manner. As soon as sentinels or vedettes are posted, they will be instructed in their duties by noncommissioned officers, supervised by picket commanders; when properly posted and instructed, the picket commanders should notify the outpost commander, who then makes his inspection, questioning vedettes and sentinels as to their orders and duties, changing posts not well located (giving reasons), and giving such additional instruction, information and illustration as may seem advisable.

Picket and connecting sentinels are posted and instructed.

ASSEMBLE THE OUTPOST.

Explanation:

The commander explains to all the use of Cossack posts, in place of pickets and vedettes or sentinels. It seems proper to observe that the modern tendency is in favor of the use of Cossack posts, as more desirable in all cases, except where a close investment of a fortified place is being carried on, than the use of pickets, sentinels and vedettes.

He then explains the purpose, duties, and composition of visiting (small) and reconnoitering (small or strong) patrols,

tells the men what examining posts are, also explains patrolling posts, and detached posts, giving an outline of the purpose for which each is used, and the duties, location and composition of each.

He explains how the outpost is defended (entrenching, etc.), and shows the necessity and desirability for changes in the outpost at night, the system usually adopted and reasons therefor, how posted, and how the duties are performed.

Practical.

A trooper is detailed to represent the reserve with a flag or other suitable mark, the whole troop is divided into supports, each of which furnishes Cossack posts. The line of outposts is then established as prescribed. Instruct and inspect as before.

Examining and detached posts are detailed from the supports, and posted and instructed. Small reconnoitering and visiting patrols are also detailed, instructed, and sent out.

Assemble the outpost on the supports, and make new dispositions for observation at night.

Several patrolling posts are detailed, instructed and posted.

Repeat this instruction sufficiently often for thorough appreciation and understanding.

REAR GUARD DUTY.

Explanation:

When the duty of the rear guard begins.

Why it is that a retreating army can be protected by a small fraction of itself.

Why it is necessary to organize the rear guard as soon as possible.

By what it is to profit, and what it is to do.

The two courses of action open to the enemy, and the disadvantages of each.

Strength of the rear guard, and the objections to having it too large or too small.

Distance from the main body, and the objection to having it too great or too small.

Formation with illustration.

Features in which different from advance guards:

- (a) Flankers.
- (b) Intermediate bodies.

Practical.

Dispose the troop as a rear guard (indicating the intermediate and main bodies by a flag) and march it along a route affording opportunity for illustrating the methods of taking up successive defensive positions, and of withdrawal from action.

EXPLANATION—*Continued.*

The commander explains:

Composition and general conduct of:

- (a) Artillery.
- (b) Cavalry.
- (c) Infantry.
- (d) Withdrawal from action.
- (e) Patrolling for protection of flanks.
- (f) Advantage over pursuing force.
- (g) Defensive positions, when used.
- (h) How long occupied.
- (i) Contact with pursuing force and how it is maintained.

Defiles:

- (a) Use of, by pursuer and by rear guard.
- (b) How defended:
 - (a) At entrance.
 - (b) At outlet.

Measures for delaying the enemy:

Positive:

- (a) Actual combat.
- (b) Threatened combat.

Negative:

- (a) Bridges, how destroyed.
- (b) Fords, roads, how obstructed.
- (c) Villages, how utilized.

What should be done by rear guard:

- (a) To produce suffering and inconvenience to pursuers.
- (b) With stragglers.
- (c) At each halt.

Duty of rear guard:

- (a) In friendly country.
- (b) In hostile country.
- (c) In forward march.

Practical.

The commander divides the troop into components of a rear guard, assigns duties, and after explaining what pursuing patrols are (their use and duties) details several small ones to personate the enemy.

The troop then makes a retreat with patrols in pursuit, halting as often as is necessary and desirable for corrections and suggestions. The intermediate and main bodies are indicated as before by flags.

This completes the course for the instruction of the troop noncommissioned officers, and with it the instruction of the troop. More attention is paid to the noncommissioned officers with a view to grounding them so thoroughly that they are capable of keeping the privates up to the standard demanded. The "explanations" of the schedule will be the more valuable and more thoroughly impressed on the hearers in proportion to the attractiveness (and value) of the method used in illustration. The terrain table is advocated for the theory until all is understood, eradicating erroneous impressions at the outset. They are always harder to eradicate afterwards. The interest of the men is the first requisite at this stage, and when it is once aroused the rest will follow in a way most gratifying to the troop commander.

After the combined theory and practice afforded by the terrain table instruction, the memory of each individual trooper is refreshed by a brief rehearsal of the movement for the day, made to the troop collected in the field just prior to

giving the preliminary commands for execution. Each individual can and will move out at once at command, intelligently and confidently.

Hold the men in practice to the principles previously explained and reiterated. The above scheme is perfectly practicable. Inclement weather, instead of being a time for idleness on the part of the men and officers, can be utilized for the terrain table. Noncommissioned officers' school will be eagerly attended by men who accomplish much more than ordinarily, for their hearts are in their work.

It seems needless to remark that an organization provided with a fair theoretical basis (the above schedule will provide it) can accomplish more than double the field work that can be gotten through with by a troop unacquainted with the principles of the security and information of the command.

Since completion of the above essay, attention has been directed in section room work, to the scheme of M. Dubois, for illustration of tactical dispositions, problems, etc.

He uses plates of glass which are primarily placed on a map and marked with ink in such a manner as to indicate the positions of various forces.

By this means, two (or more) men, representing opposing forces with identical maps on which rest the glass plates, make their dispositions under a time limit and according to instructions.

At the end of the period a third individual (umpire), who has a third map identical with that of the others, takes the glass plates of the other two and superposes them over his own map.

At a glance he can determine what opposing forces can be seen by each other, and he marks on each map what each force is able to see of the opposing one. Then the plates go back to their original maps, and the operators have another period to adjust their dispositions to suit the new conditions, etc.

This is, apparently, a most excellent method of illustration, and is to be advocated *after* the terrain table instruction. The reason for not taking it up at once is that it will

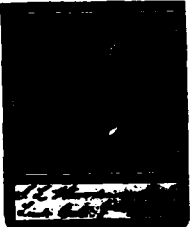
hardly be probable that the noncommissioned officers are sufficiently up in map reading to be able to use this instruction intelligently without the preliminary instruction that the terrain table gives. On the latter they first *see* the folds of the ground, etc. Later they are better able to unconsciously read the contours and understand the relations they bear to slopes.

M. Dubois' scheme is in reality "Kriegsspiel," and in this country at least, we look upon "Kriegsspiel" more as a means of illustration for commanders, training them to see and recognize, and promptly meet new conditions. It is undoubtedly a valuable addition to our means of illustrating and may be used when the men are able to handle it with the requisite appreciation and intelligence.

GRIERSON'S RAID, APRIL 17TH TO MAY 2D, 1863.

BY LIEUTENANT-COLONEL S. L. WOODWARD, SEVENTH CAVALRY,
FORMERLY MAJOR AND A. A. G., U. S. VOLUNTEERS.

[CONCLUSION.]



CAPTAIN TRAFTON'S advance entered Bahala on a charge and captured an officer of the staff of General Frank Gardner, from Port Hudson. At Bahala, the depot, water tank, steam pumping plant, bridges and trestles near the town, were destroyed. The detachment then started on its journey to rejoin the main column, which Captain Trafton had been instructed would be found in the vicinity of Union Church. After leaving the column for Bahala, he had traveled as much as possible off the road in order to take the town by surprise. On returning he took the shortest route to the trail of the column, and upon striking the road learned that the main body of Wirt Adams' cavalry, with a battery of artillery, had preceded him several hours en route to Union Church, with the intention of coming in rear of Grierson's command while it was engaged at Union Church. They had no idea that there was a force of "Yankees" in their rear. It was indeed a mutual surprise, with the advantage in favor of Captain Trafton, who knew of their presence in advance, while they did not know of his command in their rear. When he learned of this force of the enemy preceding him, it was intensely dark, and he had still thirty miles to march to rejoin the main column, with this intervening enemy to encounter or circumvent. It was necessary to exercise great caution in his march, as well as to use the utmost celerity in order, if possible, to rejoin Colonel Grierson before daylight, or at least notify him of the presence of this force in his rear.

Sergeant Surby, the chief of scouts, with one of his men, Stedman by name, a private of one of the regiments, had been ordered to report to Captain Trafton for this expedition. These two moved continuously in advance of the column, observing everything. The command was ordered to maintain the utmost silence, and every man seemed to realize the necessity for this precaution. A few men rode in advance of the column to convey messages from Surby to the commanding officer, so that it could be halted when necessary, in accordance with a preconcerted arrangement, to give the scouts time to interview any parties they might meet and to obtain information of the inhabitants. Soon after striking the main road, Surby saw a light, apparently outside a house; he approached silently and before he himself was discovered saw an old man on the portico, holding a candle in one hand and shading his eyes with the other, conversing with a mounted man. Surby hailed the old man, asking him to step to the fence, as he wanted to obtain some information from him. The old citizen shambled out to the fence, when Surby asked him "How long since our troops have passed?" The old man replied: "Do you mean Colonel Adams?" Being answered in the affirmative, he gave all the information he had as to the force, its composition, and the hour at which they had passed. It was also ascertained that the mounted man who had disappeared in the darkness, though a stranger to the old citizen, was a Confederate officer inquiring the road to Port Hudson. Surby bade the old man "Good night," saying that his command which was approaching, were reinforcements for Colonel Adams, and they hoped to overtake them early in the morning, and also asked him to inform the mounted man, if he returned, that they were Confederates.

Just as Surby reported to Captain Trafton, a lone horseman came in from the roadside. He was ordered to halt, which he promptly did, saying loudly: "I am all right; I belong to the Confederate army. I heard your conversation with the man at the house." Captain Trafton directed him to advance, which he did promptly. He was armed with a shotgun, which Surby obtained by a ruse to examine it. He

never again saw that gun. Captain Trafton remarked: "This man may be a Yankee." He most emphatically denied the soft impeachment, saying: "No, gentlemen: you are mistaken. I am a lieutenant from Port Hudson, and can tell you all about the post and who commands it, so that you can tell if I am all right." He was a youngster at home on furlough, and incidentally, to visit his sweetheart. He was taken along and was quite voluble. From him Captain Trafton gleaned much valuable information as to the Confederate forces in his front, from which he was enabled to effect the capture of several detachments from the rear of Colonel Adams' cavalry, in each case Surby having approached in the darkness and by his conversation deceived and secured them without a struggle. They were generally induced to accompany the command without knowing they were prisoners in the hands of the Yankees. Of course, their enlightenment came later. During the expedition quite a number of Confederate officers and soldiers were surprised and captured while engaged on the same pleasant duty as the lieutenant from Port Hudson.

During the night, by the accidental discharge of a captured shotgun, Sergeant Vaughn of the Seventh Illinois Cavalry was seriously wounded, so that he had to be left. He was turned over to the tender mercies of the inmates of a house near which the accident occurred, who promised to treat him kindly. I believe he recovered and afterwards rejoined his command.

Soon after midnight the scouts approached a house, which seemed to be the residence of a large planter. A loud knock at the door brought inquiry from within as to who was there. Surby's prompt reply that he was a Confederate soldier who had been sent by his captain to inquire about the road, and how long since Colonel Adams had passed, brought an invitation to enter, light a candle and be seated. The proprietor, Mr. Mosby, was a planter, lawyer and bachelor of large means. His attorney's habit of cross-questioning asserted itself and he interrogated Surby closely as to what command he belonged to and where they were from. By Surby's acuteness his curiosity was satisfied and his suspicions, if he had any, allayed. Being requested to furnish a servant

to guide us, he replied that when he heard the "Yankees" were coming he had sent his negroes away with his horses and mules to save them, but if he had his saddle horse he would gladly accompany the command till they joined Colonel Adams, whom he knew very well, and who had halted at his place for half an hour as he passed: he thought this reinforcement was a "capital idea." He stated that Colonel Adams had about 400 men and about six pieces of artillery.



Being told that he could be well mounted and sent safely back, he consented to go: in fact he was anxious to do so.

About midnight the command came to the intersection of the roads, the left going to Fayette, and thence to Natchez on the Mississippi River, and the right to Union Church, where Colonel Grierson was expected to be found with the main column. At this point the scouts met three men of Colonel Adams' command, two of whom were officers who had left the column to visit friends in the vicinity. Practicing his

usual deceptive methods, Surby learned that the enemy had taken the road to Fayette, where they expected to be joined by the rest of the command and reinforcements from farther west, and, as it was believed that Colonel Grierson was going to Natchez, an ambush was to be prepared on that road.

Mr. Mosby being curious about the prisoners he saw brought back, was told they were "Yankees" who had straggled, probably to plunder; he thought their capture a "capital idea," and hoped they would be shot, as they should not be permitted to live. When the command arrived at the point where the roads diverged, he was anxious to know if they intended to follow the "Yanks" or join Colonel Adams. Upon being told by Captain Trafton that he would follow the "Yanks" and send a courier to Colonel Adams, he thought it a "capital idea," volunteered and was anxious to carry the dispatch. He evidently thought his services would be more valuable in carrying a message to his friends than in guiding them into the jaws of the enemy. The commanding officer did not agree with him, however, and he was kept with the column.

Captain Trafton was much relieved to find the road to Union Church unobstructed, and his weary little command continued their march with light hearts, rejoining the main force at Union Church before daylight, having been continuously in the saddle for nearly twenty-four hours, marching over sixty miles and capturing twenty-one prisoners. The main column and other detachments had, in the meantime, covered about thirty miles.

Mr. Mosby, who was nicknamed "A Capital Idea," was much surprised and chagrined when he was called upon to take an oath not to give aid or comfort to the enemies of the United States until properly exchanged. He characterized the proceedings as "a d——d Yankee trick," but was very much mollified when given a horse and equipments to carry him back to his home.

The next morning, April 29th, the command moved out on the road to Fayette and Natchez, and after proceeding a short distance a small detachment was sent still farther on the road to make a demonstration, while the main column

swung off to the southeast, leaving the road and marching through the woods to the road to Brookhaven, which is south of Bahala on the railroad. The detachment which had been sent on the Natchez Road was directed, after demonstrating towards that point and Port Gibson, to return by the shortest route to the main column. Colonel Adams having taken the road to Fayette and Natchez the evening previous, encamped within four or five miles of Grierson's command at Union Church. If he knew of Grierson's presence at that



point he must have heard that a detachment of his command had been driven from there the afternoon before, and concluded it was not prudent to attack. He passed by the flank of Colonel Grierson's command toward Natchez and placed his force in ambush on that road. As only a demonstration was made for a short distance in that direction, he was left in ambush and in blissful ignorance of the direction Grierson had taken until late in the afternoon of April 29th, when, finding Grierson had returned to the railroad, he took the same direction, hoping to intercept him farther south. His efforts, however, came to naught. On this morning the guns of Admiral Porter's fleet, which was bombarding Grand

Gulf, were distinctly heard, but the little command could not dally to await developments. The enemy were concentrating from every direction to envelop it, and its only salvation was rapid movements to deceive them, and long marches.

After striking the main road to Brookhaven numbers of oxen and mule teams were met, loaded with supplies for the Confederate forces at Port Gibson and Grand Gulf. These were all destroyed. A number of prisoners were also captured. It was understood that there was a camp of instruction at Brookhaven with from 500 to 1,000 men, and that there might be some opposition at that place. The commanding officer had no fear of meeting such a force, however, and he determined to attack and break it up. As the column approached the town along the wide road with dense woods on both sides, a single shot was heard on the left and front, doubtless a signal of its approach. The advance guard charged in column of fours through the town, completely enveloping it, the troopers in their wild dash separating by twos at the cross streets and firing from their horses at every man in sight. The camp of instruction was about one and one-half miles south of the town in a beautiful grove of live oak, a most admirable location. A part of the command proceeded rapidly and charged wildly through it. This cantonment of rude frame buildings had accommodations for 1,200 or 1,500 men and had been garrisoned until the day before by about 800 men, mostly conscripts inferiorly armed. In anticipation of Grierson's cavalry coming that way they left the day before. It was afterwards learned that orders had been sent to the commanding officer to scatter his men through the country to prevent their capture. A number of arms and a large quantity of ammunition and other public stores were found here and in the town. These were all destroyed, to accomplish which it was necessary to burn the railroad depot. The fire was so fierce as to endanger some private dwellings, but a detail was made from the command, with an officer to direct, which, with buckets and other appliances, succeeded in preventing the destruction of any private property. Over 200 officers, soldiers and able-bodied citizens, who were captured

in and about the town, were paroled. Indeed, when it was ascertained that the captives were being paroled and released instead of being carried away, it was surprising to see the eagerness with which every man liable for military duty, sought one of the papers which exempted him until exchanged. Many who had escaped and were hiding out were brought in by their friends to obtain one of the valuable documents. The citizens generally expressed great surprise and gratitude at the treatment accorded them.

Among the prisoners captured here was a newly fledged lieutenant in a bright new uniform bedizened with gold. He was visiting some young ladies, and as the advance dashed through the town, he attempted to escape. As he was astride the back fence two troopers espied him and fired upon him. When he was delivered to the paroling officer, his desire for war and deeds of glory had vanished like water through a sieve.

After making a complete wreck of the railroad for some distance each way, the column, about dark, moved south about eight miles to the plantation of Mr. Gill, where sufficient forage being found, it bivouacked for the rest of the night, having marched about forty miles since the last rest.

April 30th, the march was resumed southward along the railroad to Bogue Chitto, thence to Summit, destroying every bridge, trestle and water tank en route. At Bogue Chitto, the depot and fifteen cars, all filled with public stores, were destroyed. A large Confederate flag was also captured. The bridges and trestles from Brookhaven to Summit were very extensive, and after their destruction, the road was never again of use to the Confederate government. News of the treatment accorded the people at Brookhaven had reached Summit, and the inhabitants of this pretty little town did not seem especially alarmed at our approach. Much Union sentiment seemed to exist, and the population generally were friendly. Prisoners captured during the day and citizens in the town liable for military duty were paroled, as at Brookhaven.

The railroad station and about twenty-five cars were found laden with supplies, sugar, bacon, salt, meal and

molasses. As the destruction of the station by fire would endanger the town, the stores therein were carried out, the citizens invited to help themselves to what they needed for their own consumption, when the remainder was loaded into empty cars, pushed beyond reach of harm to the town and burned. A silk flag inscribed with the mottoes, "God and our rights," "Fort Donelson," "Shiloh," was also found. The people were profuse in their thanks for our generosity and kind treatment.

About sunset the command left Summit and the railroad and marched southwest towards Liberty, halting for rest and food at midnight, about fifteen miles from Summit, on the plantation of Dr. Spurlark, having covered about thirty five miles.

The demonstrations in different directions were the means of scattering the forces of the enemy in their efforts to intercept the command in the different places towards which their dispatches and couriers reported it had gone. The movement toward Natchez had drawn all available cavalry south on the direct line of march toward that point, so that they were beyond the control of General Gardner, commanding Port Hudson, and the subsequent destruction of the railroad from Brookhaven to Summit led him to believe it to be Grierson's intention to continue down that road to Magnolia and Osyka, at both of which points there were large accumulations of stores. At Osyka, too, there was already a considerable force and camp of instruction. General Gardner, therefore, ordered every available force from Port Hudson and other places to rendezvous at this latter point.

On the morning of May 1st the march was resumed southwest towards Liberty, but soon after starting the column left the road abruptly, marched due south through dense woods interspersed with fallen trees, so that it was necessary to lift, by hand, the little artillery over them. After traveling several miles in this way, a dim road, but little used, was intersected, which led in the desired direction. This movement was also intended to again threaten the railroad at Magnolia and Osyka, and was also to deceive any couriers or scouts that might be on the watch. From

the report of Colonel R. V. Richardson - Confederate - dated Osyka, May 3, 1863, it appears that a courier brought him word that the column had left the road to Liberty and taken that to Osyka.

About noon the main road from Port Hudson to Osyka was struck at a right angle a few hundred yards west of where it crosses the Tickfaw River at Wall's Bridge. This is a deep, abrupt, rapid stream, not fordable, and completely hidden by a dense growth of vines and bushes. The road making a curve after crossing the bridge, it was impossible to see any distance in advance. When the scouts came to this road, they found evidences of a considerable force of cavalry having recently passed, going east to Osyka. The column was halted to give time to reconnoiter. Sergeant Surby approached the bridge and found a picket of three men stationed there. He engaged them in conversation, ascertained to what command they belonged and their number. It was a detachment of about one hundred men of Colonel Wingfield's battalion of cavalry, under Captain Scott, en route to Osyka. They had halted for a noon rest and to feed. While Surby was conversing with the men, several shots were fired off to the right. This was occasioned by a small party on the right flank approaching a house where they found several saddled horses tied in the yard and the riders in and about the house. The party charged them, capturing all of the horses and two of the men. The firing, however, alarmed the pickets, and Surby and his comrades disarmed them and brought them back to the column. He immediately returned towards the bridge and saw two more mounted men approaching; these were Captain Scott and a comrade. Surby and one of his men rode forward and conversed with them, allaying any suspicion they had as to the cause of the firing by telling them it was caused by their pickets firing upon the advance of the reinforcements, who were en route to Osyka to protect it against the "Yankees." Captain Scott and his companion were quickly disarmed and sent to the rear. At this juncture, the column having been halted for some time awaiting the reconnaissance of the scouts, and from information obtained from them and the prisoners, it

being evident that there was considerable force in our front. Colonel William D. Blackburn, who was in command of the advance battalion, asked permission to ride forward, clear the bridge and ascertain the character of the force in our front. Colonel Grierson gave him the necessary order, and warned him to proceed cautiously, as it was uncertain what force was in front. It was not Colonel Grierson's intention to be drawn into a general engagement with a large force, which would cause a delay long enough for the enemy to concentrate the commands following and trying to intercept us from every direction, as well as to incumber his command with dead and wounded; but rather, while presenting a bold front and developing their strength, to pass by their flank.

Colonel Blackburn rode rapidly and recklessly forward, followed by three or four of the scouts, and dashed across the bridge. Several shots were fired as they approached, while Lieutenant Stiles of the Seventh Illinois, with the advance guard, charged upon the bridge after Colonel Blackburn, and was met by a withering fire at short range. Those not killed or wounded retreated in some confusion. Two troops were quickly dismounted, deployed and began firing through the dense foliage without being able to see the enemy, and two guns of the battery were unlimbered and threw a few round shot and cannister in that direction. In a few moments a party of dismounted skirmishers were cautiously advanced across the bridge, to find that, after firing one volley, the enemy had precipitately fled. A strong detachment was sent to pursue them rapidly. Colonel Blackburn was found near the bridge seriously, and as it afterwards proved, mortally wounded, his horse, a large, powerful animal, dead and lying partly upon the Colonel. Colonel Blackburn was wounded in the head and thigh, and his horse had received twenty or more bullets. One soldier was dead, and Sergeant Surby and two others seriously wounded, one of whom afterwards died. Colonel Blackburn was quickly relieved from his predicament, and he, with the other wounded and dead soldiers, were taken to the nearest house, that of Mr. Newman, where the dead soldier was buried and the wounded disposed

of as comfortably as possible, with the warning to the people to treat them properly under pain of future punishment. Suffice it to say, that they were given all possible humane and proper treatment. All the wounds were too severe for the men to be taken with the column. Precaution was taken to change Sergeant Surby's clothing from his citizen's dress to uniform, as otherwise he would have been subject to treatment as a spy. A surgeon and two men as nurses were detailed from the command to remain with them. Colonel Blackburn and one of the wounded soldiers died a few days after the fight.



The road over which the enemy had fled was found, as far as the pursuing party followed them, strewn with saddles, blankets, hats, coats and firearms, indicating that after firing their one murderous volley they had been seized by an uncontrollable panic. They never pulled rein until they had reached Osyka and reported Grierson's approach towards that point. It was not the commanding officer's intention, however, to again attack the railroad or be diverted from the object of reaching the Union line at the nearest point. The powers of endurance of the command, marching day and night, fighting, destroying railroads, etc., had been taxed to the utmost, and he knew full well that rest and recuperation

were necessary and that further enterprises would be reckless, and invite disaster.

From all information obtainable, it was known that every available force was marching from all directions towards Osyka to save that important point. During the engagement at Wall's Bridge, "Miles' Legion," a force of infantry and artillery far outnumbering Grierson's, was approaching from Port Hudson, and according to the official reports of Colonel Miles when he arrived on the scene of the engagement a few hours afterwards, he found the cavalry commands of Colonel Wirt Adams, Lieutenant-Colonel G. Gantt and Lieutenant-Colonel C. C. Wilburn, all of whom had been in pursuit and abandoned it at this point. Colonel Miles did likewise, and at the urgent request of Colonel J. M. Simonton, in command at Osyka, who was fearful for the safety of his command, he proceeded to that station, where other forces of the enemy had already concentrated. At Osyka also arrived later Colonel R. V. Richardson, with a force of about 500 men. According to his official report of May 3, 1863, from Osyka, to General Pemberton, he had been ordered to embark on cars at Jackson, Mississippi, on the evening of April 28th, with the men and horses of three companies of the Twenty-Ninth Mississippi Mounted Infantry, proceed by rail to Hazelhurst, where Grierson had last been heard from on the railroad, and with the assistance of other forces which were to report to him, to follow or intercept. After much delay in leaving Jackson, on account of inefficient railroad service and lack of enthusiasm on the part of the conductor, engineer, etc., he did not reach Hazelhurst until about noon on the 29th, during which time Grierson had marched to Union Church, whipped the detachment of Wirt Adams' command, made the demonstration towards Natchez and doubled back to the southeast, and was then at or near Brookhaven.

At Hazelhurst, Colonel Richardson was met by an excited citizen who reported "a thousand Yankees a quarter of a mile from town." He ran his train back, dismounted his command and formed for attack, sending twenty men mounted to reconnoiter. He soon found the report false, no Yankees having been there for at least forty-eight hours.

He heard that they had been at Bahala on the railroad the previous evening, and also that they had engaged Wirt Adams at Union Church that morning and were going to Natchez. They were reported to be in so many different places and directions at the same time, that he was somewhat mystified, but decided that they had abandoned the line of the railroad and were on their way to Natchez. He accordingly decided to go to Union Church, as well to get upon the trail as to gather up the rest of the forces which were to constitute his command. Upon his arrival at that point, he sent dispatches to Colonel Adams, informing him of the route Grierson had taken, with directions to join him in the direction of Liberty, and himself proceeded towards Brookhaven, gathering up some scattered detachments on the way. But his pursuit amounted to nothing. All he saw of Grierson's cavalry was their work of destruction. He continued, however, along the railroad from Brookhaven to Osyka, viewing the destruction that had been accomplished as far as Summit. At Osyka, he saw a dispatch from Colonel Adams to the effect that he Adams had sent an officer (Captain Wren) to destroy Williams' Bridge across the Amite, and was en route for that point with his command. Colonel Richardson accordingly followed with all the force he could muster, striking the trail near Greensburg about the time the Illinoisans were being enthusiastically welcomed by their friends in Baton Rouge. This ended his pursuit.

After burying the dead soldiers and making all possible arrangements for the care and comfort of the wounded at Wall's Bridge, the column moved rapidly south on the road to Greensburg, Louisiana, recrossing the Tickfaw to the west side at Edwards' Bridge. At this point it met and engaged a command of Confederate cavalry under Major W. H. Garland. They were surprised and easily driven off by the advance battalion and two guns of the battery with considerable loss on their side in killed, wounded and captured. There were no casualties on the Federal side, and no delay in the march, the battalion engaged simply falling in the rear of the column after scattering the enemy.

In order to reach the Union line at Baton Rouge, it was necessary to cross the Amite River, a wide, deep and rapid stream, with only one bridge, Williams', which was in exceedingly close proximity to Port Hudson. Up to this time Colonel Grierson had hardly hoped to be able to reach it before it was destroyed or sufficient force should be placed there to effectually prevent his passage. Upon arrival at Greensburg, from information obtained there and from captives, he believed he was so far ahead of the news of his approach that it was possible the crossing could successfully be made at Williams' Bridge. The column accordingly pushed on with as much rapidity as possible, surprising and capturing couriers as well as officers and soldiers absent from their commands, and from whom much valuable information was obtained as to forces yet to be confronted. The bridge was reached about midnight. Upon inquiry of a citizen, who was with some difficulty awakened, a half mile from the bridge, it was learned that at dark that night there was no force at the bridge, except a small courier force at a house a few hundred yards from the river on the Port Hudson Road. As it was the intention to take the left hand road to Baton Rouge after crossing the bridge, it was thought prudent not to awaken this detachment (whom it was learned were likely to be asleep in the house, lest some one might escape and carry news to the enemy who might be in front. A large force of infantry and artillery was sent from Port Hudson to guard this bridge and intercept the column. Not dreaming of the celerity of the movements, they tarried on the way and arrived too late. The bridge was approached with some trepidation, but crossed in safety, and the weary column proceeded on its journey without the knowledge of the couriers until after daylight the next morning.

Just before daylight, as the scouts approached the bridge across Big Sandy, a pretty, rushing stream, they espied the tents of a large camp upon the opposite side: reconnoitering carefully, they discovered no pickets or guards and no special signs of life, except two negroes about the campfire. They reported their discovery to Colonel Grierson, who dismounted one troop to proceed quietly and cau-

tiously across the bridge and deploy towards the camp: another troop was advanced mounted to support it. The dismounted troop fired a volley into the camp, and then charged through it, yelling. It is needless to say the occupants of the camp were paralyzed with terror. Only one is known to have escaped and he, from his own statements, dressed only in underclothing, mounted a horse bareback and never drew rein till he reached his home sixty miles.

This was a camp of about 800 men, the command of Colonel Hughes. The effective force was absent, having been drawn northwest towards Natchez by the demonstrations from Union Church towards that place, leaving about seventy convalescents and camp guard, all of whom, with the exception noted, were captured. The camp was beautifully located along the bank of the stream, and consisted of about 150 tents, with every appliance for comfort, large quantities of ammunition and other stores, as well as many stands of arms. These were all quickly destroyed, the command only halting long enough for that purpose. The country hereabout, with its beautiful groves, the trees laden with the gray moss characteristic of Louisiana, was very attractive, and as the day dawned, it seemed to inspire the men with renewed life and spirits, especially in view of the great success thus far, and of the fact that they knew the danger line had been passed and that this was the beginning of the end of the great raid.

Having completed the destruction of this camp, the command moved rapidly towards Comite River, seven miles away, the last barrier between it and Baton Rouge. The scouts in advance described a camp near the river, men moving about and horses grazing. Three columns, of two troops each, were quickly formed and deployed some distance apart, the center column having as its objective the horses and men in sight, and the others going on either flank. These, each in columns of fours, simultaneously charged wildly down on the unsuspecting enemy, who were picketing towards Baton Rouge, and were totally unprepared for such an onslaught in their rear. They were evidently at breakfast. They fled in the wildest confusion, leaving

arms, horses, clothing, and in fact everything except their precious bodies, each seeking his own personal safety. The columns coming in on the flanks and the main command quietly bringing up the rear, prevented any possibility of their escape, and the only man of the command who did escape was the commanding officer, who bethought himself to climb a tree and conceal himself in the thick foliage. He was not discovered. One troop ran on to eighteen concealed in a dense arbor of vines and captured the entire party. This was Captain Bryan's company of Stuart's cavalry, and was composed of the scions of the aristocracy of that part of Louisiana. They, as well as the troops whose camp had been destroyed earlier in the day, were on outpost duty from Port Hudson, watching the Federal forces at Baton Rouge. About forty men with their horses and all equipments were captured. As soon as everything was destroyed which could not be taken, the command forded the Comite River, which was deep enough to swim the small animals. Proceeding about five miles, abundance of provisions and forage were found on a plantation, and as neither men nor horses had been fed since the morning of the day before, Colonel Grierson decided to halt, feed and rest for a few hours, the more especially as he knew his command was not expected in Baton Rouge and would not be prepared to entertain so many unexpected and hungry guests.

When the command halted, an orderly at headquarters who was evidently asleep on his horse, continued on the road to Baton Rouge and rode into the pickets. The appearance of a single cavalryman in Federal uniform was rather a surprise to the guard, and upon being questioned the orderly stated that he belonged to the Seventh Illinois Cavalry; he was discredited, and it was thought some ruse was being attempted by the enemy. He was sent to the commanding general, Brigadier-General C. C. Augur, who sent two troops of cavalry under Captain J. F. Godfrey to investigate. The commanding officer deployed a line of skirmishers and advanced upon the bivouac very cautiously. Being met by vedettes and assured of the identity of the command, Captain Godfrey welcomed it most cordially and sent word to

General Augur what command it was, and from whence it came. The march to Baton Rouge was resumed, the command reaching there about 3:00 o'clock P. M.

The news of its coming had been heralded through the city and the streets were lined with soldiers and citizens who vied with each other in the manner of their welcome. The command certainly presented an interesting appearance as it marched in, the troops in columns of fours, with drawn sabers, one regiment in advance the other in the rear. Between the two were the battery, prisoners, several hundred negroes, each leading several animals besides the one he was riding, and a number of vehicles of various descriptions carrying the sick and wounded, of whom there were about twenty. The indisposition was generally caused by swelling



of the legs from continuous riding. The battery especially presented a ludicrous appearance. The wheels were originally poorly constructed and nearly all had broken down at some stage of the journey. They had a peculiarly short hub. They were replaced by light wagon wheels which were found from day to day, the hubs being sawed off and bands shrunk on; but there was scarcely any two wheels of the same size, so that the guns had an odd, wobbly motion, giving one the idea of a huge bug ambling along. Sometimes a gun had to be carried several days in a captured wagon until suitable wheels could be obtained. Such was the affection of the command for this battery that the idea of abandoning any part of it because it was disabled could not be thought of.

The enthusiasm of the crowds, which met the column half

a mile from the city and lined the streets as it passed, knew no bounds. With waving of flags, banners, handkerchiefs and everything available, the entry into this beautiful Southern city was indeed triumphant. The march was directly to the Mississippi River to water the horses, thence to a beautiful magnolia grove on the outskirts of the city. Since the morning of the day before the command had marched without rest or food, except at the place referred to near Baton Rouge, during which time it covered over eighty miles, passed almost under the guns of the stronghold of Port Hudson, had four engagements (in each case routing the enemy, captured two camps and forded an almost impassable stream. It is needless to say that all appreciated the fact that they were once more within friendly lines and could sleep with assurance. The garrison at Baton Rouge were most profuse in their hospitality, regiments volunteering to furnish coffee and food to the weary troopers from Illinois, and in every possible way contributing to their comfort.

The result of this most extraordinary and successful expedition were twofold. The original object, to pierce the heart of the Confederacy, cut lines of communication, destroy things which could be of value to the enemy of the country in the prosecution of a war, and generally to strike them with terror and discouragement, had been accomplished beyond the most sanguine expectation of the participants and their friends, who were anxiously looking for the outcome. The Confederacy was, for a time at least, cut in twain, Mississippi and the trans-Mississippi being separated from the middle and eastern departments, and the only two great strongholds of the enemy on the Mississippi, Vicksburg and Port Hudson, being isolated from each other.

The assistance rendered to General Grant and his army after they had gained the east bank of the Mississippi below Grand Gulf, was incalculable, and was often acknowledged by the great commander in his reports and dispatches. All the cavalry of the enemy throughout the States of Mississippi and Eastern Louisiana, which would otherwise have been used against his flanks and lines of communication,

were drawn into wild goose chases and scattered to the four winds in futile attempts to circumvent and capture Grierson.

The commands of Generals Chalmers, Ruggles and others in Northern Mississippi and Alabama were employed in watching for the return of the Illinois cavalry to Tennessee, while those of Wirt Adams, Hughes, Wilbourne, Garland, Miles' Legion and many others were, in the same manner, fully occupied to prevent Grierson from reaching Baton Rouge. All troops from Pass Christian on the Gulf of Mexico were ordered to intercept. (See dispatch of General W. W. Loring to General Pemberton, page 787, Volume 24, Series 1, No. 38 Rebellion Records.)

It is only necessary to refer to the official reports and dispatches of these several commanders as published in the Rebellion Records to show the intense excitement and consternation which this little command produced throughout the length and breadth of the State of Mississippi. Mr. Jefferson Davis, in his book, "A Short History of the Confederate States," characterizes it in this language: "Among the expeditions for pillage and arson, this stands prominent for savage cruelties against defenseless women and children, constituting a record unworthy a soldier and a man." The disgruntled, garrulous and untruthful nature of this allegation is simply on a par with the general tenor of his book. No report or writing of the great generals of the Confederacy, J. E. Johnston, Pemberton, Gardner or others, who were immediately cognizant of the conduct of Grierson's Raid, have ever in the remotest manner attributed to it any destruction of property or hardship upon persons not strictly warranted by the law and usages of civilized war, and certainly the people along the line of its march, who came in direct contact with the command, after their first fears were allayed, exhibited much greater fear of Mr. Davis' conscripting officers and their posses than of the "Yankee cavalry."

The eyes of the middle classes, who had been greatly deceived by their politicians and leaders, were opened, and their influence, through letters to their husbands, sons and brothers, who were in the ranks of the Confederate army,

relating the kind and generous treatment and protection accorded them, was farreaching.

Be it said to their credit, each man in the command seemed to realize the importance and gravity of the situation, and all worked with the utmost zeal for the success of the expedition.



Acts of pillage and insubordination of any description were rare, and it was seldom necessary to administer even a reprimand. During the sixteen days the main column marched about 650 miles, and the detachments, which from time to time embraced nearly every man in the command, covered from 150 to 200 miles more.

Eight hundred miles is a safe and modest estimate of the distance traveled. The casualties in the command were four killed, three wounded (one accidentally), a surgeon and two men left as attendants on the wounded, and nine captured.

For proper understanding of the magnitude and influence of this expedition upon subsequent events in the West, especially the campaigns against Vicksburg, Port Hudson and the trans-Mississippi, it is but fair to quote a few extracts from the numerous dispatches and reports of Federal and Confederate commanders upon the subject.

EXTRACTS FROM REPORTS, DISPATCHES AND LETTERS OF
COMMANDING GENERALS OF THE U. S. ARMY.

General Grant to General Hurlbut, February 13, 1863:

"It seems to me that Grierson with about 500 picked men might succeed in making his way south and cut the railroad east of Jackson, Mississippi. The undertaking would be a

hazardous one, but it would pay well if carried out. I do not direct that this shall be done but leave it for a volunteer enterprise."

Grierson undertook and accomplished it.

General Grant to General Hurlbut, March 9, 1863:

"The object will be to have your cavalry move southward from La Grange in as large a force as possible, but in reality to cover a move of a select portion of the cavalry which will go south and attempt to cut the railroad east of Jackson. I look upon Grierson as being much better qualified to command this expedition than either Lee or Mizner."

Report of General Hurlbut to General Grant, April 17, 1863:

"Grierson's cavalry expedition started at daylight from La Grange. I do not expect to hear from him for fifteen or twenty days, unless from Southern papers. Godspeed him, for he has started gallantly on a long and perilous ride. I shall anxiously await intelligence of the result."

Report of General Hurlbut to General Grant, April 20, 1863:

"Grierson will cut the railroad, if he lives, at or near Chunky Bridge, about Wednesday night or Thursday."

Dispatch of Brigadier General William Sooy Smith to General Hurlbut, April 29, 1863:

"A scout by the name of Bell is just in from Jackson, Mississippi. He says Grierson has destroyed twenty miles of the Southern Railroad, having burned thirteen trestles, destroyed one tunnel and captured three trains of cars."

Reports of General Hurlbut to General Halleck, April 29, 1863:

"Scout just in from Jackson, Mississippi, reports that Grierson has destroyed twenty miles of Southern Mississippi Railroad, burning thirteen trestles, destroying one culvert and capturing three trains of cars. The enemy are gathering near Okalona to intercept his return. I have sent 1,200 men this morning from La Grange to take them in rear and help Grierson. His orders are to return by Alabama. If accomplished as reported, it is a gallant thing."

Letter of General W. T. Sherman to General F. P. Blair, May 3, 1863:

"It was Grierson who made the cavalry raid to Meridian, and he is supposed to be traveling toward Baton Rouge or Dixie. It has produced a sort of a panic South."

Report of General Hurlbut to General Grant, May 5, 1863:

"Thus our gallant soldier Grierson proceeded with his command unchallenged, and has splendidly performed the duty he was sent upon. I very earnestly support his claim for promotion, earned by a long and meritorious service, and now crowned by this last achievement. I trust he will be able to join the main army below Grand Gulf; if not, he will go to Banks. In either event, he will be a gain to the part of the army he may join. If it be practicable, I strongly request that he and his command may be sent to me."

Letter from Brigadier General H. T. Reed to General Grant, May 12, 1863:

"An unnaturalized Englishman arrived here this morning from Yazoo City, says the people of Yazoo City were greatly troubled about Grierson's raid on the Jackson & New Orleans Railroad, and thought it surpassed anything done by Morgan or Forrest."

Letter from General Grant to General Banks, May 23, 1863:

"Colonel Grierson would be of immense value to me now. If he has not already started will you be kind enough to order him here immediately. He should come up the Louisiana shore to avoid delay."

Letter from General Banks to General Grant, May 29, 1863:

"Colonel Grierson's cavalry is of great importance. It is now the only cavalry force we have. He has rendered us great service, and his immediate departure will entirely cripple us. I hope to avoid a separation from him by joining you at the same time he moves, upon the plan I have suggested."

Letter from General Grant to General Sherman, July 13, 1863:

"I have written to Banks to send Grierson up, but do not believe he will send him."

Letter from General Grant to General Sherman, July 17, 1863:

"Grierson will be here in a day or two and I will then add him to your command."

Letter from General Grant to General Sherman, July 18, 1863:

"A portion of Grierson's command passed here to-day with rebel officers. The remainder will be up in a day or two and will go on to west Tennessee to join their commands. Grierson is very anxious to get back there to get his troops together. He has no whole company together with him. By having him there, I can organize a large raid through the eastern part of the State or wherever required."

Grierson's command, the Sixth and Seventh Illinois Cavalry, had, at that date, been separated from their camps and baggage, which were left at LaGrange, Tennessee, over three months.

Letter from General N. P. Banks to General H. W. Halleck, commanding the United States army, dated May 31, 1863:

"I beg to invite the special attention of the General in Chief and the War Department to the valuable services rendered me by the excellent officer, Colonel B. H. Grierson, Sixth Illinois Cavalry, and the Sixth and Seventh Regiments of Illinois Cavalry under his command, since, by the most brilliant expedition of the war, they joined the forces under my command. The moral effects of that most remarkable expedition upon a wavering and astonished enemy, and the assistance rendered us in breaking up the enemy's communications, in establishing and in covering the concentration of our forces against this place (Port Hudson) can hardly be overestimated. Their timely presence has supplied a want which you will remember I have frequently represented as crippling all our operations. I trust the services of Colonel Grierson and his command will receive, at the hands of the government, the acknowledgment which they so eminently deserve."

Letter from General Grant, commanding the armies of the United States, to General Canby, commanding Military Division of West Mississippi, dated February 9, 1863:

"I have ordered General Grierson to report to you to take the chief command of your cavalry operating from Mobile Bay. I do not mean to foster on you commanders against your judgment or wishes, but you applied for——I suppose for that service. I have no faith in him, and cannot point to a single success of his, except in his reports. Grierson, on the contrary, has been a most successful cavalry commander. He set the first example in making long raids, by going through from Memphis to Baton Rouge. His raid this winter (December, 1864 and January, 1865) on the Mobile & Ohio Railroad, was most important in its results and most successfully executed. I do not think I could have sent you a better man than Grierson to command your cavalry on an expedition to the interior of Alabama. Unless you go yourself, I fear your other troops will not be so well commanded. What is wanted is a commander who will not be afraid to cut loose from his base of supplies and who will make the best use of the resources of the country. An army the size of the one you will have can always get to some place where they can be supplied if they should fail to reach the point started for."

EXTRACTS FROM OFFICIAL REPORTS AND DISPATCHES FROM
CONFEDERATE COMMANDERS IN RELATION TO GRIERSON'S
RAID AND EFFORTS TO INTERCEPT HIS COMMAND.

"JACKSON, MISS., April 24, 1863.

"Brigadier General John Adams, Commanding, etc.:

"GENERAL:—The Lieutenant General Commanding directs that you order the 15th and 26th Mississippi regiments and one battery Point Coupee artillery, now near Jackson, to move at once by the Southern Railroad to Morton, the station this side of Forrest, under command of the senior officer in the regiment. He will move his force to Forrest or Lake, or to such point as the circumstance or position of the enemy make necessary. They have certainly been at Lake Station.

J. C. PEMBERTON."

"JACKSON, MISSISSIPPI, April 24, 1863.

"Brigadier General Adams:

"You will return to this place with your command at once unless you have information which makes it highly import-

ant for you to remain. If possible communicate with General Loring and advise him to return also. Communicate with General Johnston (J. E.), informing him of our situation and urging him at once to send 2000 cavalry to fall in the rear of the enemy. Also with General Buckner at Mobile, urging him to send up the road a regiment to Meridian.

"J. C. PEMBERTON."

"ENTERPRISE, MISSISSIPPI, April 24, 1863.

"General Pemberton:

"Enemy demanded the surrender of this place, which was refused by Colonel E. Goodwin. General Loring has arrived and enemy is retreating.

"MILTON BROWN.

"General M. C. Smith, Jackson, Miss."

Note:—The force demanding this surrender was Captain Forbes with about thirty-five men.

The following was Colonel Goodwin's reply:

"ENTERPRISE, MISSISSIPPI, April 25, 1863.

"Colonel Goodwin, commanding Confederate forces, sends compliments to Colonel Grierson, commanding U. S. forces in the vicinity, and asks one hour to consider his proposition to surrender."

"JACKSON, MISS., April 24, 1863.

"General J. R. Chandler, Port Hudson, La."

"Move with all your cavalry and light artillery via Oxford to Okalona to intercept force of enemy at Newton on Southern Railroad.

"J. C. PEMBERTON."

"JACKSON, MISS., April 24, 1863.

"Major General Loring, Port Hudson, La."

"A raid of the enemy, some 700 strong, reached Southern Railroad this morning, and it is possible that they are making their way to join Banks. Send all your disposable cavalry in direction of Tangipahoa to intercept him.

"J. C. PEMBERTON."

"JACKSON, MISS., April 24, 1863.

"Colonel J. M. Simonton, Pensacola, Fla."

"You must make a flank movement to Tangipahoa if it is threatened. Cannot spare a regiment from Port Hudson."

"J. C. PEMBERTON."

General Lloyd Tilghman to General Pemberton:

"CANNON, Miss., April 24, 1863.

"Messenger to Major Cummins (General Maury's staff), courier from Philadelphia, Neshoha County, reports 700 Federal cavalry at Philadelphia yesterday afternoon. Cummins falls back behind Yockanock River with train at Ladore's Ferry."

General J. E. Johnston to General S. Cooper, Adjutant General C. S. A.:

"TULLAHOMA, April 25, 1863.

"Major General Loring at Meridian and Brigadier General Adams at Newton Station report that about 300 Federal cavalry came to that station yesterday morning, destroying two engines and trains and cutting telegraph line."

General J. E. Johnston to General J. C. Pemberton:

"TULLAHOMA, April 25, 1863.

"Is there not a regiment of cavalry at Columbus, Miss., to intercept that of the Federals just reported at Newton Station?"

General J. C. Pemberton to General John Adams: three dispatches, all dated Jackson, April 25, 1863:

"You say in your dispatch to General Buckner, 'All is lost unless, etc.' Correct it. I never authorized you to use such an expression."

"Be on the alert. Enemy probably return from Enterprise by way of Newton. Bright lookout at night."

"Do not move to Morton, but carry out my instructions of this afternoon."

General John Adams, Lake Station, Southern Railroad, to General Pemberton:

"LAKE, April 26, 1863.

"I have about 100 mounted men scouting in parties. Report enemy 800 fifteen miles south. Expected to strike here or Forrest Station. Fear if I leave for Forrest enemy will come here."

General Pemberton to General Chalmers, who commanded in North Mississippi:

"JACKSON, MISS., April 26, 1863.

"Move with all your cavalry and light artillery via Oxford to Okalona to intercept force of enemy now at Newton on Southern Railroad."

General Pemberton to Captain R. C. Love, Brandon, Mississippi:

"JACKSON, MISSISSIPPI, April 26, 1863.

"Ascertain where enemy is and go in that direction. You will not stay at Brandon, but if enemy is at Raleigh, go there and get on his rear and plant ambush and annoy him. See if something can be done."

General Pemberton to General J. E. Johnston, Tullahoma, Tenn.:

"JACKSON, April 27, 1863.

"However necessary cavalry may be to army of Tennessee, it is indispensable to me to keep my communications. The enemy are to-day at Hazelhurst on New Orleans & Jackson Railroad. I cannot defend every station on the road with infantry. Am compelled to bring down cavalry from Northern Mississippi here, and the whole of that section is, consequently, left open. Further, these raids endanger my vital position."

General Johnston to General Pemberton:

"Cavalry from Mobile is directed to operate in enemy's rear. Am sorry you did not sooner report raid in Southern Mississippi."

General S. Cooper, Adjutant General, to General Pemberton:

"RICHMOND, April 27, 1863.

"Impossible to comply with your wish respecting cavalry. Enemy's fleet still on the coast of the Carolinas and not expected to move south of Florida."

General Pemberton to General John M. Bowen, Grand Gulf, Mississippi (three dispatches all same date):

"JACKSON, April 27, 1863.

"The raid on the enemy is reported three miles west of Westville last night. It is possible they may be making for Hazelhurst and Grand Gulf to fall on your rear."

"Collect Wirt Adams' cavalry and send them out to meet the enemy who were at 12 o'clock to-day at Hazelhurst."

Follow them up without delay, annoy and ambush them: if possible move rapidly."

"Which way the enemy will move from Hazelhurst is only a matter of conjecture: Port Hudson or Big Black Bridge most probable."

General Pemberton to Major M. R. Clark, Brookhaven, Mississippi:

"Send a messenger to Captain Wren. Tell him to ascertain the position of the enemy and move in direction of him. Try to ambuscade him and annoy him, particularly at night in his camp."

(Note.—It was hard to find Grierson in camp at night.)

General Pemberton to commander of cavalry from Port Hudson at Tangipahoa, Louisiana:

"APRIL 27, 1863.

"Move up north with your command and be guided by such information as you receive en route."

General Pemberton to Colonel T. P. Dockery, Big Black Bridge, Edwards Depot:

"APRIL 27, 1863.

"General Stevenson will send cavalry to cooperate with you. Vigilance should be increased. A guard of a company should be kept at each end of this bridge and trestle-work."

General Pemberton to General Franklin Gardner, Port Hudson, Louisiana:

"JACKSON, April 27, 1863.

"From information derived from a prisoner, it is believed that it is the design of this party of the enemy to join Banks. You must make every effort to intercept them. They were to-day, 12 o'clock, at Hazelhurst on New Orleans & Jackson Railroad."

General Pemberton to General Stevenson, Vicksburg, Mississippi:

"JACKSON, April 27, 1863.

"The raid is reported approaching Hazelhurst west of Pearl River. All the disposable forces of Wirt Adams must be sent out to meet them. It seems to me probable the intention is to reach Big Black Bridge. Movements should be made to prevent it."

General Pemberton to General Bowen, Grand Gulf, Mississippi (two dispatches):

"JACKSON, MISS., April 28, 1863.

"It is probable enemy numbers 1,500; have no information of his movements subsequently to Hazelhurst by interruption of communication. Our cavalry must follow him up."

"Have reason to believe enemy are striking for Natchez or Baton Rouge. Send courier to your cavalry to try to get on their flank and rear. If Colonel W. Adams has not gone, instruct him to go on and take command of all the cavalry engaged in this expedition. From Osyka northward there are eleven companies of cavalry operating."

General Pemberton to Major M. R. Clark, commanding Conscript Camp, Brookhaven, Mississippi: two dispatches:

"JACKSON, April 28, 1863:

"The enemy may possibly pay you a visit. Their principal object will be to parole prisoners. It will be well in that event to send all the men you cannot arm to the country, if only a few miles."

"Send couriers to cavalry to move as rapidly as possible towards Grand Gulf, keeping out advance guards, so as not to encounter main force of enemy, harassing his rear and flank."



MILITARY VETERINARY HYGIENE.

BY OLAF SCHWARZKOPF, V. M. D., VETERINARIAN THIRD CAVALRY.

THE history of war, ancient, medieval and modern, is pregnant with facts which show the great losses of army animals from the ordinary causes of improper care, overwork, starvation and the introduction of devastating diseases, which have in many instances tied the hands of military commanders, and in not a few have compelled them to desist from further pursuit of a campaign without having gained the real object in view. When all branches of the military art are now studied with the object in view of preparedness for war, then the problem, how to keep army horses in the field alive, healthy and serviceable, is serious enough to warrant a special study by army officers, not only by those of the cavalry and artillery, but by all such as may be dependent upon horses for mounts or for transportation.

Few, indeed, will be those among us who can conscientiously affirm that such has been the case heretofore, or that it is now. It is true that in our army, as in all civilized armies, the subject of the hygienic care of horses is treated in a rudimentary manner under the heading of "hippology." But this Greek name implies everything and anything pertaining to the horse, but really nothing in particular about the army horse. This may be one reason why the average books on hippology still contain no more than the old conventional teachings on the conformation of the horse, which is seldom more than skin deep; a few hygienic rules of his care as regards grooming, feeding, watering; some mystic dictates on the recognition of the age by the teeth, a knowledge which is greatly overestimated in its real value by laymen; some rules and pointers on stable management, on biting, saddling, shoeing, and finally some more or less empirical treatise

on the injuries and diseases of the horse. If we follow the historic origin of these "books on the horse" in a technical library, we discover with wonder that they all have remained nearly the same in conception and extent during the last three hundred years and more. One need only to scan the pages of the "*véritable parfait maréchal*" by Solleysel (1617-1680), the similar work of Peuvinel (1570-1620), with its fifty-eight luxurious coppers on the French medieval art of riding, down to the works of the Italian riding-masters, Pignatelli (1550) and Grisone (1518), to find that we have copied much, perhaps unknowingly, from these medieval writers. As one example, it may be interesting to note that the work of Grisone contains that distorted picture of a horse which points out his blemishes and diseases, and which, after 350 years of wandering through "horse-books," has found a place of preservation in our Cavalry Drill Regulations, on page 453.

While I do not intend to assert that our chapters and books on hippology do not contain much that is needful to know by our newcomers into the army, may they be young officers or recruits, yet such books cannot impart more than that "little knowledge which is proverbially dangerous." It is more so dangerous, because the innate love of the horse makes everybody believe that he knows all about a horse and is a born rider. But our publications on the horse demonstrate that we have made little effort to throw off the shackles of empirical knowledge, whereas we should have adapted the results of modern scientific research as embodied in our present day theories of veterinary hygiene.

Some sternly practical horseman may now maintain that officers do not rely much upon the theories of hippology, but that they gain the knowledge of the horse and his care by daily practical experience in the stable, camp and on the march. There is some truth in this, but is it the whole truth? It shall be admitted that many of our older cavalry captains of years gone by, who really received their lessons on the military care of horses in the actual warfare with the nomadic Indian tribes, were such practical horsemen. They were no hair-splitters on theories, but common sense, hardy

horsemen, who had learned how to help themselves in emergencies, even if their way was not always scientific. They could do things with their own hands if need be, and do it well. But such practical things are little understood or appreciated by the younger officers of our new army: not all of them have the liking for horses and riding that cavalymen should have, and somehow the feeling must have crept into our arm that the little routine matters of horse management are somewhat beneath the dignity of an officer. The writer does not feel qualified to inquire into the cause of this fact, but for the sake of fairness it may be suggested that our late Philippine campaign, with its hurry and rush, and with its manifold demands for military and civil administration, has compelled our young officers to apply themselves more particularly to other matters of a purely military nature, leaving the ordinary care of the horse to others under them. This shifting of supervision, inaugurated under dire necessity, had its mark stamped upon many a troop in the Philippines, from which the service naturally suffered.

Thus it is evident that the mounted officers of our re-organized army need not only a return to a practical application of the details of military care of horses, but that it is also time to abandon mediocrity and aim at a higher standard of theoretical education in the hygiene of the army horse.

WHAT MEANS HYGIENE?

Dispensing with the ordinary definitions of the term hygiene and the conception of health, let us at once inquire into the fundamental reasons by which the health of horses may be preserved, and how it is endangered. Under ordinary circumstances a horse sustains itself in health if the proper necessities for the existence of his life are provided for him, particularly pure air, good food, sufficient rest and sufficient work. If one or a few of these necessities are changed or absent, then the living body at once exercises a strong tendency to accommodate itself to these changes by the inherent regulatory functions of its various organs, a power commonly called "nature." But these regulatory

functions are not always powerful enough to preserve the balance of health within the system, nor are they always strong enough to overcome the ordinary influences which may endanger it from outside, such as impure air, improper food, too little rest or too much work, and then the animal may succumb to some form of illness or another from its own lack of vigor. Still there are other, more remote causes of disease which are of an entirely different origin, such as poisons, parasites, and the manifold germs which produce disease. The theory of this danger of "bugs," humorously so termed by laymen, may not be as dark as sometimes painted by ultra-scientists, but it is greater than is generally admitted by those who are not familiar with its scientific aspect. We need only to remind our military friends of the ravages which the little "bacillus of glanders" produced among our cavalry horses in the Philippines, as also of the "parasite of surra" which could be seen so extremely alert and busy in the blood of horses infected with them. But even these and many more germs, parasites and poisons are not always positively destructive in their effects if only the animal is in a perfect, normal health. We know, for instance, that the germ of glanders is not always infectious to a healthy horse, but that its propagation and harmful influence is greatly dependent upon a weak and emaciated condition of the horse, such as is favored by insufficient food, hard work and little rest. Thus, in the army we must guard against the introduction of this germ in war when such conditions may prevail.

These few brief scientific facts, chosen to illustrate our subject, should make it clear that we must not only understand how to provide for a few ordinary necessities of the life of horses, such as proper food, general care, sufficient shelter, etc., if we want to assist his nature in preserving his health, but we must also know how to guard him against the manifold causes of disease. In this broad sense hygiene becomes applied etiology, which means that those of us who have charge of public animals should not merely know and practice a few rules of health, but that we should also sufficiently

comprehend the relationship between cause and effect in the diseases of horses and their intelligent prevention.

MILITARY VETERINARY HYGIENE IN THE GARRISON.

Although different animals, such as camels and elephants, have been used at certain periods and under certain conditions of war, the utility of the horse has steadily grown larger for many hundred years past, and to-day the horse remains practically the only animal used in warfare. The useful mule of our army has its own virtues and vices apart from the horse, but he is so near the horse in constitution, needs and ailments, that our consideration narrows down to the hygiene of the horse. This subject is wide enough as ordinarily considered, but it certainly becomes a special study if considered from the military standpoint. Indeed, if the hygienic care of the army horse consisted merely of the teaching of his care in time of peace and in the garrison stable, then the general rules promulgated for well kept horses in civil life might be sufficient for the care of the army horse. This can be seen if we observe reasonable care and sanitary protection given to army horses in time of peace, which has had great and beneficial results. Anyone acquainted with the hygienic conditions prevailing in the army stables of the foremost European armies must acknowledge this fact if compared with times not so far distant. Only a hundred years ago glanders decimated the mounts of whole armies of Europe during peace, a fact which is almost inconceivable for us to-day. In our own army, too, we have generally fared well in preserving the health of our horses during peace. Much of this good result is due to a sensible, natural hardening of our horses by herding and grazing them whenever possible, and by a general care at the garrison which is laudably free from artificial pampering and that exaggerated race-course-care which has partially invaded some European army stables. But we must not forget that conditions have been very favorable for our own good results. The horses used in the short Indian campaigns were mostly born and reared in the same

climate and on the very soil on which they were used, so that they were practically at home even in the field. Moreover, the isolated situation of our army posts has kept our army horses free from contact with contagious diseases, which is an ordinary cause of epizootic diseases among horses of European armies garrisoned within cities. Finally, the employment of our horses in peace has not yet approached the intense use of army horses in drills and maneuvers which tax so greatly the health and strength of horses in the foremost foreign armies. But withal, we have learned many valuable lessons in the care of our horses, and while we have to learn many more, we need entertain little fear of ruinous diseases among our horses during time of peace.

MILITARY VETERINARY HYGIENE IN THE FIELD.

Granting that all civilized armies have learned how to take proper hygienic care of their horses *in time of peace*, have they also learned how to do so *in time of war*? Let us see. The very moment our horse accompanies the army into the field, he is taken out of all ordinary hygienic conditions of life which are the rule in time of peace. He encounters a variety of strange influences, such as changes of climate, irregularities of care, shortage of food, absence of protection; he has to face peculiar injuries and diseases which are practically unknown in time of peace; in short, it is the unexpected and exceptional in everything that he has to meet constantly. If these changed conditions of life arise for our horses, we have so far been unable to intelligently meet them. It is an indisputable fact that veterinary hygiene in the field is as yet an imperfect science, surely an unapplied science. One need only to study the military writers on the South African War and on our own campaign in the Philippine Islands, to be peculiarly impressed by their endeavors to explain the wasteful destruction of horses in recent wars as something unavoidable, something that goes with modern warfare and for which there is no apparent remedy. This may be so from the purely military standpoint, which considers only the results obtained and

counts the loss of horses merely an incident. But those of us who had to deal directly with the details of the causes of such losses, know only too well wherein the fault of it all lies, and we were never in doubt that the principles of military veterinary hygiene are sufficiently elastic in their scientific aspect to meet the exigencies of warfare in much the same manner as they have met the simpler and better known demands of peace.

That this is not a mere hypothesis but a practical possibility can be proven by simple facts. Many of us have been with troops on the march, in the camps and on expeditions where we had the opportunity to observe the different use and care of horses by different commanders. One troop commander may bring his horses back healthy, in fair condition and good spirits, ready to partake of the good things that come with well-earned rest; another troop commander who has done less work may return with his horses worn out in body, and broken in spirit, unable to recuperate in a reasonable time; and there have been seen detachments of mounted infantry that had done no other work than to occupy some military post and keep open connection with neighboring posts, and yet their horses were in a pitiable condition. Such observation points plainly to a common source for good or evil, which can be none other than the ability of the officer in command of such small organizations to lift himself above the mere military aspect of his mission and to attend equally well to the minor details of husbanding the strength of his horses, or at least to encourage and support by his authority those under him, whose duty it is to perform the work entailed thereby. What is attainable by a commander of a troop ought to be possible for commanders of larger organizations, and there are held out as example the lives and deeds of great cavalry leaders of different nations who knew how to save their horses by judicious care, while others ruined them by neglect or want of knowledge of the hygienic care of horses.

Perhaps some grim warrior may object to such views as sentimental, and maintain that sentiment has no place in an army, and that the life of a horse is not worth considering

when a great result is at stake. This assertion has become a military phrase. It is not denied by anybody that a horse's life has no such intrinsic value as the life of a soldier, as it represents only a money value to the government; but that is not the real question at issue. The main object of military veterinary hygiene simply is to save as many serviceable, well-trained horses as possible in order to have them on hand and ready for work when such a great result is really at stake. That results are often imagined as greater than they are, or at least estimated as greater beforehand than they prove to be afterwards, is one of the errors of military enthusiasts, who are blindfolding themselves in the pursuit of one object alone. In so doing they lose sight of other issues and their consequences, one of which is the husbanding of the strength of their horses. When these break down prematurely or are entirely lost by diseases, then comes the cry for new mounts. But new horses are seldom procurable in the field on short notice or in sufficient numbers, and when they finally arrive they prove to be raw, unbroken animals of inferior quality, because purchased in haste, unacclimated and emaciated from a long journey; in fact a hindrance rather than a help in any further movement. This was our experience in the Philippine campaign, and we read that it corresponds with the experiences made during the South African War.

Thus coming down to naked facts, it is not sentiment that aims at the preservation of horses in the field, but a prudent, intelligent foresight developed from adverse experience. The correctness of this contention is acknowledged by many calm and considerate cavalry leaders of different armies, but it would lead us too far to cite their good advices. They have learned that the old proverb, "An ounce of prevention is worth a pound of cure," is not an empty phrase, but that it constitutes an actual truth, by which the modern notion that war necessitates the waste of horses is proven a fallacy that can be successfully avoided by true knowledge and careful attention.

It is denied that the causes of the losses of horses in the field are many. It is impossible even to mention them all.

in the infinity of combinations which actual field service presents. But it can never be difficult for one thoroughly instructed in veterinary hygiene to ascertain their cause and devise means for their further prevention. Yet, mistakes must not be made as to the real cause. One of the common errors is the accusation of shortage of food. This is a calamity. Still, a horse can subsist on comparatively little food for weeks, and even for months, and while he may become in poor condition from losing his stored up fat, yet he can remain healthy and in good spirits and in fair shape for work, if he is only otherwise treated reasonably. But by far the surest and most common cause of the "breakdown" of horses in the field is ruthless overwork, absence of sufficient rest, and a continued worry of the animals by that excited rushing and pushing forward which is supposed to underlie the gospel of offensive tactics. A horse can be ridden to death in less than a day by a man who fancies that riding means a perpetual struggle between man and beast, or who is ignorant of the limits of its endurance, or who is anxious to save himself from undue exertion, or who considers the horse merely an automaton furnished to him by a rich government. We are not unmindful of the fact that at times the horse is at fault and not the rider. There are excitable or dull brutes in the ranks, with whom neither patience nor kindness will avail, and we have often enough known other horses that are totally unfit for the military service by faulty conformation and weak constitution. For this the government is responsible by a faulty system of providing remounts. But nowhere is good horsemanship quicker shown than in the field, and fortunately we have always natural horsemen in the ranks who, by their good temper and love for the horses, bring them through a whole campaign alive, healthy and in good spirits, no matter what the hardships may have been for both riders and horses. It is only a pity that such natural horsemen are so few, even in the cavalry.

THE PURCHASE OF REMOUNTS BY CONTRACT.

It has been already indicated that, great as the responsibility of individual commanders of mounted troops is as regards prudent horse-management in war, they cannot always alone be held responsible for losses of horses from premature breakdown by field work or disease. We must look to our government to make proper provisions and allowances, and to the supply departments to properly supply them. One of the most difficult problems is the purchase of suitable mounts for our cavalry. This problem is an old one in our army, but remains unsolved. It has been partially solved by but few European armies, and this only after adverse experience in many wars, dating back hundreds of years. The systems of remounting established by these armies, frequently incorrectly reported, are those of direct or indirect breeding of their army horses. Russia is the only country which has gone so far as to directly breed her own cavalry horses, at least in part. Germany, Austria-Hungary, France and some other countries, have chosen to assist their natural breeding districts by supplying them with suitable stallions bred in the government studs. This latter system is beyond dispute the most noteworthy. It does away with the fruitless discussion of what constitutes a suitable cavalry horse in theory, on which no two officers can agree. It fixes a certain type as most suitable for military purposes, because the sire is bred on such lines of conformation, size and soundness as have proven most valuable in war, and the mares to be covered must conform to a certain standard of breeding and soundness. This system may appear as paternal to us, but it is nevertheless wise, as few breeders would properly mate the sire and mare if the choice were left to them. Thus the armies mentioned are enabled to procure annually a sufficient number of horses, whether horses are scarce or plenty, and they receive a uniform class of horses which are sound by heredity. This latter point is of enormous advantage. In the purchase of remounts from a contractor or dealer, as is the case in our army and in the English army, no such certainty of inherited soundness is possible. We can find a horse sound as he

stands; but how soon he may become unsound by ordinary military use no one can foretell. True, there are certain positions of the leg and formations of joints which probably indicate an inherited predisposition to contain forms of unsoundness, but how few of our inspectors and veterinarians are able to recognize and properly judge such infirmities, which, after all, are based more on guesswork than on real and accurate knowledge. From this reason we have in our army an unproportionally high percentage of horses for periodical condemnation, which few armies and few countries other than ours could afford to pay for. But with all this expenditure of money we are entirely unable to procure even a middle class of horses which are uniform and serviceable, because our remounts come from different sections of the country and of different stock. They generally range all the way from fair horses to the worst scrubs, entirely dissimilar among each other in conformation, size, weight and intelligence—a sorry lot to look at and a worse lot to ride on.

Much has been written on this subject in our military journals for years past, and some excellent suggestions have been made from time to time to remedy these defects. But we have been told by our horse-breeders that any system of breeding our cavalry horses after European fashion will be looked upon by them as un-American, and that our country is well able to supply all horses we shall ever need in time of peace or war. As such opinion must have a certain weight with our government, it would be impolitic at present to dispute this point, and we shall have to look for the next best method of supplying our army with suitable remounts.

REMOUNT DEPOTS.

There is only one substitute which can be regarded as at all promising good results in remounting our cavalry, and that is the establishment of remount depots. It has been announced that Fort Riley, Kansas, has been selected for the location of such a depot, because this post is a natural center of our army, it lies near some of the best breeding districts of saddle horses in the country, and its large reservation se-

cures ample room for the erection of the necessary buildings. As we are new in such an enterprise, a timely warning may be permitted not to copy too close the old plans of the European establishments, to cram together a few large stables in a comparatively small area. This is against all principles of veterinary hygiene, and has had its disastrous results in fostering the peculiar diseases of remounts which are bound to develop among young horses. There should be plenty of room everywhere, with a number of smaller stables and several isolated veterinary hospitals, with running yards, paddocks, and pastures for grazing. Only with all these points skillfully observed will we succeed to develop colts into well-grown cavalry horses, for that is the real object of a remount depot in peace. Of course, we may purchase four-year old colts at the start, as we have done so frequently, and allow them to fully mature instead of prematurely ruining them in the ranks. But we shall soon learn, as most European armies have learned, that we are obliged to purchase younger animals, because a fairly matured four-year old colt is eagerly bought up by dealers everywhere.

It will also soon be found that one remount depot is not sufficient to supply the needs of our largely scattered army, and at least two more will have to be established, one in the East and one in the far West. With these remount depots in successful operation, under skillful management, we shall have taken quite a step toward better mounting our cavalry. Yet, if the history of the remount depots of some European armies may teach us anything, we shall then be slowly drifting towards breeding our own stud horses or even our own cavalry horses, for which a bountiful nature has given us better opportunities and greater facilities than any European army possesses, except perhaps Russia. The indicated result will be sure to come as soon as we have learned in our army more about the breeding and rearing of cavalry horses, a knowledge which experience in the remount depots will gradually teach us. Moreover, the selection and collection of horses by the remount depots will not be found to be above criticism by the regiments, because there will never be a time when our private horse breeders will fully under-

stand the particular purpose of a cavalry horse, and only by breeding for this purpose can such a horse be produced and can such a breed be established in this country.

THE QUARTERMASTER'S DEPARTMENT AND THE ARMY HORSE

There is no department on whose efficiency and willingness depends so much the welfare of our army horses in peace or war as the Quartermaster's Department, because it furnishes in our army not only the horses but everything that pertains to their well being. In peace this department works smoothly as regards the supplies needed and allowed for horses, but in war it is not always successful in accomplishing its purpose. In the earlier Philippine campaign, just as in the South African War, our horses had no oats or hay, the food best suited for their health and labor, and they had to subsist on rice and native grass, a strange food and not always a proper one. For quite a time there were also no horseshoes, and when these arrived no shoe nails were sent with them, neither did we have at first veterinary medicines and dressings. All these are supplies that should go with the horses when they are shipped, and their issue should be kept up without interruption.

It is one of the oldest experiences of armies schooled in warfare, that the supplying of food for men and horses in the field is the most difficult task to perform. There are many instances recorded in military history where this has been evidently impossible, and the results have always been disastrous in great loss of men and horses. It is certain that we have made no great progress in the transportation in the field, and our most modern appliances, such as the automobile, give little hope of a reliable means of improvement. These machines may be of certain use in maneuvers and even in war in the old, settled countries of England, France and Germany, which possess a network of excellent country roads, but for warfare in semi-civilized or unsettled countries where good roads and bridges have not been built, they must be regarded as hopeless playthings. It is worth remembering that the commanders of smaller mounted organi-

zations in the Philippine campaign soon learned again the value of the pack-mule, thus returning to the most ancient system of using "beasts of burden" as practiced by the armies of Greece and Rome, by the Crusaders, by Wallenstein in the Thirty Years' War, and by Frederick the Great in the Seven Year's War in Silesia, not to forget our own constant use of the pack-mule in the Indian wars, especially in mountainous districts. The great drawback of the cumbersome transportation by heavy wagon trains lies in the fear of everybody that they may get stuck in a bad road, and may not arrive in camp until after dark, if at all. All of us know that these occurrences are common. This feeling of unreliability is the cause of the overpacking of horses with articles that are not intended to be on the saddle, and which help to cause not only sore backs but a speedy breakdown of the animals. It was often a memorable sight in our Philippine marches to see the troops start out of camp with the saddle-bags extended to the breaking point with things that should not be seen, overruling the carefully laid down regulations about the equal distribution of weight of the cavalry saddle as it is packed in place. And yet with all these "unavoidable" weights some troop commanders would wonder how their horses acquired sore backs. True, this overpacking of horses in the field is the only means at present to keep mounted troops mobile and independent, but it is certainly done at the expense of horse flesh, horse spirit and horse life.

Thus, with all the display of modern equipments, we have as yet no adequate improvement in the simple transportation of the necessities of the soldier in the field. It is for the Quartermaster's Department to devise some light, movable and reliable contrivance for future campaigns, that will unburden our overpacked horses and keep our mounted troops serviceable for a longer period. Until such has been invented the ancient pack-mule must remain the only reliable camp follower, the only source of comfort when he promptly comes into camp with that joyful bray, the equal of which will never be heard by any soulless machine contrived by mankind.

THE PREVENTION AND SUPPRESSION OF CONTAGIOUS DISEASES.

While in time of peace the necessity for the prevention against the introduction of contagious diseases of horses is not a frequent occurrence from the isolated location of our garrisons, the danger of infection is ever present during a mobilization and as soon as horses are transported by rail or over sea, resting perhaps here and there in corrals for short intervals. Intelligent foresight and diligent watch should then be employed, and prompt measures for the suppression of contagious diseases must be taken at once. That in our mobilization during the Spanish War, and later in rushing horses to the Philippine Islands, we have taken such intelligent precaution, must be denied. The camp at Chickamauga soon became hot-beds of glanders. At first the old, ever repeated doubt arose whether the disease was really glanders or not, a doubt incurring the loss of valuable time for prompt action. When this doubt was overcome, then the carnage by the bullet and the butcher-knife began, whereas under the light of modern veterinary hygiene most of the horses, at least many of them, could have been saved by the intelligent use of mallein, by prompt and correct isolation, and by a thorough disinfection of the infected corrals and picket lines. Nor was any lessons learned from these occurrences. True, attempts were made at San Francisco to test the horses to be shipped to the Islands, with mallein, but this was done in a crude manner by crude men, and again many horses were killed on mere suspicion.

Whether glanders was indigenous in the Philippines or whether it was first introduced by our troops, has been a point long disputed but never definitely ascertained, but there has been a tendency to blame our officers of mounted commands for its introduction. But even if it was so introduced, it was the fault of our system, or rather entire lack of any system, to prevent such occurrence, and military officers who happened to be responsible for horses, should not have been accused for its failure to work. The only persons responsible for such matters can but be the army veterinarians, provided that they are educated professional men, and as

such placed in a position where they can give intelligent counsel to the proper military authorities. This is the only safe and correct standpoint, because it is impossible that any military officer, however experienced he may be in the care of horses in garrison or in the field, can have a correct knowledge of the specific pathological lessons of this disease which would enable him to make a positive diagnosis. This knowledge can be acquired only in the post-mortem room and in the histological and bacteriological laboratories. Of course I have met a few officers who thought that they "knew a case of glanders when they see it," but I have never yet seen one of them step up to a diseased horse to carefully examine him in order to verify his suspicion. Neither can any reliable veterinarian make a diagnosis at such a respectful distance, but he must open up the nostrils of the horse which are often glued together by a sticky and fetid discharge, use a reflector if necessary, and take the risk of having a few millions of bacilli sneezed into his eyes or nose. How often has the writer earnestly tried to convince members of boards of survey that a horse was really diseased with glanders by opening for them the nostrils of a horse, but few officers would venture near enough to see for themselves. While such abhorrence of a deadly disease is perfectly natural in laymen, it shows that after all, these officers had to write their signature on the best of their belief, relying on the knowledge and integrity of the veterinarian and on his opinion. As this is very much the same with some other diseases of horses it is clear that in such crucial tests the veterinarian ought to be the responsible expert and not the military expert the responsible veterinarian.

On the whole it must be confessed with sorrow that our dealing with glanders in the Philippines was most crude, bordering on many occasions on the lowest empiricism, unworthy of an educated army. The main cause of this state of affairs was the absence of qualified army veterinarians in the early campaigns, and the hiring by the Quartermaster's Department of impostors who masqueraded under the title of contract veterinarians, but many of whom proved to be missionaries, homœopathic physicians, wheelrights, team-

sters, and "men born and raised on the stock ranch." Such were the experts given to officers responsible for horses and mules to control and stamp out an animal scourge. The result was that the disease spread with rapidity and soon assumed alarming proportions throughout the Islands. Then came the stop of the disease by order, informing us that "as a rule tropical glanders is not dangerous like its prototype in the United States, and animals affected with it will usually recover with treatment. The wholesale destruction of public animals should cease." No doubt there were instances of ruthless and ignorant killing of horses by the advice of the men enumerated above, but there is also no doubt that the true, old-fashioned glanders had eaten itself deeply into our horses and mules, perhaps more so in some districts than in others. So the above well-meaning optimistic opinion came to the afflicted as a thunderbolt, because it was so much at variance with the true condition, and could not have emanated from a thoroughly informed expert. By this time the disease was well under control in some districts, and its ultimate suppression only a question of time. This had been accomplished by the intelligent work of a few educated army veterinarians, backed by their commanding officers who had seen for themselves the ravages of the disease. But glanders had been declared under ban and it ceased at once to be heard from. The officers responsible for horses were further willing to report even the suspicion of glanders among their horses.

But heaven came to the rescue of the oppressed. All at a sudden "surra" was discovered in Manila. The news came from the "Army Pathological Laboratory," an acknowledged scientific body. This new disease had a mystic but clear name: it was not spread by the carelessness of officers and men as was the case with glanders, but "flies" carried the infection, and who can stop flies. It was a deadly disease, but as no successful treatment was known there was excuse for the dying of horses. The symptoms "resembled" those of glanders, so that "the casual observer" could make a mistaken diagnosis of glanders instead of surra.

Of course, no army surgeon will diagnose small-pox or bubonic plague by "casual observations," but the surgeons of the Army Pathological Laboratory evidently believed that a veterinarian in making a diagnosis of glanders is a mere "casual observer." So again the advice given to our military authorities was that of medical experts and not of veterinary experts. They were correct in their detection of the "parasite" of surra, but they were wrong in bringing it into connection with glanders, which is a totally different disease. But the new disease fitted the occasion admirably, because it was officially sanctioned, and supposed outbreaks of "surra" were forthwith reported from different garrisons where glanders had been rampant. Bound for God's land, the writer was thrown back for long, weary three months investigating supposed outbreaks of surra, and to stem the tide of this new disease in the minds of its converts would have killed a man with seven lives.

What should we learn from these experiences? Firstly, that in dealing with deadly contagious diseases of horses in the army, our military authorities should not depend upon half-educated veterinarians, troop farmers and hired impostors, which is worse than relying on the redemption by a merciful fate, as done by the army commanders in medieval times. Secondly, that our general officers should be given the assistance of educated, experienced chief-veterinarians, whose duty it should be to investigate the outbreaks of such diseases and give correct and reliable information and advice. Thirdly, that instruction in veterinary hygiene be extended to all officers of the army, including those of the Quartermaster's Department and of the infantry, both of whom are so often responsible for horses and mules in the field, in order to secure their intelligent cooperation in the suppression of the contagious diseases of horses and mules and in the prevention of their unchecked spread.

The object of this article has been to paint with a few strokes of the pen some shortcomings, mistakes and oversights, which are apparent in our army, and to suggest their amelioration. The criticisms made were born of careful observation, unprejudiced thought and hearty good will.

There is no army in the wide world which is perfect, even if things look well nigh perfect on their surface, and ours has certainly its shortcomings on the subjects touched upon. It is hoped that our military commanders, high and low in rank, will come to acknowledge the value of a higher knowledge and better practice of veterinary hygiene in our army, for tactics and strategy alone cannot win battles and campaigns, but they must go hand in hand with a wise appreciation of the eternal laws of nature as demanded in the hygienic care of men and horses, both of which go to make up an army in the field.

TARGET PRACTICE IN ENGLAND.

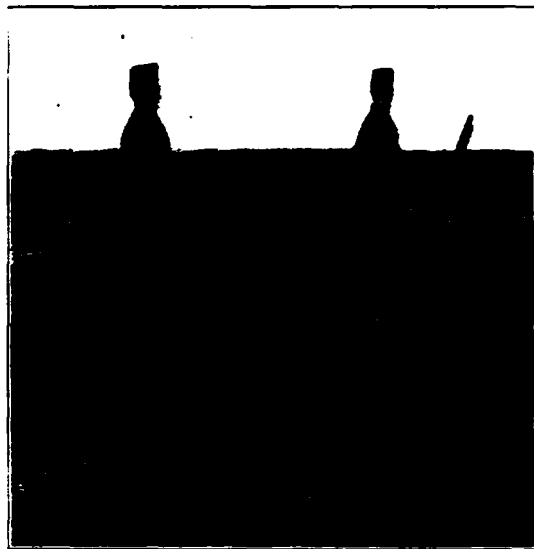
BY LIEUTENANT W. B. PERSHING, FOURTH CAVALRY.



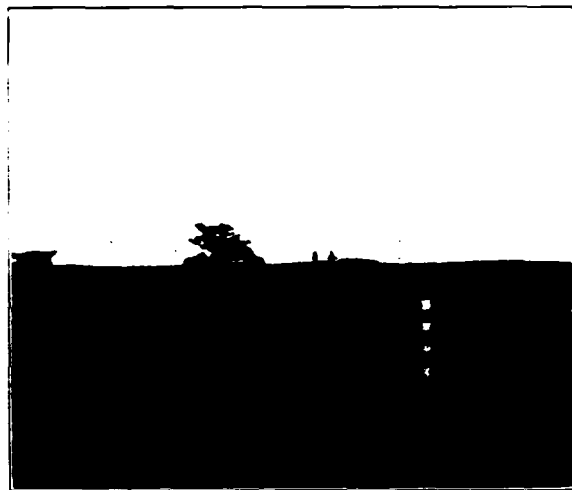
THE SIGNALER.

IN view of the recent changes in our firing regulations and the adoption of the new rifle with which our service is soon to be equipped, it is thought that a brief outline of the present system of target practice in England, to which subject great attention is there being given, may not be uninteresting.

The School of Musketry at Hythe, where both commissioned and noncommissioned officers are sent for instruction, has for its purpose the special musketry training of those so detailed and secures a uniform system of instruction throughout the service. With this end in view frequent inspections and visits are required to be made by the commanding general of the department to all garrisons under his command. In addition to this the commandant of the school at Hythe inspects all home troops once each year, and is constantly in touch with and maintains control over the methods employed in each department. This control is furthered by means of the reports required monthly from all garrisons showing the course of instruction to be followed during the ensuing month.



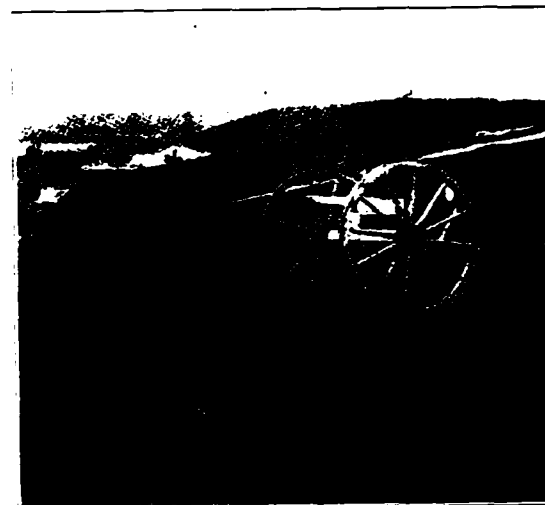
THE RUNNING MEN. SHOWING HOW THEY ARE WORKED FROM THE FIT.



THE SAME FIGURES ON THE CREST OF THE HILL SOME 400 YARDS AWAY.

For the fire efficiency of a company its captain and his lieutenants are responsible, but the noncommissioned officers receive their preliminary training as drill instructors from the adjutant, assisted by the noncommissioned officers, who hold certificates from Hythe, known as sergeant instructors.

Field firing is compulsory wherever the ground necessary for conducting it is available, and the men are divided into three classes for target practice. First, recruits; second, trained men; third, exercised men; each class having as a

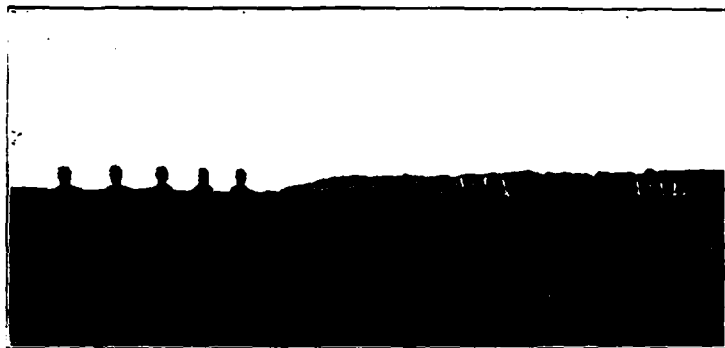


THE DUMMY MANIM.

prerequisite to admittance to it a certain degree of proficiency in the preceding class. Rifle clubs among the men are given every encouragement, and great interest is always displayed in their matches, which are conducted under the supervision of a noncommissioned officer.

Recruits are given their preliminary instruction by the assistant adjutant and the course consists of four parts: First, the care and description of arms and ammunition; second, instruction in firing exercises; third, aiming drill; fourth, instruction in theoretical principles. This course is followed in turn by judging distance, miniature cartridge practice and

blank firing. On the attainment of a certain degree of proficiency in these subjects, the recruit proceeds to actual firing in the target practice course, recruit class. To this point the



HEADS AND SHOULDERS AMONG THE HEATHER.

English system is similar to our own in many respects, but the trained men are now taught the use of the stadiometer in range finding.

One feature of the system which seems to me particularly desirable is that of voluntary practice, for which purpose a



THE DUMMY CAVALRY.

(Note the ropes which keep the figures straight.)

specific allowance of twenty rounds per man is authorized, and ammunition in excess of this allowance may be purchased for the same purpose by both officers and men. The



THE DUMMY ARMORED TRAIN SPITS FIRE.

practice itself is conducted similarly to our own, and the entries in the target record are made in ink at the firing point, while the noncommissioned officer in charge of the targets



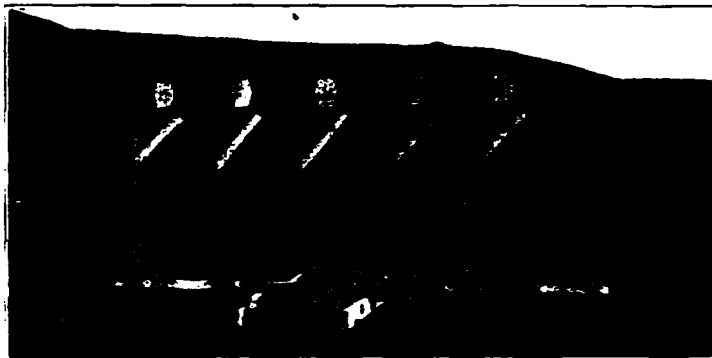
THE ARMORED TRAIN "GOING HOME."

The white patches indicate the hits after a field day.

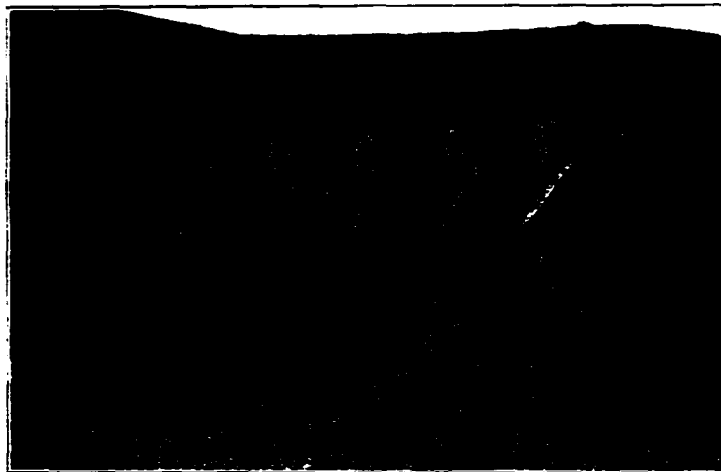
submits a signed memorandum of the hits on each target at the end of the day's practice.

The use of the sight fixed at 500 yards, which is ordered to be used against infantry and cavalry when fully exposed,

and where there is no opportunity for judging distance, seems objectionable, as it necessitates, as laid down in general instructions, aiming at the feet of the enemy at first, and then,

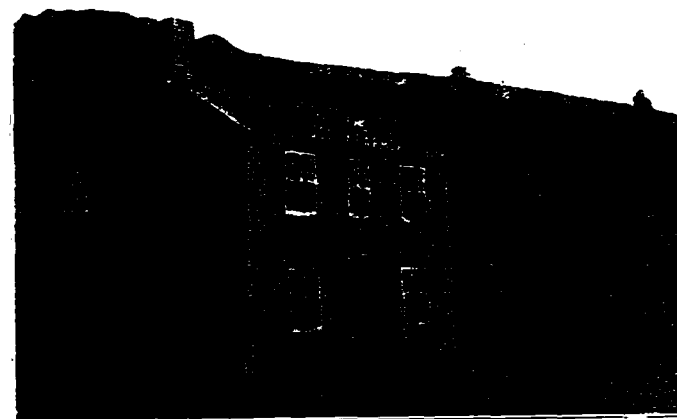


THE DUMMY WRECKING PARTY.



AFTER THE ATTACK.

as the distance decreases, changing the point of aim to below the ground line of the approaching objective. This would seem to entirely vitiate much of the careful preliminary in-



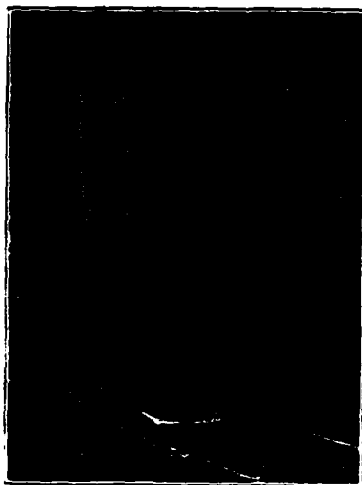
THE BOER INN



THE BOER INN—BEHIND THE SCENES.

struction at just the time when it should be of the greatest value.

Fire as used in the English service is classified as follows:



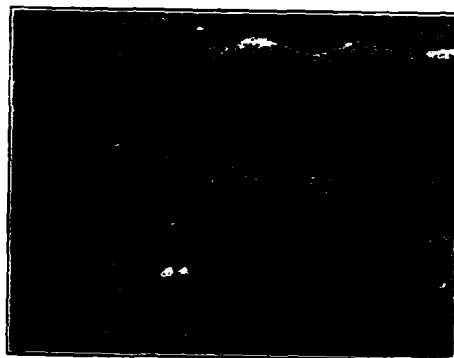
THE LANDLORD.

Slow fire, the usual rate employed, about five shots per minute; rapid fire, as rapid as is consistent with deliberate aim and single loading; magazine fire, ten to fifteen shots per minute. Miniature ranges, constructed with a total length of thirty yards and with the targets reduced proportionately, are in common use, but this practice is not made a matter of official record. Safety ranges, in which by means of embrasures, screens, and prepared surfaces of ground, erratic shots are controlled, are also

used where the extent of ground necessary for open ranges cannot be obtained. Both silhouette and bull's eye targets are in use in different portions of the course.

Among the subdivisions under which the practice is conducted are: Individual practice, rapid individual or timed fire, collective practice or field firing, deliberate volleys and rapid or timed volleys, which latter

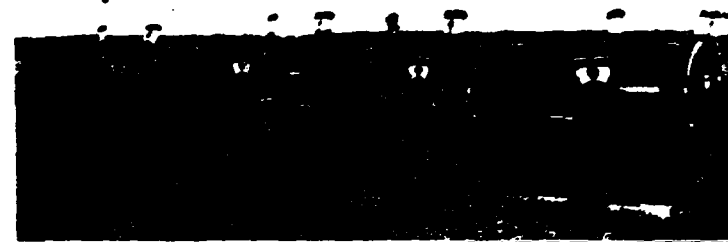
have for their object the development of the efficiency of the unit and its fire control. Independent firing, running practice,



THE PIT, WITH MEN WHO WORK THE INN-KEEPER.

long range volleys, and attack practice are other subdivisions. In the latter the kneeling position is prescribed for all distances nearer the objective than 600 yards, and the prone position expressly prohibited within the same limits, which is contrary to our ideas on the subject.

Field firing is held once a year under the direction of the commanding general of the department, assisted by his musketry staff officers, and is carefully conducted in the various arms according to the principles laid down for the attack. The distribution of ammunition is carried out as if in active service. No comparison in the efficiency of troops stationed



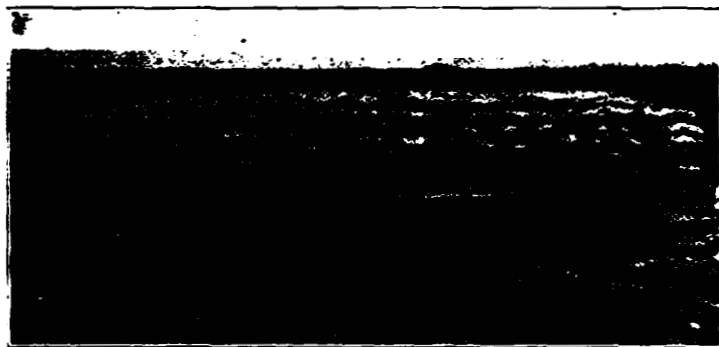
THE DUMMY BATTERY.

at different points is attempted, but each command is judged by its discipline and the general manner in which the exercise is carried out.

It is thought best to quote an account of a day's target practice at Aldershot in order to show how closely the targets used in England may be made to simulate an actual enemy. Captain Cassett, of the Thirteenth Cavalry, military attache at London, relates his experience as follows:

"The ground at Aldershot for this purpose, enables one battalion to advance to the attack with as near an approach to the conditions of actual warfare as I have seen. The battalion advances in column of route, when fire is suddenly opened on it from a single gun, posted about 800 yards to the left front. Deployment is at once begun, and the gun is silenced. On the firing line reaching the crest of a long hill

perpendicular to the front, the first position of the enemy is seen about 900 yards distant, and the advance is subjected to the fire of artillery by a battery about 2,500 yards away. The enemy can hardly be distinguished, as their skirmishers show only their heads and shoulders, and these only occasionally. As the advance continues the enemy is supposed to have retired to a second position about 800 yards away, with a deep ravine in its front, through which runs a main railway line. The enemy's object is to destroy this line before the advance can occupy it, and with this object in view, an armored train is sent down to cover a party of men who



THE SWITCH.

come running down the hill to blow up the tracks, which they are supposed to succeed in doing. The advance continues beyond the railway and up the hill, when the enemy is found to have taken his last position near the guns aforementioned. The battalion thus strikes three positions, covering about 2,500 yards. The targets are merely dummy figures of the simplest construction, and look as if they had been made by some post carpenter. They are all worked by men in pits by means of ropes and springs, with the exception of the armored train and wrecking party. An extensive system of telephones connects all the pits. A peculiar arrangement is that the advance is the whole time subjected to shrapnel fire, which is obtained by means of the explosion of small harmless bombs, suspended from wires above the men's heads or laid on the ground in front. This and the firing of the dummy guns by the same means are the only electrical features of the system. I must confess myself to having been startled when one of the imitation shrapnel ex-

ploded without any warning at my horse's feet. The only thing in the system which could not be made at any post is the ingenious spring by which the fixed targets are made to assume their upright position after being pulled down. I can heartily recommend the adoption of a similar system at some of our larger posts.

"In conclusion, it must be stated that over all the ground are covered pits for the use of umpires, who, by means of mirrors, can watch the advance in all its movements. The only drawback to the practical utility of this range is that the government will allow only twenty rounds per man to be used in this practice."

A rather elaborate system of awards and prizes is laid down. These are under the control of commanding officers subject to the approval of department commanders, and have a great stimulating effect on the effort made by individuals to excel.

Many of the regulations governing this system have been but recently adopted, and every possible effort, it would seem, is now being made to remedy the not altogether good marksmanship of one accepts without question the statements of some of the higher officials of the Boer army displayed in South Africa.

NOTE.—The illustrations accompanying this paper appeared originally in *The Strand Magazine* and are reproduced by permission.



THE EXPLOSION OF A GROUND MINE.

CAVALRY SADDLES AND PACKS.

BY MAJOR LOYD S. McCORMICK, SEVENTH CAVALRY.

ALL officers present know that cavalry saddles must necessarily be of a distinct type—almost totally different from that of saddles used in civil life. One pronounced exception will be noticed later. The ideal cavalry saddle would be one to give the greatest comfort to the horse in carrying the unavoidably great weight, the greatest comfort to the rider—at the same time lending itself to his many duties—and be of sufficient strength and durability to warrant the cost price and prevent the necessity for frequent renewal. Appearance in a cavalry saddle is a comparatively unimportant factor, and is ignored in this paper.

One of the features of this ideal saddle would be sufficient bearing surface, so shaped as to properly distribute the imposed weight of saddle, pack and rider over those portions of the horse's back which nature has prepared for carrying loads. This bearing surface is the entire under surface of the tree, and on its good or bad shape will depend, in a great measure, the verdict, for no matter how satisfactory the other parts may be, the bearing surface—or foundation—must be good in order to have proper results.

As the backs of horses vary so much, no positive rule can be laid down to govern in this matter. The best that can be done is to profit from experience, and when that teacher discloses a fault or discovers an improvement, to discard the former and adopt the latter. The weight to be carried—that is, of the saddle, equipments, and rider—governs to a great extent the size of the horse to be provided. In our service the average horse weighs more than a thousand pounds. This excludes from the cavalry very many horses.

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weighing from 850 to 1000 pounds, which with lighter loads would no doubt render longer and more satisfactory service, since among horses of this class is to be found more frequently what is termed substance; and that quality is generally accompanied by the action so desirable in a saddle horse.

However, it is questionable whether any perceptible reduction can well be made in the weight our cavalry horses must carry—except in isolated cases of emergency—and as there is only one kind of cavalry with us, it seems a settled fact that we must retain the rather large horse.

The saddle used in our service—the McClellan—is the result of experience during the Civil War, and its bearing surface was determined upon after plaster casts of the backs of a large number of horses had been made. A detailed description of this saddle will not be taken up here, as most if not all of you are fully acquainted with it; and such a description is always within your reach. It is carefully made of the best materials, and is accurate in all dimensions; and is recorded in your text book as comparing most favorably with the saddles in use by the more prominent military nations as regards strength, durability, packing capacity, and comfort for man and horse; and as having been in use for forty years with most satisfactory results after the severest tests.

The fact, though, that our cavalry saddle has remained virtually the same for forty years is not wholly convincing that during that time a saddle with a more satisfactory bearing surface has not been constructed. I think it more than probable that if the same board of officers that made the plaster casts, from which the bearing surface of the McClellan saddle was determined upon back in the '60's, should make casts of the same number of average backs now, the bearing surface determined upon would be perceptibly different.

During the last forty years a great many breeds of horses have been imported—breeds not at all suitable for saddle purposes—and as the demand for saddle horses has decreased generally, the demand for draft horses has increased.

and consequently the farmer has turned his attention to Clyde, Percheron, Norman and other heavy, coarse animals. This mixture has certainly had its effect on the conformation of the average horse. An examination of the horses of any troop that has seen even a fair amount of field service will show very few, if any, without great blotches of white hair—the result of saddle sores—indicating beyond doubt that at one time or another nearly every horse in the troop had to be laid off from service and treated during a more or less prolonged tour on "sick report." This is not so serious a matter in garrison, where horses of absent men can be used to replace those disabled, as it is in the field, where the chances are that the sore back must continue to carry its usual load until the horse—possibly from pain and discomfort as much as from traveling—gives out, and has to be shot or abandoned.

Of all the things that were in use forty years ago there are few of them in use now, made on those same lines: and I think that on general principles, if for no other reason, it is high time to have a fair trial of some other saddle that has a different bearing surface, and one with the best tested modifications and attachments.

During the twenty-seven years of my service I think there has been only one other kind of saddle given a trial. This was in the '80's, when I think two troops (one of the Seventh and one of another regiment) were issued the Whitman saddle. That saddle, as then made, was a dismal failure for enlisted men, as the pommel arch was so weak that few were unbroken after a short test in the field with packs. The arches have been strengthened since that test, and I believe they would now stand a severer trial without breaking.

The seat naturally adopted when riding a Whitman saddle I consider the best for military purposes, as the rider cannot, without a tiresome effort, take the "fork" or "tongs across a wall" position. Consequently the rider is closer to the horse and there is less swaying motion. Motion of this kind is very tiresome to the horse, as he has to constantly counteract it by so locating his feet as to retain his equilibrium. This causes his gait to be unnatural and brings un-

due strain on his muscles. The McClellan saddle favors the "fork" or "tongs across a wall" seat. One reason for this is the location of the stirrup loop, which is too far to the rear and is almost under the rider's crotch. This induces, for the sake of comfort, the straight leg, which is characteristic of the two faulty styles of seat mentioned above. The illustration on page 223 of the text shows the rider's feet at least ten inches in front of a perpendicular dropped from the stirrup loop. To retain this position he must constantly, by muscular exertion, keep the stirrup pushed that much away from the most natural and most comfortable position—that is, in a perpendicular dropped from the point of support. This muscular exertion is bound to have its effect: after riding one or two hours, advantage is taken of the first halt to lengthen the stirrups: the leg straightens, and the "tongs across a wall" follows: or the feet fall to the rear under the point of support, and we have the "fork" seat, in either of which positions the swaying motion begins.

I think another reason for these faulty seats is the steepness of the McClellan saddle from the center of the seat to the cantle. It requires considerable exertion to sit braced against this surface. The Whitman saddle has a more level seat and the rider sits more on his buttocks, the portion of his body intended by nature for supporting his weight. The stirrup loops are located farther forward, and if that portion of the leg from the knee down hangs in a vertical position, which is acknowledged to be correct, the foot will be very nearly under the stirrup loop and no muscular exertion will be required to retain that relation. I think the Whitman saddle should be used until the rider is well established in his seat.

The saddles used in foreign armies seem to be more in keeping with what may be termed the Whitman seat than with that of the McClellan, and in this respect are better. It is difficult to accurately compare the weights of foreign saddles with that of the saddles used by the United States, with saddle bags and similar appliances removed. It is safe to say that our saddle is very much lighter. However, it is a

question whether most other features should be sacrificed in order to lighten a saddle.

I believe that if patient consideration could be secured so as to have a fair test of what is called the "Stock" saddle (which is the exception referred to in the second sentence of this paper) a great many officers would be convinced that it possesses some very desirable qualities not found in any other saddle. It also has one feature in common with nearly if not all foreign military saddles. This feature will be noticed later.

In advocating a trial of the Stock saddle, I believe I am attacking a strong prejudice existing among army officers; and I further believe this prejudice to be an unwarranted one, based not on any test but simply on a feeling that all belongings of the cow-boy (and therefore of the plainsman) are necessarily of a low standard and not becoming to the needs of the army. It seems to me that the army can well learn a great deal from the experience and practical ability of men who have had to work out their own salvation under conditions very similar to those existing in our service; but with the very important exception that these plainsmen have had to pay for any mistakes or faulty equipments by replacing them, at their own expense, with each improvement in material and pattern. Practical ideas and changes are sure to develop under such conditions, and wits are sharpened by such necessities.

I think no one will deny that the best locality in which to secure the most improved device of any kind will be that locality most dependent on the use of that device. Nor, I think, will any one claim that the incentive for improvement in any such article as a saddle exists in the army itself in such sharpened and active strength as it does among plainsmen, whose pockets have at first to supply and afterwards to replenish or replace their mounts and equipments. It stands to reason that such men will have the best and most suitable outfits, such as will be least liable to leave them stranded when subjected to any unusual call. The best argument in support of this is the fact that these men will pay forty dollars for a saddle to be depended upon for comfort both to themselves and their

horses, in preference to having any other pattern of saddle as a gift.

There are several styles of Stock saddle, but they are all essentially the same, and while they appear different to the eye, they all possess the important features in a greater or less degree of perfection. Throughout the entire West there is virtually no other saddle used; and the riding done by the plainsmen is more constant, harder, and with less attention to a proper seat than that done by troops; yet with it all, sore backs are almost unknown except during "round ups," when the horse must resist repeated struggles of numerous steers each day by means of a rope fastened to the horn of the saddle and running to such part of the steer as may by chance be caught when the rope is thrown by the rider. This is very severe and rough work on the horse's back—much more so than any the soldier has to require of his horse.

I believe comparatively few army officers have ever given any real thought to the merits of this saddle, or have ever done more than look at it and condemn it. And I further believe that if every officer who objects to it were asked if he had ever practically tested it, nine-tenths of them would have to say that they had never ridden one more than ten miles, even if that far. It is hard to get patient consideration of anything that has been condemned without acquaintance and simply because it exists; but if officers would give a little thought to this subject, conceding the possibility of superiority, it seems to me that there would be but few objections to at least a fair trial, and the willingness to be convinced even against their wishes.

I think no officer will deny that most sores are now to be found on the withers—either on top or on the sides—and the next largest number under the cantle. To me this is conclusive proof that the McClellan tree does not distribute the pressure equally, and that a modification is desirable. The Stock saddle does distribute the pressure equally, and this is one of its most valuable features. A large percentage of wither sores are now caused by the pommel arch being too low and too narrow. These two faults show themselves in a most decided manner in the two extremes of the horse as regards his

flesh. When he is fat the arch is too narrow and causes pinching; and when he is thin in flesh the saddle rests too low and bears on top of the withers.

With the McClellan saddle there is no remedy for the first fault, and before the fat horse has been ridden two days he has the beginning of one or two nice troublesome sores on the sides of his withers, followed when he gets thin by another on top; and the result frequently is that after six or eight months he is condemned on account of incurable fistula. We often hear of a remedy for the second fault, and that is the wearing of a second blanket under the saddle. This raises the saddle a little but not enough in all cases. It does, however, keep the horse's back so hot, particularly under rapid or fatiguing work, that we soon see the effects in a general parboiled condition ready to encourage the first intimation of a sore to spread over most of the unhealthy back.

The pommel arch of the Stock saddle is wider and higher, and there is no undue pressure in any condition of flesh on the upper and tender sides of the withers, and none on top in any case. The under surface of the McClellan saddle is smooth as glass, and we faithfully endeavor by tight cinching to make this surface stay in place on a woolen blanket. The result is that from the time the horse is saddled in the morning until unsaddled in the evening he is virtually enduring a compress equal in effect to the full strength of the man who tugged at the cinch strap; and I actually believe that it is not the weight carried that causes bruises of the back, so much as this steady and unyielding compress.

When the rider dismounts the pressure on the back continues. Theoretically, cinches should be loosened whenever the rider dismounts, but we all know that in practice it is rarely done. The usual ten minutes halt is hardly sufficient to readjust a packed saddle and attend to the calls of nature, for which these intervals are frequently demanded.

The under surface of the Stock saddle is the wool side of sheep-skin stitched to heavy leather skirts on which the tree of the saddle rests; and in this respect resembles the

foreign military saddles. I think no one will claim that it is possible for a blanket to slip from under this sheep-skin. Therefore a tight cinch is not needed to keep the blanket in place. It will remain in place without cinching. This reduces the services of cinches to simply keeping one thing for now the saddle and blanket are virtually one—safely and properly secured to the horse. The conformation of the horse's body indicates plainly the best method for doing this. Instead of one cinch passing over the point of greatest swell of the ribs—not belly—as is the case with the McClellan saddle on the average horse, it seems only reasonable that the best method is to have one cinch pass in front of this point and one behind it, and in this way provide against movement in either direction in the simplest manner. This is the method of cinching Stock saddles, and if horses could talk I believe the cavalry horse would express more sincere thanks for those two modifications than for any other changes that could be made.

Of course the double cinch could be put on the McClellan saddle, but without the lined skirts the tight cinching must continue. These skirts cannot be used under the McClellan saddle, for the simple reason that it is too narrow now in the pommel arch and will not admit of any contraction. At a large saddlery house in Kansas City I lately saw a McClellan saddle rigged as a Stock saddle, and the space for the withers was so taken up with the lined skirts that there was virtually nothing left of it. I believe there is no horse in this command with sufficiently thin withers to wear that saddle one day without distinct injury.

Another desirable feature of the Stock saddle is the readiness with which it lends itself to removing pressure from an injury to the back. The tree is fastened to the skirts by means of leather thongs, and between the tree and skirts pieces of blankets may be placed without the possibility of being disarranged, so as to relieve pressure from any affected place or places. This is more readily understood by examining the saddle than by the lengthy description necessary to explain it. We are told that the same can be done with the McClellan saddle, but I have tried more than once

to put this into practice, and always with the result that in a very few moments after the rider mounted the hole in the blanket was exactly where I did not want it instead of being over the sore; or the additional piece of blanket which had been put on next to the sore in order to relieve pressure on that spot had slipped so as to make its presence harmful.

The packing capacity of the McClellan saddle is undoubtedly good. An examination of an enlisted man's equipment for field service will convince anyone of this fact. The constant attention of officers is necessary, however, to prevent the cantle pack from causing sores on one part of the back. In order to allow as much slipping of the blanket as possible, the soldier frequently places it so far forward that the cantle rests on its rear edge. If his cantle pack is not strapped tightly to his saddle it will settle down and partially rest on the horse's back bone, and an hour's ride will result in a sore that will cause a great deal of trouble. The lined skirts of the Stock saddle project back of the cantle and furnish a sufficient pad or cushion to protect the horse from such results of temporary carelessness or accident.

The objection will surely be made that the Stock saddle is too heavy. It is heavier than the McClellan, but so is the apparejo heavier than the old pack saddle, but I do not believe any one would suggest a return to the latter. It has certainly been demonstrated beyond question that a mule can carry a heavier load on the apparejo than on the pack saddle and with more comfort to himself—an acknowledgment that I believe would be made in favor of the Stock saddle after a fair trial. Several pounds could be taken off the Stock saddle by removing certain features that are of use only to the cowboy.

My serious attention was first called to the Stock saddle in the winter of 1895 and 1896 in Arizona. My troop was on a six weeks' trip in the mountains trailing an Indian murderer, who naturally led us over the highest and most inaccessible places. More than half the troop was left at a camp on the Gila River, to which stream we had to return nearly every night for water. This camp was of course changed several times so as to be within reach, and to enable me to

alternate with horses and men in order to keep down sore backs. I had a guide nearly all the time, and I noticed that he never dismounted for any kind of a hill, up or down, while we were walking nearly half the time in order to save the horse's back. To make any distance each day I made it a rule to walk down all hills and up only the steepest ones. The guide in the meantime would get from a quarter to half a mile ahead and would have to wait for me. One period of this kind of work lasted for about a week, during which time I had changed nearly every horse in the detachment each day. With all the care possible I could not get away from sores, while the guide rode his one horse all the time without an intimation of an injury. Before that week was past I determined to get a Stock saddle at the first opportunity. Such a chance presented itself before we returned to the garrison, and from that time until September, 1902, I rode such a saddle whenever on duty outside of a garrison.

If there is a locality in the United States in which to test a service saddle, it is the Southwest; and during my three years' tour in Arizona I fully tested this kind of a saddle. I afterwards had it in Cuba for three years, and as a result of my experience with it I am firmly convinced that it is a more satisfactory saddle for our service than any we have ever tried. Some few minor changes might be advisable, but the principle features should be left as they are. In all my criticism of the McClellan saddle, and recommendations of the Stock saddle, I wish to be understood as expressing my own views and endeavoring to put this important piece of our equipment before you in such a manner as to encourage impartial investigation, in the hope that we shall, by test and experiment, so agitate the question that if a better saddle exists or can be made, our cavalry will soon have it furnished.

FIVE YEARS A DRAGOON '49 TO '54 AND OTHER ADVENTURES ON THE GREAT PLAINS.*

PART III.

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IN the winter of 1852 Major Chilton went on a six months' leave, which left Lieutenant Hastings in command of the troop. Sergeant Hooper went on a two months' furlough, to the end of his time. Every good man in the troop felt his absence a personal loss. It wound up his ten years honorable service, and he would never return. It was time for him to make a home for himself and family, which, with land warrants and some money that he and his industrious wife had saved, he did in Iowa, and became a prosperous and prominent man. Sergeant John Cuddy was made acting first sergeant until Hooper's time should be out, and three-fourths of the troop hoped he would keep the place. He was born in Ireland, was well educated, bright, clear headed, and a good judge of men, six feet tall, handsome, and a perfect picture of manhood, witty, cheerful and self-reliant. I never saw a better specimen for a first sergeant. He was just what our troop needed. I knew that good order would reign under Cuddy; but there was an element that did not want such a man, and a few of them would do anything to destroy him. After he had been acting first sergeant a couple of weeks, he was visiting a friend across the parade ground, out of quarters in the night without permission. Some miscreants managed to get fire into his orderly room, and the garrison was aroused at midnight by the alarm of fire. When Sergeant Cook and I reached the door and

broke it down, the room was in flames. The fire was soon quenched, but Cuddy's enemies had gotten their work in; this was sure to prevent his promotion. He was placed in arrest and Sergeant Drummond took his place. Cuddy was released in a couple of weeks and returned to duty, but Colonel Fauntleroy would not consent to promote him.

In April, 1852, Major Macklin, the paymaster for Kearney and Laramie, called for an escort and Sergeant Cuddy and ten privates were detailed. Cuddy was glad to get away with his little command, and did not object to some of the toughest cases detailed to go with him, to get them away from the troop. The man who was the instigator of the fire in the orderly room deserted, and with his wife located in Weston. More of him hereafter.

There was a custom at Fort Leavenworth to detail a noncommissioned officer each month who was called "provost sergeant," and whose duty it was to work the prisoners in policing the garrison, cleaning up generally, and to do anything that there was no hired employees to do. If there was a death the provost sergeant had the grave dug. My turn came and I served during April. It was an odd coincidence, to say the least, that three men died of delirium tremens during that month, two of Light Battery "G" Fourth Artillery and one of the band. I remember the names of these men and can see how they looked as well as if it happened yesterday. These were the only men I ever saw after death from delirium tremens, and the only deaths at the post during the month. I had two prisoners digging a grave in the soldier's cemetery where now stands the commanding officer's quarters. They had gotten down half deep enough when one of them, an infantryman, leaned on his spade, turned to me with a sorrowful expression, and in a sad tone said: "Arah, Corpler, aren't it lucky I am?" I could not see his good luck, it was not apparent on the surface, and so I said, "How is that Mike, have you struck a gold mine?" My question brought no smile. Poor Mike shook his head; leaned harder on his spade, and said: "If I hadn't got in the geard house I might 'ev shared the fate of poor Tom, and yez w'd 'ev had somebody digging me grave as

*This is the third installment of Mr. Lowe's account of his personal experiences in the opening of the West. The first part appeared in the January, 1904, number (51) of the CAVALRY JOURNAL.

I am his." I said I hoped that such a misfortune would never befall any of us. Straightening himself to his full height, looking at me earnestly, he said: "No danger of yez, Corpler, but look at poor Mike." I suggested that this was a good time to swear off. He sighed and went on with his work. I pitied him with all my heart. The only enemy he had was whisky, and he needed a guardianship that would keep him from it, or keep it from him.

Several men deserted the first pay day after coming in from the summer's campaign of 1851. In March, four of the best men in the troop deserted, and as they had been my friends from first to last, I felt the loss keenly. They made a big gap in the efficiency of the troop. A batch of recruits from Carlisle joined about this time, and special attention was given to drilling them preparatory to the summer's campaign sure to follow. They had spent the winter at Carlisle and were pretty well drilled. They came up on a steamboat.

On the 20th of June I was made sergeant; on the 23d, first sergeant. After the order making me first sergeant was read and the troop dismissed, as I was passing a group of men on the way to the steps leading up to the squad room I heard one man say: "Well, we may as well desert now." The man was slightly under the influence of liquor and evidently intended that I should hear the remark. I walked over to where they were standing, and said: "See here; I don't care what anyone says of me so that I do not know that the words are intended for me to hear. In this case you said what you did purposely for me to hear. Now, it lies entirely with you whether or not you may as well desert. If you intend to be a decent, respectable soldier, there is no occasion for you to desert. On the other hand, if you want to make things disagreeable generally, and for me in particular, the future for you is not bright. Now take your choice, for I tell you plainly that I will not be harassed, worried and annoyed by men who can see no good in anything but whisky, noise, opposition to good order and discipline, and other things that make the troop and all connected with it miserable. I may not succeed in having everything my own way, but I will

come as near to it as I can, and the nearer I come to it the less cause any one will have to talk as you have." The man was about to speak. I do not think disrespectfully, when a man said quietly, "Shut up," and two of them walked him off. Though I spoke in a low tone, probably half the troop heard what I said. The next day this man made an apology and said he would never give me any trouble, and he never did.

I called the roll at "tattoo" without a light, the first time I had seen it done, and without a mistake—called two absentees the second time and reported them absent. I never used a light, nor read from a list at roll call. A general good feeling seemed to develop from day to day, and many men said they were glad it was settled. The most experienced said they would know about what to expect for the next two years, and there was a great deal in that. Lieutenant Hastings had the confidence and respect of all the men whose opinions were worth anything, and that was a tower of strength to me.

The day of departure soon came and we found our way to the Arkansas via Pappan's Ferry across the Kaw and thence through Council Grove.

Arrived in the vicinity of Cow Creek, now in Rice County, Kansas, it became evident that the Kiowas and Comanches were as energetic as usual, annoying trains, surprising small parties, and driving off stock. Several trains were compelled to corral and stand them off until relieved by the Dragoons. Generally the Indians did not stand much upon the order of going when the "long knives" came in sight. Some inexperienced people have charged Indians with possessing less real courage than white men. There never was a greater mistake. The Indians knew that bows and arrows good at forty yards, could not compete with musketballs and pistols at 100 or 200 yards, so they skirmished for the advantage, and took it whenever they could, as became the sensible robbers and bandits that they were.

Arrived on the Arkansas, from the mouth of Walnut Creek west the danger to trains was great. Nothing short of constant, intelligent, determined effort on the part of the commanding officer, Lieutenant Hastings, served to

protect the trains from destruction until he compelled their owners or managers to concentrate in large caravans and proceed with the greatest caution in double column.

One morning near Pawnee Rock, now near the corner of Barton, Stafford and Pawnee Counties, a Mexican train of ten mule teams pulled out of camp. The rear team was made up of seven little mules and three burros. The load was heavy and the team lagged. Suddenly a small band of Indians was seen charging toward this train. The train master did the usual thing, hurried into corral as fast as possible, and succeeded very well except as to this last team, which all expected to see captured and the man and his ten-year-old son scalped. Seeing his desperate situation, the father hid the boy in the wagon under some blankets, in hopes that relief might come to his son, though he must die. The Dragoons had camped west of Walnut Creek, near where Great Bend, the county seat of Barton County, now is, and had made an early start in order to halt this train until others should come up. A few skirmishers on the high ground saw the situation, gave the alarm and charged in time to drive off the robbers, though a shower of arrows had already hit the wagon and slightly wounded the man. One pony was killed, and it was believed that some Indians were wounded, though all got away.

This team was owned by the driver and traveled with the big train for company and protection, and the team being weak for the load it had to haul, was compelled to travel behind, so as not to retard the progress of the train, and frequently lagged. Numerous small freighters were in the habit of traveling in this way.

Probably no better officer than Lieutenant Hastings ever commanded a troop. He was forty years old, had served half of his life in the army—more than fifteen years as first sergeant—and was promoted from the ranks for gallantry in Mexico. One heel had been shot off while he was reconnoitering from a tree near Chapultepec, Mexico. He wore a cork one, was a good walker and fine horseman. This was his second campaign with this troop. And now he was approaching ground sacred to the memory of brave men, and there

was still with the troop a remnant of those who fought desperately at the mouth of Coon Creek, now in Pawnee County, when in 1846 twelve men out of a detachment of twenty under Sergeant "Ben" Bishop were wounded, some of them fatally, in recovering cattle that had been driven off by Indians. Bishop was shot through the body with an arrow, but survived and was discharged first sergeant of the troop in 1849.* Sergeant Peel and Bugler Brydon kept alive the fires that burned in memory of their fallen comrades, and the spirit that pervaded the little command boded no good to the reckless robbers that infested the Santa Fe Trail from the Little Arkansas River to Mexico. The Indians knew the troop, the sorrel horses, the blue shirts worn in the field in place of the regulation uniform, the drab hats, the horses and men that they had seen before when they by forced marches relieved Fort Adkinson. In fact they had not forgotten the sorrel troop since 1846.

Having concentrated the trains and escorted them via the so-called Cimarron crossing of the Arkansas, about where Cimarron station on the Santa Fe Railway now is, to about sixty miles southwest of that point, the troop returned and went into camp about where Dodge City now is, and about four miles below Fort Adkinson. Here the whole Kiowa and Comanche tribes seemed to have concentrated in one vast camp on the south side of the river, opposite the Dragoon camp.

Sergeant Cuddy and his party joined from detached service a day or two later. I quote from what he and others

*Sergeant "Ben" Bishop died at Fort Leavenworth in 1882 at the age of sixty-seven years. At the outbreak of the Civil War he was appointed master of transportation under Assistant Quartermaster General Rufus Ingalls, and held the position until its close. He came to Fort Leavenworth in 1861 and was placed in charge of the government farm. While stationed at the post before the war he carried the United States mail for a considerable period between Forts Leavenworth and Kearney. Mr. Bishop, while a member of Troop B, First Dragoons, was detailed with other men of his troop to lay a stake and rider fence from rails made on the Fort Leavenworth reservation. He being the youngest man of the troop, his captain had him lay the first rail. Of this incident Mr. Bishop frequently spoke to his friends. He was born in Newell, Pennsylvania. One of his two sons is the present freight agent of the Kansas City-Leavenworth Electric Railway.—[Elliott's] Kansas.

told me: When he returned from Laramie to Fort Leavenworth in July, he was, after a few days' rest, ordered to join his troop. In the meantime the "toughs" of his party got drunk and Colonel Fauntleroy ordered four of them to confinement in the guard house until ready to start—actually had four horses led to the guard house for the prisoners to mount and ride away. Their arms were boxed up in the wagon. The men were mad; they had been kept from liquor, could not get any now, and were going across the plains with no rest except what they got in the guard house. A few miles on the road the mutinous disposition was at fever heat. Four good men rode behind and two in front of them, while Cuddy rode ahead. They cursed the men in the rear because they were not allowed to fall out of ranks, and finally got so bold that they addressed themselves to Cuddy. Then he ordered a halt, wheeled his horse so as to face them, loaded two pistols, placed one—army size—in his holster with flap thrown back ready for use, the other—navy size (his private property), in his belt, and addressing them reviewed all of their misdeeds during the time he had known them, especially the trouble they had given him during the trip and since returning, and wound up by telling them that now they were sober and had not the excuse of drunken men for being insolent, showing that, drunk or sober, they were utterly bad and unfit to live, and then and there assured them that the first man who did or said anything to him or in his hearing in the least disrespectful he would *kill him—he should die like a dog*; he knew they intended to desert and would do so if permitted, but that he would return them to the troop or give their *worthless carcasses to the wolves*. A desperate man, fearless, outraged and thoroughly aroused, is dangerous, and these villains saw that their race was run. He brought them 400 miles into camp and they were placed in the guard house at Adkinson. He told me that these desperadoes had caused him the loss of many nights' sleep on the trip to and from Laramie and from Fort Leavenworth to the troop. Cuddy and six good men were a valuable addition to the troop at this time. Cuddy knew that these scoundrels should not have been let out of the

guard house to go with him, but fearing that Colonel Fauntleroy would place a wrong interpretation on it if he asked him not to send them, his pride kept him silent; he would not do anything that would reflect upon his *nerve*; if nothing else would do he would kill them. He would have been amply justified in doing so. The Colonel meant well, but he had not been in Cuddy's place, and could not see into his fine character, nor could he imagine the character of the villains he had to deal with.

Company D, Sixth U. S. Infantry, was at Adkinson. Brevet Captain S. B. Buckner commanding (late governor of Kentucky and candidate for Vice-President on the Sound Money Democratic ticket with General John M. Palmer).

Guard duty was extremely arduous, nearly half the men being under arms among the horses or on post day and night. This constant strain told on the disposition of the men more in camp than on active march. They became tired and morose, and with the cause of their trouble constantly before them, somewhat reckless, and would have welcomed almost anything for a change.

There was no active war. Every day some of the head men of the tribes came into camp to talk with the "white chief," always expressing regret that they could not control their young men." One day while this kind of farce was being enacted a young buck rushed across the river and reported to the chief, who was talking with Lieutenant Hastings, that a few miles away some of the "bad young men" were attacking a train. Hastings' information led him to believe that there were no trains within 150 miles of him. That a government train and escort was on the way, with which a caravan of freighters had joined at Council Grove, he knew, and he also knew it to be too strong to tempt the Indians to attack. The actions of the Indians and the commotion in their camp made him believe there was something wrong. When "boots and saddles" sounded the interviewers broke for the other side of the river and their whole camp seemed to be under arms. Their horse herds were rounded up and hundreds of the horses saddled. Hastings concluded that all of their fine talk for some days had

been to gain his confidence, and this report was to induce him to send a detail to the relief of the train said to be besieged, thereby dividing his command, so that a sudden rush could destroy the Dragoon camp and probably wipe out the detail afterwards. But instead of dividing his command, Hastings made it more secure by tying all horses to the picket line, all mules to the wagons, and doubling the line of sentinels along the river, thereby plainly indicating that he understood their little ruse.

And now all grass for the animals was cut with butcher knives. Fortunately the grass was abundant, and by moving a little up or down the river it could be had within convenient distance. This episode somewhat dampened diplomatic relations between the wily warriors and the "long knife chief," and the effect on the soldiers mowing grass with butcher knives was anything but pleasant. Such strained relations could not last very long. We soon got a scythe from Adkinson and relieved the butcher knives.

Guard mounting while on campaign was always in the evening. When the old guard was relieved it was marched to the river below the camp, and the musketoons discharged down stream. One fine evening, a few days after the incident above referred to, Sergeant Cuddy marched the old guard off, and having given the command "fire" some of the men deliberately turned their pieces and fired across the river into the Indian camp, not at the people, but hitting the tops of some lodges. Having dismissed the guard, Cuddy reported to Lieutenant Hastings and explained the occurrence. The men were called to account and claimed an accident—a falsehood, of course, but might as well go at that. Every precaution was taken, and with the river on one side and a big ditch running from it, there was perfect confidence in the ability of that camp to defend itself.

About nine or ten o'clock, as the gentle south breeze blew across the river, the rattling of lodge poles was heard—not loud rattling, as if being carelessly handled, but an occasional click, as if great care was being exercised to avoid making a noise. The Indians were surely taking down their lodges. The sound of "tom-toms," that made barbarous

music for the monotonous chant and dance—the war dance, the scalp dance, the squaw dance, and every other dance that had hitherto made their camp hideous till the wee small hours—was not heard on this lovely night. Nothing but the slight rattle of lodge poles; even the dogs were silent. A mounted messenger left camp with a letter to the commanding officer at Adkinson informing him of what seemed to be taking place. Hour after hour passed, and silence reigned supreme—silence that was oppressive. It was like a dead calm when storm laden clouds hang thick and threatening. The hours from midnight to dawn seemed long and tedious. When the sun sent its glimmering rays up the beautiful valley, not a lodge, not a soul or an animal was in sight. Where a few hours before had stood a large city in all of its savage grandeur, with great herds of horses and mules grazing in the vicinity, not a living thing remained save the prowling coyotes—all had silently stolen away. The Dragons were puzzled.

Mounted vedettes went to their posts upon the bluffs north of camp; from there and from the tops of wagons the Indian camp ground was carefully examined. Peel, Cuddy and I crossed over at some distance apart, for fear of an ambush, while a line of men on the river bank stood ready to support us. For half a mile from the river bank towards the hills and two miles along the river lodge poles and every kind of Indian equipage lay scattered upon the ground. Where each lodge had stood more or less of the family property was left. The poles were all there. In their haste they had taken their best lodges and whatever they could pack that was of greatest necessity to them. In a few hours they had packed hundreds of horses, and mounted on others had scattered in all directions, to meet at some appointed rendezvous, probably hundreds of miles away. Not a lodge pole trail led from the camp.

The men were in high spirits, notwithstanding the probability that after their families were at a safe distance the warriors under the great war chief Satanta Sawtanta might make it warm for them. In two days everything desirable for comfort or pleasure had been moved to the Dragoon camp

and the rest burned. Not a vestige of the great Kiowa and Comanche camp remained. The soldiers had killikinnick by the bushel and Indian pipes to smoke it in, and buckskin in every style. Buffalo chips were no longer gathered in sacks for fuel, lodge poles having taken their place.

But these Dragoons were not without sentiment and sympathy. Emblems of motherly love and helpless infancy were found in abundance. Pappoose cribs, buckskin clothing for infancy, maidenhood and old age, robes, moccasins, and trinkets of all kinds, told of the terrible sacrifice the women and children had made, and there was general regret that the helpless ones had left so much of home and comfort behind.

The Indian movement could only be explained by supposing that they considered firing into their camp a declaration of war. But the Dragoons could not understand why so many warriors should be so easily bluffed. They had heretofore been very independent and saucy. While very diplomatic and deceitful, the chiefs who visited camp acted in a patronizing sort of way, leaving the impression that they held the soldiers in utter contempt. They had learned enough to convince them that the superiority of the soldier was in his arms, not in his horsemanship (for the Kiowas and Comanches were the finest horsemen in the world), nor in his strength and prowess as a warrior. These athletic, sinewy sons of the plains were from an ancestry that had been warriors since the race was created, so far as known, and from infancy through every stage of their existence their normal condition was that of warriors and champions of the chase. From instinct and education they were alert, cunning, strategic, recklessly brave, and capable of subsisting where white men would utterly perish. To say that such men given equal arms and supplies, are not the equals, as rank and file soldiers, of any race known to history is bald nonsense.

Two days after the Indian movement the train and escort heretofore referred to, including some artillery, came up en route to New Mexico. Lieutenant Hastings was not expecting them so soon. It seems that Indian runners brought

the news of their approach, and their conclusion was that the troops were coming to help clear them out, and firing into their camp confirmed this belief, hence their sudden departure. It was an odd coincidence.

Major Chilton joined from a six months' leave.

Two weeks had passed, no Indians had been seen, and the two great tribes that harassed the travel and were a standing menace to the commerce of the plains were believed to have gone to Texas, and would probably extend their raid into Old Mexico, as was their habit. This had been a bad season for them. They had captured no trains, no fresh scalps dangled at their bridle bits, and they had met with heavy loss in the destruction of their camp. Peace seemed assured for the balance of the freighting season.

Owing to the great amount of travel, the buffalo kept away from the road, and to procure fresh meat (which we needed very much) it was necessary to go a few miles from it. One bright morning Sergeant Peel and a comrade got permission to go on a hunt as far as what Sergeant Ferguson called "Angel Spring," the head of what is now known as South Fork of Pawnee Fork of the Arkansas, six miles north of camp, it being understood that Sergeant Cook would be out there with a six-mule team about noon to haul in whatever the hunters killed.

At seventeen years of age Langford M. Peel enlisted at Carlisle Barracks as a bugler. His father was a soldier, and Peel was practically raised in the army. He was assigned to "B" Troop, commanded by Captain E. V. Sumner. In the spring of 1864, in a battle at the mouth of Coon Creek, heretofore referred to, Brevet Captain Lovel commanding the troop, Bugler Peel, then not twenty years of age, was credited with having killed three Indians. Three years and a half later, in a battle with Pawnees near Fort Kearney, he killed two, and a month later, one. He was the best specimen of one hundred and sixty pounds, five feet nine inches, naturally bright, clear headed, cheerful and helpful always; as keen as an Indian on the trail, well up in every branch of prairie craft, a perfect horseman, possessing unlimited courage and endurance, he was a man to be relied on

and trusted in every emergency. A full set of such non-commissioned officers under a good commander would make a troop invincible against any reasonable odds.

Peel and his companion arrived early, drank from the lovely spring, watered their horses, and hobbled and picketed them for safety. Buffalo were plentiful, and seemed perfectly at ease on the grazing ground, indicating that they had not been disturbed, and giving assurance to the hunters that no Indians were in the vicinity. Waiting patiently for the buffalo to go to water, in a couple of hours they had two fine ones within a short distance of the spring, cut up ready for transportation. Then they built a fire of buffalo chips, broiled meat, and feasted as only an Indian or a plainsman can; smoked and recounted their adventures. Noon, and Cook and the wagon not in sight. The creek from Angel Spring runs a little east of north; on the east, bluff; in some places, vertical, rocky bluffs from ten to thirty feet above the level of the creek; to the west, some bottom, gradually sloping to high ground. Along the creek, which hugged the bluffs pretty closely, was scattered trees, choke cherry and wild plum bushes, with numerous wild grape vines, forming patches of dense thicket in some places. Little more than a mile north of the spring a herd of buffalo lay in the open bottom. The land lay so that it was easy to approach them, and the wind favorable, the temptation was great.

The campaign had been one of monotonous care and drudgery, and no mounted hunting had been allowed on account of the necessity of keeping the horses in the best possible condition, and this was the first good opportunity to have some real sport. They agreed to make a ten minutes' run to see which could kill the most in that time, the pending bet being a good dinner when they reached "America." Such was civilization called among plainsmen. They approached the herd at a walk, and were within easy pistol shot before the buffalo saw them. Then each went his way, Peel to the west, his companion to the east. The latter dropped his first buffalo in the bottom, the second ran east to the top of the bluff where he fell. The man was

down cutting out the tongue, always the sportsman's trophy, when the voice of Peel rang out, as he came up the hill. "Get on your horse!" No time was lost, and looking east he pointed to fifty or more Indians in a half circle half a mile away, their left wing so far advanced that retreat towards camp was cut off. Consultation was brief. Peel led the way down the hill, circling around a thicket, carefully selecting the firm buffalo grass sod so as to leave no trail, and drew into cover not twenty yards from where some of the Indians were sure to come down. Here they sat on their horses, pistol in hand. They had no future plans; they might have to fight to death under that bluff; they would do whatever circumstances seemed to dictate.

They had not long to wait. The Indians came rattling down the rocky trails leading into the bottom, sending out their blood-curdling war-whoop at every jump. They seemed to think the fleeing men would try to escape towards camp, and be involved in the circle; did not think they would stop to hide, or that they would do anything but run for their lives, which would be sure death. Their greatest success had been against demoralized men who had given up hope and lost their heads, which soon made their scalps an easy prey. One brawny brave drew rein at the foot of the trail where the men had come down, raised himself in his stirrups and looked sharply towards them. Peel's companion, believing they were discovered, and that a signal would bring the whole pack of howling demons, raised his pistol to shoot; but Peel quietly reached over, and placing his hand on his comrade's arm gently pressed it down. In less time than it takes to tell it the Indian was off to the west, showing by his actions that he had not seen them. Hearing no more noise from the east, the way seemed clear in that direction. Peel led the way out, and they quietly walked their horses up where they had gone down a few minutes before, turned south, and gently trotted towards camp, saving their horses' wind for the critical moment which they knew must soon come.

By this time the Indians seemed confused. The hunters could see most of them riding helter skelter and peering from

the highest points to the west of the creek, never dreaming that they had passed the game. More than half a mile had been covered, not away from the enemy but directly south, slipping by, when suddenly they were discovered, and every Indian charged toward them furiously. But the hunters' horses were comparatively fresh; they were on the high ground, and as far south towards camp as the most southern Indian, with four or five miles of nearly level stretch ahead of them, while the Indians had to oblique to the east and rise considerably to gain their level, and they felt that while the race would be interesting, barring an accident they were pretty safe. The greatest danger was that a horse might step in a prairie dog or badger hole and fall, hence they rode with great care.

When fairly under way and all on a level the soldiers were a quarter of a mile ahead. Soon the wagon was seen. Cook's horse tied behind, while he rode with Matthews on the "lazy board," as they smoked and chatted. Then, to attract Cook's attention, and not lose a shot, the two hunters turned in their saddles and fired at the Indians. Quickly Cook was seen to mount his horse, Matthews turned his team, and Cook "interested" the mules with a "blacksnake." About two miles further, and the hunters were close to the wagon. A vedette on the high point north of camp saw something wrong in the distance and discharged his musketoon; then the other vedette on another high point discharged his. In the meantime the Indians had not been gaining on the men until within the last mile, and then only because the team impeded their progress a little. Not half of them had kept to the front; some were a mile behind. Arrived near the vedettes, Matthews was allowed to go down the hill alone to camp not half a mile away. Cook joined the hunters and shooting began in earnest, including the two vedettes, who had been using their musketoons at long range for all they were worth. Seeing the hopelessness of capturing their game, and knowing that a strong force from the troop would soon be up the hill, having lost two ponies and had some of their number wounded, the Indians retreated. At the risk of their lives they always carry off the dead and wounded if possible. When Lieutenant Hastings with half of the troop came up

the steep hill the Indians were well on the retreat, and he followed them only a short distance beyond the crippled ponies. Horse flesh was too precious to be wasted in a pursuit that could accomplish nothing.

No fresh meat cheered the camp that night, but it was a jolly camp. All answered to their names at retreat roll call. There was something new to talk about, as the men sat around lodge pole fires and related the traditions of the grand old troop.

The next day Major Chilton with a part of the troop, including those in the excitement of the previous day, went to the spring, killed more buffalo and returned with a wagon load. No Indians were seen, and the wolves were feasting on the buffalo killed the day before. Of course, Major Chilton examined the ground that Peel and his companion had gone over, including the hiding place and the race course.

Now, when Peel discovered the Indians he was half a mile west of his comrade and nearly one and a half from the Indians. He could have easily escaped by going south towards camp. He had scarcely one chance in ten to save his friend, but he took that chance, such as it was, in the face of almost sure death. He saw the thicket and the steep shelving bluff as he went up the hill. To hide there seemed the extreme of recklessness, but he builded better than he knew. Until that moment he had no idea how to act unless they got on a high point and with their pistols stood off the Indians until help should come. The latter was all he hoped for, and he knew that if Cook saw the situation, that hero in every emergency would join the two or die. One iota of weakness would have induced Peel to abandon his friend and save himself, and how easily Cook could have left the teamster and rode to camp for the troop, as many a coward has done, and been counted a hero for the noise he made. But no such weakness troubled his manly soul. Like Peel, he was a born hero. The vedettes on the bluffs could have pulled their picket pins, mounted their horses and rode into camp after discharging their guns—such were their general directions; but they saw their comrades in trouble, and Charles McDonald and Edward O'Meara confirmed the faith that they had in them.

And what became of the Indians who pursued the hunters? A freight train returning from New Mexico saw a band of Indians—supposed to be the same—some distance south of the Cimarron Crossing a day or two later, and corralled to stand them off, but the Indians seemed in a hurry and did not trouble the train. These were the last Indians seen on the trail that season.

To put in a little more time and make sure that there was no further danger to trains, Major Chilton went up the river about ten days, traveling about five miles per day—going through the skirmish drill all the way—the principal object being to get fresh grass and exercise for the horses and practice for the men. We returned leisurely along the trail, met F. X. Aubry, the champion rider of the plains, Colonel William Bent, of Bent's Fort, and Maxwell, of Riado, New Mexico. All were of the opinion that the Indians would not return to the trail that season. From Pawnee Fork we made time for home—Fort Leavenworth.

At Council Grove we got corn—the first in two months—and fed a quart to each horse and mule night and morning from there in. Our horses were thin in flesh but otherwise in good condition. We had but the two company wagons for transportation of rations, tents and other camp equipage. Of course, we drew rations at Adkinson when necessary.

All the way in the grass was dead. Plenty of buffalo from Pawnee Fork to the east line of what is now McPherson County, and turkey on every stream. They had never been hunted, hence not easily scared, and were big and fat.

On arriving at the fort the Major found an order waiting for him to escort and act with Major Ogden, quartermaster, to locate a new military post near the junction of the Republican and Smoky Hill branches of the Kaw River. In three days fifty men had clothing replenished, rations and forage drawn, some horses shod, and were on the road. Sufficient transportation was taken to haul corn for the animals. The most unserviceable men and horses were left behind. Lieutenant Hastings in charge of them. The Santa Fe Trail was followed to the crossing of Soldier Creek, four miles north of Pappan's Ferry, thence to Silver Lake—up the Kaw through

St. Mary's Mission, where Father Deurinck had a flourishing school for Pottawatomie children, thence fifty-two miles to the junction of the rivers above mentioned. A week was spent in that vicinity, resulting in the location of the new post, afterwards named Fort Riley, about 130 miles from Fort Leavenworth. A band of Delaware Indians returning from a buffalo hunt said there were plenty of buffalo twenty-five miles west of the new post. We were never without turkey after reaching the Big Blue River until our return. It was a little late in the season, nights cold, but no rain or snow, and with big fires and plenty to eat, the trip was rather pleasant.

Having arrived in Salt Creek Valley, three miles from Fort Leavenworth, Major Chilton made a speech to the troop, in which he gave them excellent advice concerning their conduct in garrison. Major Ogden was a strictly temperate, religious man, and I always thought that he inspired this speech. They had made a good campaign, a campaign that should be a credit to any troop. Unfortunately there were men who would become intoxicated, get in trouble and cause trouble for every one having anything to do with them. He advised them that whiskey was their worst enemy, and if they drank at all not to get drunk, and assured them that leniency for those who did need not be expected, for he would not have his troop destroyed in that way. I think that speech did much good: moderate drinkers watched the fellows who had little control of themselves, and curtailed the excesses.

Heretofore during winter about ten per cent. of the troop were undergoing punishment in the guard house, much of the time by sentence of garrison court martial—forfeiture of pay and time in the guard house—nearly all of the offenses growing out of drinking whiskey. I talked with the noncommissioned officers about it, and cautioned each one in charge of a squad to give personal attention to their men and stop any man who seemed to be verging on the danger point in drinking, and if he could not control him bring him to me. Sometimes a man was brought to me and I shut him in a store room to sober off and then put him on extra duty for punishment. During the winter we had several company courts

martial, three noncommissioned officers sitting in judgment, and the proceedings reviewed and acted upon by the first sergeant. Of course, the written proceedings were not very voluminous. The result was, no man was tried by general or garrison court martial; summary courts were unknown. Another result, some men were doing extra guard and fatigue duty instead of loafing in the guard house and letting better men do their duty. When a man could not be managed without violence he went to the guard house, but much of the time "B" Troop was not represented there.

If punishment was not immediately meted out to an offender, his record was fairly kept and he was sure to be called on for the next fatigue party (details for fatigue to do some kind of dirty work), and during the whole winter scarcely a decently clean soldier was called upon—always the troublesome fellows got the job. Twice the findings of a court and the approval of the first sergeant were appealed from and the parties sent with a noncommissioned officer to the Major, who heard their complaint, and sent back word to me that if I had any more trouble with them to put them in the guard house. No officer ever saw the proceedings of the company courts; they did not want to. I gave all the dissatisfied ones to understand that if they had any grievance I would send them to the Major to make their own statement.

Of course we did not always have peace and happiness, nor freedom from drunkenness, but we came nearer having *home rule—self government*—government within the troop and by the members of it than any of the oldest members had before seen. It was a little binding on ten per cent. of them who were taught many good lessons in respectful demeanor and language towards noncommissioned officers; they could not hide insolence and abuse under the cloak of drunk, and hence not accountable. There was much whiskey drank and no effort made to conceal it. "Budgen-ken," a sort of company club, in a place fixed up between the two stables, was always supplied, each drinker "chipping in" to buy whiskey, and the men were given to understand that any abuse of the privilege would insure its destruction. No

whiskey was allowed in the quarters, a rule which was closely lived up to.

Soon after returning to quarters, the Major came to the orderly room and broached the subject of a company library. He had learned the cost of "Harper's Classical and Family Libraries": a pair of book cases, with hinges closing the edges on one side, and two locks the edges on the other side, held the library of uniform size and binding. When open the title of each book could be read, and when closed no book could move or get out of place: the books were all the same length and breadth, and an excellent collection. The Major led off with a subscription of \$25.00. I followed with the same. Peel the same, then followed a calculation of what percentage would be due from each man in proportion to his pay to make up enough to pay for the whole. I took the list with each man's name. The Major spoke to the troop on the subject at retreat roll call, explaining to them the advantages of so much good reading matter, and before dismissing the troop I requested each man who wanted to subscribe to come to the orderly room and sign the list pledging himself to pay the amount opposite his name on pay day. Most of the men off duty and *at liberty* signed immediately and the others soon after, and the library was assured with scarcely an effort. The Major collected the money at the pay table, and the books in their cases came on the first steamboat in February. Of course the library was sure to give me some trouble, but it was so popular and had such a good effect that with Bugler Brydon's help I got used to it and ceased to look upon it as a burden. Compared to present usage there was little writing to be done in transacting troop business, and I never had a regular clerk. Lieutenant Hastings always assisted with the muster rolls and anything else that I asked him to: he liked to do it; and by calling in a man for two or three days in a month I was never much crowded with writing.

Our troop ball came off—a decided improvement over that of the previous winter.

A few recruits from Carlisle came up on a steamboat soon after we came in. The lance sergeant in charge, a cul-

tivated gentleman, said little about himself except that he had experienced ups and downs in business; had lived some time in Cuba, and knew considerable of the business world. He seemed to have no bad habits, and was soon made a corporal. He made the next summer's campaign and spent the following winter with us, and was discharged in the spring of 1854 by order of the Secretary of War. He was the son of United States Senator Clark, of Rhode Island. He was commissioned first lieutenant First—now Fourth—Cavalry when it was authorized in 1855, served a couple of years and resigned to take a position in a business house in Leavenworth. Drifting along with varying fortune, he became hospital steward of the Military Prison when it was established, and died there several years ago. I have mentioned this case to show the ups and downs in some good men's lives.*

Another man in this same squad of recruits was a tall, fine looking, rather polished man, with a fine set of dental instruments, and proved to be a fine workman: a genial, cheerful fellow, he made friends easily. Worrell by name, became a corporal, then a sergeant. But I skip his history

*Hartford T. Clark was born in 1827, and is a descendant of Revolutionary stock of prominence. His maternal great-grandfather was none other than Stephen Hopkins, one of the two delegates from Rhode Island who signed the Declaration of Independence. After learning the trade of a pharmacist he enlisted in the army in New York, and was sent to Carlisle Barracks, Pennsylvania, from which he in due time reached the First Dragoons. Upon his discharge from the service he was appointed a first lieutenant in the same regiment, the date in the records being given as March 3, 1855, an appointment which expired by limitation May 1, 1856. He again enlisted in the army, and his knowledge as pharmacist being valuable, was appointed a hospital steward in January, 1860. He served as such much of the time at Jefferson Barracks, having been transferred there from Fort Leavenworth, and was discharged July 30, 1863. He is again found in the army in 1875, for early in that year he was appointed hospital steward again and assigned to duty at the U. S. Military Prison at Fort Leavenworth, where he served until the date of his death, June 7, 1881. Prior to his death he made a request of the military authorities that upon the death of his wife her burial at his side be permitted. A lot was so left vacant, and upon her demise, in 1877, her body was deposited in the spot she had hoped some day to be placed to be near her husband. She was the granddaughter of Count DeSanno, who came to the United States with Lafayette and later located in Pennsylvania. Mr. John Clark, the eldest of two sons and the second of five children of Hartford T., is at present employed as assistant engineer in the Quartermaster's Department at Fort Leavenworth.—[EDITOR.]

until I left the troop, of which he hoped to be first sergeant at the expiration of my time, but through my influence failed, and was the only man that I did not shake by the hand and say "good by" to when I left the troop. To be brief, he got discharged when the First, now the Fourth Cavalry, was raised, enlisted and was made first sergeant of one of the troops, served about a year and then with some company funds and the farrier of his troop deserted, taking with them horses and equipments and pistols. Down towards Jefferson City, Missouri, they stopped at a plantation for the night and there met a Mr. Gordon, chief engineer of the Missouri Pacific Railroad, then being built between St. Louis and Jefferson City. In the morning all three left the plantation on horseback traveling the same road. A few miles on the road Worrell shot Gordon from behind, robbed him of considerable money and hid his body in some brush. But the history of this case, the capture of the murderer and his execution after several trials, in which his good father and mother spent much money, is recorded in the proceedings of the courts, and I refer to it here partly to gratify my vanity, and to prove the correctness of my judgment in regard to this man's character.

Spring came, and early in April we were on the way to the Arkansas. The desertions during the winter were not numerous, and they not damaging. A few horses had been turned over to the Quartermaster and new ones received, so that we were again well mounted.

Fort Adkinson was to be abandoned, and in its stead a camp established on Walnut Creek near its confluence with the Arkansas. We took along teams and citizen teamsters to transport the government property from the Arkansas to the new camp, and utilized them to haul forage for our horses, so that we were able to feed two quarts of corn to each horse every day for some time, and finally came down to one quart. We were supplied so that we had some corn all summer.

This was one of the most trying seasons in my experience.

Having spent the night at Cow Creek, the next camp would be "Big Bend" of the Arkansas, eighteen miles. About midway between these points, now in Rice County,

was a line of high sandy hills, called "Sand Buttes," sometimes "Plum Buttes." With his usual prudence and forethought in passing through broken country and in crossing streams, a habit which had enabled him to travel with one troop through all the tribes from the North Platte to Mexico, and from the Missouri to the mountains without being surprised, the Major threw out skirmishers, a corporal and four men, riding twenty-five or thirty yards apart. Having reached the highest "Butte" the corporal discharged his pistol, the four men rallied on him, the troop moved forward quickly, part thrown out in line of skirmishers. Ten yards from the corporal was a dead Mexican, and within a hundred yards two more. One was still breathing, and blood was trickling from their scalped heads. Away down towards the Arkansas was a large Mexican train. The dead men belonged to it, and were hunting antelope in the hills when killed. Ponies and arms were gone. They were evidently completely surprised. After following the Indian trail a short distance it was completely obliterated by countless thousands of buffalo tracks. The Mexican train was corralled on the plain below and the Dragoons moved to it, but they had corralled to let the herds of buffalo pass by, and had not seen any Indians.

From Cow Creek to Coon Creek travel was nearly blocked by buffalo. Standing on any high point as far as the eye could reach, a vast moving mass could be seen, making the earth tremble with their trampling and bellowing.

We arrived at camp near Adkinson: "D" Company Sixth Infantry moved to the new camp on Walnut Creek; Major Chilton and Lieutenant Hastings located in the commanding officer's quarters, which was a pretty comfortable sod building, and the men of the troop occupied the soldiers' quarters.

Sergeant Cook, acting wagonmaster, made regular trips to and from the new camp, moving everything that could be utilized in completing it. On one of his trips, one morning after leaving camp on Pawnee Fork, Cook was asleep in the front wagon; he never got a good night's sleep on these trips. His little escort of two infantrymen to each wagon was also asleep. The teams were moving along up the in-

cline from the Pawnee Fork bottom to the dry route by the head of Coon Creek, when suddenly a band of Indians came up, stopped the train and demanded a feast, etc. Cook hurried out and mounted his horse. He was pointed out as the chief, and to their demand for "tobac" he said "No," when the leader hit him a vicious blow with his "quirt" or riding whip and raised his bow and arrow. Cook shot the Indian, who fell from his horse, and shot two more who clung to their horses as they ran off. The escort was out of the wagons by this time, but Cook had done the work and the band was gone, about a dozen. Realizing that probably this was only a small party from a larger force near by, Cook straightened out his teams, left the dead Indian and made the best time he could. This happened about 9 A. M. The next morning before sunrise a vedette called attention to a train down the road some miles traveling unusually fast. I reported to Major Chilton, who told me to mount ten men and go down to meet the train, which I did, and met Cook two miles below camp. He had traveled over fifty miles in twenty hours, watering and feeding a little twice. He knew the Indians to be Osages, supposed to be entirely friendly, but stealing and robbing whenever they could bluff a small party. A detachment of dragoons accompanied the train the next day, which wound up the moving.

News had come that a "pow-wow" was to be held at or near Adkinson during the summer, and large amounts of presents would be distributed; that in addition to the Kiowas and Comanches, the Prairie Apaches would be there, and that Major Fitzpatrick on the part of the Indian Department would superintend the distribution. Of course it meant the three tribes in full force.

Until the final movement of Indians after the distribution of presents one-half of the troop was on guard at night and one-fourth during the day. Sentinels called the number of post, the hour and "All's well!" every half hour during the night. In daytime the horses were herded a short distance below the post. The Indians were not allowed north of the river unless visiting by permission.

This condition of things lasted two months. Major Chil-

ton had a great many talks with leading men of the Kiowa and Comanche tribes. Sawtanta, the war chief of the Kiowas, always came rather neatly dressed in fine buckskin, and wore a handsome cavalry saber and belt. He was a man about five feet ten, sparely made, muscular, cat-like in his movements—more Spanish than Indian in his appearance—sharp features, thin lips, keen restless eyes, thin mustache and scattering chin whiskers that seemed to have stopped growing when one to three inches long. At the time of which I write he was about thirty-five years old. He invariably came with one servant, a Mexican Indian, to the line of sentinels, dismounted, leaving his handsome horse and Spanish equipments with the servant. Always before allowing an Indian to come inside the line of sentinels the sergeant of the guard was called, who escorted the visitor to the commanding officer, permission having been given for the visitor to come in.

Usually the conversations between the Major and Sawtanta were apparently pleasant, though sometimes the latter became somewhat emphatic. He complained of the treatment the Indians received from the whites, the manner in which they overran the country, destroyed the game and ignored the Indians' rights, and his eyes flashed as he jammed the end of his saber scabbard into the ground. Sometimes the Major recounted the efforts made by the government to look after the welfare of the Indians, and the treacherous manner in which such efforts were taken advantage of. Sawtanta, excited, and his black eyes flashing, was scarcely a match for the Major whose big black eyes fairly blazed when he chose to be emphatic. The Major always tried to be pacific and just, admitting many wrongs that Sawtanta complained of, but never permitting a threat, even by innuendo, to pass without an emphatic rebuke. He felt that Sawtanta was a superior, intelligent man, and treated him as such. There was a good deal in common with these two men. Both had tempers easily excited, unbounded energy, boldness and courage. Educated and civilized, Sawtanta would have been a match for the Major anywhere. In cunning, Indian duplicity and shrewdness he was a full match; but the Major was not a man to be

trapped, flattered, coaxed, driven or bluffed, and if the combined Kiowa and Comanche tribes had him surrounded he would roll his black eyes with their broad white borders, defy them and threaten to "wipe them off the face of the earth," a favorite threat of his, and no man living could come nearer making them believe it. Every man of his troop capable of imbibing a stern determined spirit of defense knew that his threats, though sometimes extravagant in the face of overwhelming thousands, would be defended to the bitter end. His watchfulness, care, prudence and clear conception of Indian character were his best safeguards. He could never be caught napping; there was no earthly danger of surprise, and no seventy-five men under such discipline, with such a commander, armed as we were, had been overwhelmed by men carrying bows and arrows and lances only; hence staunch, steady confidence, from which there was no swerving, reigned supreme in our camp, and men endured the hardships without complaining. About the most comfortable place during the heat of the day was under a tent fly stretched near my orderly room, and there I had a good opportunity of seeing and hearing what passed between the Major and others.

One day when the conversation had been quite animated, the Major looked steadily at Sawtanta and made an emphatic assertion of what he would do if certain trains then on the road were interfered with. Sawtanta always spoke Mexican Spanish in talking with the Major who could understand fairly well what he said, but when in doubt had the interpreter tell him. The interpreter talked wholly by signs, never speaking a word to Indians. He was a wonder in that way, and understood the sign language of every tribe on the plains. The Major talked entirely through the interpreter. Although a mountaineer and desperado, the Major's threat was so bold that he was afraid to interpret it correctly, hesitated and made few motions, all of which the Major noticed, and Sawtanta's mild, unconcerned attitude convinced him that he had not been fully interpreted, and he called for a file of the guard, which came quickly and Pyle (the interpreter) found himself tied to the wheel of a cannon which stood near by, and there he remained until dark, when he was con-

fined in the guard house, to remain, as the Major said, "until he could tell the truth." "A life sentence," said O'Meara. Sawtanta was made to understand the threat, and why the man was tied to the wheel. He soon took his departure, and did not come again until Major Fitzpatrick came to make the "big talk," as the Indians called it. Strange as it may appear at this time, there was no representative of the Indian Department except Major Fitzpatrick, none of the army except the officers of "B" Troop, and no correspondent to write up the grand "pow-wow"—30,000 Indians, Apaches, Kiowas and Comanches. To-day the principal newspapers of the country, including the illustrated papers, would have special correspondents on the ground. At that time any one except the necessary officials, attaches and military officers would have been an incumbrance.

In a smaller way this was as important a distribution of presents to the Indians as was that in 1851 at the mouth of Horse Creek. If it had any newspaper record I never heard of it. The big ox train came in, the wily Apaches called Prairie Apaches to distinguish them from those ranging in southern New Mexico and Arizona, the Kiowas and Comanches having assembled in full force, the goods were unloaded, boxes and bales opened, the nabobs of the tribes decorated in brilliant uniforms, medals and certificates issued, goods parceled out, winding up with plenty to eat, feasting, sham battles, etc. The Apaches were off their home ground and anxious to return. Major Fitzpatrick seemed equally anxious to have the job over with and kept his little working force and a couple of clerks pushing things. The long drawn out dignity of the Horse Creek treaty was lacking.

Major Fitzpatrick had the confidence of these as he did of all other Indians on the plains. They claimed that in the twenty years they had known him as agent or trader he had never lied to or tried to deceive them in any way, and that his advice had always been good—a certificate of character that few could get.

The presents having been distributed, the Indians went south, probably not to return during the season; all the available material at Adkinson had been moved and the sods

level to the ground. We had not seen a buffalo in more than two months or any fresh meat of any kind except some prairie dogs which Peel and I killed with the only rifle in the troop; no one hunted with it except us. The musketoons did not shoot accurately enough, and no one was permitted to waste ammunition. From time to time we killed enough of the little barkers to make a stew, and found them quite as good as the common gray squirrel. Parboiled and then stewed with a little fat bacon made them taste pretty well to men who had been so long without fresh meat. Owing to the proximity of the Indians there was no other game to be had.

From our surroundings during the last month we were in a critical position. It would take but a spark to inflame the powerful tribes confronting us, and several happenings seemed to have brought the climax. A lot of trains were corralled a little below and not permitted to pass on until the distribution of presents and the Indians had moved off. To detail the incidents would be tedious and unnecessary to this narrative. For a month Lieutenant Hastings and I divided the night between us, half and half, each acting as officer of the guard and often walking from sentinel to sentinel all the way around the line, half the company on guard and half the guard on post at one time. I relieved Lieutenant Hastings at midnight and tried to make up sleep by an afternoon nap. The quarters were full of fleas, the old sod walls full of mice and snakes, and were soon abandoned for the more comfortable tents. Compared to fleas, bedbugs are pets. Spread out a soldier's blanket and see thousands of fleas hopping from an inch to a foot high, enjoying the warm rays of the sun and exercise, after a successful night with a soldier. The two dozen cats that Lieutenant Heath brought from Fort Leavenworth two years before were perfect wrecks; they could not digest mice enough to counteract the ravages of fleas, and moped about utterly discouraged.

The Indians had been gone a week, the Mexican trains straightened out up the river, the troop escorting them to the Cimarron crossing and two days south of it, returned to the crossing and went up the Arkansas to "Big Timbers"

(Bent's new fort), and returned to Adkinson, now only heaps of broken sod leveled to the ground, so that from it the Indians could not ambush mail carriers, express riders or other small parties.

It was the 1st of October when we left the vicinity of the dismantled fort to return to Fort Leavenworth. One day we camped at the mouth of Coon Creek, on the Arkansas, about noon. This was "B" Troop's battle ground, where in the spring of 1846 Sergeant Bishop with twenty men recovered a herd of 400 oxen that had been stampeded by Indians heretofore referred to. Peel explained to the Major all the interesting features of the fight.

On the opposite side of the river was a line of high bluffs, craggy and abrupt, with some buffalo trails leading out on to a narrow strip of bottom land between the river and the bluffs. Buffalo on the south side were numerous, and little bands came out of the bluffs across the bottom to the river to drink. I took Company Teamster Matthews with his saddle mule with me and crossed over. When a buffalo had been killed we were to pack Matthews' mule and bring to camp all the meat he could carry. After winding around through the trails in the bluffs for some time I killed a fat cow between the bluffs and the river. We picketed our animals and proceeded to prepare the meat for transportation to camp. We were busy cutting up the buffalo when we heard a splashing in the water; looking up we saw Lieutenant Hastings with half the troop coming at a trot. This trotting crossing the river meant urgency, and we mounted at once. It was all clear to me that nothing less than Indians skulking after Matthews and myself induced the rapid movement towards us. We joined Lieutenant Hastings, who said that some Indians had been seen watching us, and the last seen of them they were creeping towards us through the bluffs. Lieutenant Hastings wanted to get around them or behind them so they could not escape. I showed him a trail that I thought might lead to their rear. He left half the men to watch the trail that the Indians were believed to be on while we moved quickly on the trail that I believed would cut off their retreat. Sure enough we drove them out, found

them to be Osages, four in number, and did some loud talking to keep Cuddy, Cook and others from shooting them as they came out. They professed all sorts of friendship, but did not succeed in convincing any one but that Matthews and I owed the safety of our scalps to the fact that they were seen by a vedette near camp, and the prompt action of the troop. We finished the buffalo, loaded the mule with all he could carry and brought the Indians to camp. Major Chilton turned them loose with a threat to "wipe the Osages off the face of the earth" if they did not keep off the traveled road and leave white people entirely alone.

Nothing of special interest occurred until we reached Diamond Springs, now in Morris County. The weather had been frosty at night and days sunny—a continuous Indian summer all the way—grass dry as powder. We had barely a quart of corn per day for each horse, and they were poor. All day we had seen little bands of Indians two or three miles off the road traveling the same direction that we were, and apparently watching us. This was the Kaw country and probably no other Indians were there, and we could hardly understand why they kept aloof and watched our progress. Of course the Kaws knew our troop by the horses, and we knew they had no love for it, but were slow to believe they would attempt to do us any harm. We camped on high ground a little east of Diamond Springs, on the south side of the road. We had been very careful of fire all the way in, and here we were especially careful on account of the dense growth of grass and consequent danger of burning the camp. We had finished dinner, about two hours before sunset when, as if by one act, fire broke out in a circle all around us not more than a mile from camp. A stiff gale was blowing from the south, and when we noticed it the fire in the tall grass was roaring furiously and the flames leaping twenty feet high. Quickly we commenced firing outside of our camp, whipping out the fire next to it, thereby burning a circle around it. Every man used a gunnysack or saddle blanket and worked with desperate energy. The utter destruction of our camp was imminent, and we faced the fire like men who had everything at stake. Success was ours.

but the battle left its scars on nearly all. I have never seen fifteen minutes of such desperate work followed by such exhaustion—scarcely a man could speak. Blinded by smoke, heat and ashes, intuitively we found our way to the creek, bathed our burned hands and faces, many of us terribly blistered. My hands and face were blistered in several places: my mustache and whiskers, the first I had ever raised, were utterly ruined; even my eyebrows were badly scorched. I could not wash on account of the blisters, and dipped my face and head deep down into the lovely spring water and held my hands under to relieve the pain. My experience was that of most of the troop. We had quite a quantity of antelope tallow, which was warmed and gently applied to our sores. Undoubtedly the Kaws had set the fire to burn us out, and while they did not quite succeed, if they had seen us they should have been fairly well satisfied. I think that Major Chilton and Lieutenant Hastings were better satisfied with the troop than they had ever been before. Men who could stand together in such a fight and win could stand against desperate odds anywhere. I was instructed to notify the troop at retreat roll call that we would start at daylight. The guards were doubled, and we rested as best we could.

Just out of camp we met the sun squarely in the face, but fortunately it soon became cloudy, which was a great relief. At Council Grove we got some corn from Hays & Company and went on to Big John Spring, three miles east, where we camped at noon.

Major Chilton told me to be ready to go back to Council Grove right after dinner. When I asked if I should take any one with me, he said, "No, you will go alone." About half past one I reported myself with horse saddled (an extra one which I took to save mine). He gave me a sealed letter directed to myself, and told me I could read it on the road to save time. Inclosed in my letter I found one directed to Mr. Hoffaker, a young man who was school teacher of the Kaw Indians, requesting him to furnish me an interpreter which he (the Major) had spoken of when he came through the Grove. My instructions were to proceed with the interpreter to the Kaw village, said to be three miles down the Neosho

River, and there make a demand of the chief that he have five horses, stolen the spring before from some "mounted rifles" camped at Walnut Creek, now in Barton County, brought to his (Chilton's) camp at Big John Spring.

Mr. Hoffaker had the interpreter ready, one Batteese, a Pottawatomie by birth, but married to a Kaw and living with them. Batteese talked good English and was quite intelligent, but when I told him that I was after stolen horses and would make a demand on the chief he seemed reluctant to go or would rather go without me (he lived with the Kaws and was afraid to make enemies). Of course, I could not send him; my orders were to go myself. When we arrived at the village three miles down, we learned that the chief was at the lower village, two miles farther down, and there we went. We found the chief, whose name I regret to have forgotten, in a round house built of mud and willows at the west end of the village. An Indian woman came out as we went to the door and we found the chief alone, lying on a willow mattress, not feeling very well, as he told the interpreter. However, he was dressed and talked pleasantly in reply to all I said. He believed there were some government horses among the Kaws that some of the young men claimed to have *found*. While we talked, Indians came in and packed the house full, and a crowd stood outside. Most of them had no arms.

My appearance seemed to be quite a source of amusement for a lot of young bucks, and they nodded and chatted about me in a merry way, and I knew they had reference to my burnt face and hands tied up in rags, and doubtless the scoundrels who set fire to the grass were before me. For some time I had not said anything; I wanted to kill a lot of Kaws; they seemed to know that I was suffering mentally as well as physically, and were amusing themselves at my expense. I could see that the chief was embarrassed. He seemed to be a sensible, good man, and these thieving scoundrels were riding over the country committing depredations and causing him a lot of trouble. Finally I rose to go, and told the interpreter to say to the chief that my captain knew the Kaws had the five horses, and that they stole

them from a camp on Walnut Creek last spring, and that unless they were delivered in camp at Big John Spring the troop would come down and take them. I did not want to offend the chief, but to impress the thieves. I spoke in rather an angry tone, and the interpreter hesitated. I turned to him abruptly and said: "Interpret what I say, quickly, every word of it." An Indian about thirty years old, who was known as Clark, had been watching me closely, and at this juncture he spoke in plain English: "Who told you I stole um horses?" "No matter," said I, "who told me, I know you stole them, and unless they are in my camp by the time I get there I'll make you sorry you did steal them." I shook the chief's hand and said "good by" and came out through the crowd, the interpreter following. We mounted and galloped off. About four or five miles, mostly up Big John Creek, brought us to camp.

I reported to Major Chilton all that had happened, and wound up by saying that I hoped my threat would be carried out. The interpreter was much agitated, and said that he thought the horses would be brought in by to-morrow. "To-morrow!" said Major Chilton, "they'll bring them to-night, or I'll teach them a lesson they'll never forget, the thieving scoundrels. I don't propose to make another campaign against the Kaws in winter. I am here now, and while I don't want to hurt innocent men, half the Kaws ought to be wiped off the face of the earth, and my men have a mighty good excuse for doing it. Sergeant Lowe, take twenty men and bring the horses or the chief: I'll show them."

My saddle was changed from the extra horse I had been riding to my own, and in a few minutes twenty as good men as ever roamed the plains were in column of twos on the way with me to the Indian camp. We left our sabers in camp, they rattled too much, taking our revolvers only and plenty of ammunition. The interpreter was cautioned by the Major to interpret as I directed him. As I rode away the Major cautioned me to be prudent, and not hurt the chief. A low line of bluffs or hills formed the east bank of Big John Creek to within half a mile of the chief's house, which was at the upper or west end of this village. Before

passing this point I halted and told the men to follow the leader in each rank, pistol in hand but not cocked, to keep their ears open for orders, and to do just what they were told and no more. Privately I told Cuddy I would go to the left door, which was on the east side, and he would go to the right and meet me. This part I did not want the interpreter to know, fearing that he would not go with me if he did. Sergeant Peel was in the rear of the line behind Cuddy, and Corporal Ferguson in rear of the line behind me; they would see that my plan was carried out, good or bad. We passed the point at a walk, then "Trot!" "Gallop!" "Charge!" came in quick succession.

I sprang from my horse at the door just as it was opened by the chief, who ran out at the sound of the horses' hoofs. Cuddy dismounted almost at the same instant. I seized the chief by the left arm and Cuddy by his right, and placed him on a horse behind another man, mounted, and were started in less time than it takes to tell it. The chief saw at once that he was a prisoner and went willingly. Instantly there was an uproar all over the village, men, women and children howling in every style. The bucks rushed out with guns and bows and arrows as if to give battle. The chief turned on the horse and rode backward, gesticulating and talking at the top of his voice. I told the interpreter that if a shot was fired at the dragoons I would kill the chief and him too, and impressed upon him the importance of repeating this, which he did vigorously and continually, and the chief kept up his exhortation till we were out of reach.

We moved off at a walk in extended line a pace or two apart, every man with pistol in hand turned in his saddle ready to shoot, Ferguson and Peel giving strict attention to the men. I brought up the rear with Cuddy and the interpreter behind the chief. Just as we reached the point of bluff heretofore referred to, a man was seen coming as fast as his horse could bring him riding bareback. It was O'Neil, and he had been sent in haste by the Major to tell me to return, that three of the horses had been brought in and the other two promised. It was too late, and we took the chief to camp. He was one of the Major's prisoners of January.

1851, and they shook hands. The chief was much agitated and distressed. As I made my report, I felt sorry for him.

While the troop's verdict was a justification of the action, the more I thought of it the more I did not feel at all proud. Only for smarting from the outrage of attempting to burn our camp and the wounds from which we were suffering, we would all have condemned it, and I became convinced that I had been guilty of an outrage on a man who had been guilty of no wrong, in order to recover some horses that had been stolen by some thieves of his tribe. And now came the other two horses and some head men and sub-chiefs, but none of the thieving young bucks. A very earnest talk followed, in which the Major recounted the wrongs they had been guilty of, including the attempt to burn his camp the day before, and promised them if he had to come from Fort Leavenworth another cold winter to look after them he would "wipe the young bucks off the face of the earth." And he exhorted the chiefs and head men to control the bad young men in their tribe if they had to kill them. This story has been told ever since the occurrence in various forms, often greatly exaggerated. The reckless element undoubtedly predominated with all of us at that time. Smarting as we were, we were unfit to be trusted to deal out justice in such a case. Whatever of wrong was committed the blame was all mine, and it took me some time to realize the extent of the outrage upon a harmless man. In camp and quarters men delighted to relate the incident, never for a moment dreaming that a wrong had been done; but fifty-one years later, while few remember it (probably I am the only living member of the party), all false pride has passed, and I see nothing to be proud of save the faithful conduct of those who followed me. While painfully smarting under the cowardly and treacherous outrage of the day before, they kept themselves under perfect discipline and self-control. I do not believe a word was spoken on our side save by myself and the interpreter.

In Salt Creek Valley, before marching into Fort Leavenworth, the Major made quite a little talk to the troop, recounting the hardships of the campaign and the faithful and

creditable service rendered, cautioning them to remember that they were men capable of heroic acts and not to brutalize themselves with whiskey, but try to keep up the good name they had so well won on the plains, at the same time reminding them that no amount of service rendered would condone future wrong doing; good behavior should be continuous.

Few incidents worthy of note occurred during the winter of 1853 and 1854. The traditional "B" Troop ball came off, routine of drills, etc. Not a man was tried by court martial during the eight months we remained at the post, except by company court. One night at "tattoo," as I was calling the roll I heard the click of a pistol as if being cocked in front of me. It was quite dark, but standing close to a man I could recognize him. I stopped in the midst of the roll call, stepped forward to where I thought I heard the noise, reached over to the rear rank, seized a man, jerked him out in front of the troop and caught his right hand in his pocket holding a cocked pistol, which I took from him. All was done so quickly that hardly any one realized what was going on. Several seized the man, and I was obliged to protect him. I sent him to my orderly room with Sergeant Peel, finished the roll call and dismissed the troop after cautioning the men not to allow the incident to create any excitement, but all go to bed as usual. In the orderly room the man claimed that he bought the pistol Derringer to shoot rats with and had no definite object in cocking it at that time. He was pretty drunk, or pretended to be—an all around bad man, who had done an unusual share of extra duty for punishment. He had been a good while in the army, and had the reputation of having murdered a comrade during the Mexican War. I let him go and gave him his pistol the next day, at the same time telling him that I believed him to be at heart a cowardly murderer. I had no doubt but that he intended to shoot me as I passed him on the way to my quarters, which I would do as soon as I dismissed the troop. He had braced up with whiskey for the act and rather overdid it. I could not prove that he intended to

murder me, and if I sent him to the guard house the verdict would have been that I was afraid of him.

I may as well dispose of this man here. He would have deserted, but was anxious to go to New Mexico, where he had served before, and where the troop and regimental headquarters were now under orders to go. And from the happening of the incident above related he was silent, sullen and on his good behavior, having little companionship in the troop. It leaked out that in his drunken moods he had said he would desert when he got to New Mexico, accompanied with many threats. He never again gave me any trouble, but I was keenly on the lookout for him always.

When I left the troop Corporal Ferguson was made first sergeant. He joined the year before I did and reenlisted a year before my time expired. He was a remarkable fine man, an Irishman by birth, had been clerk at regimental headquarters a good deal and was familiar with all company and regimental papers. Up to within a year he had never cared to serve as a noncommissioned officer. He had been made corporal once before, but resigned. He was a fine horseman, an excellent shot, a superior drill and all around athlete; a man who would attract attention anywhere. Not much given to words, he held a quiet control of all around him without an effort. The last time he was made corporal was about a year before my discharge, through my influence, and I held up to him the fact that Sergeants Cuddy, Cook, Drummond and others would not reenlist. Peel would not accept first sergeant, and the timber for that place in the troop was scarce, and I had no doubt but that he would be appointed if he would take interest enough to accept it. And he did take interest, and showed so plainly his superiority that the appointment came to him almost as a matter of course. The troop and its commander knew that it was my wish, all became educated up to the idea and expected it. And so when I was furloughed I left him acting first sergeant.

One night after "tattoo" roll call the man of the pistol above referred to plunged a knife into Ferguson's heart, killing him instantly. By great effort the murderer was

saved from being mobbed by the troop: was tried by civil court and sentenced to hang. I have refrained from mentioning the names of men of whom I had to speak in uncomplimentary terms, for the reason that most men have family relations and friends, and to mention them in a way to leave a stain upon their character might be unjust and is altogether unnecessary, and most men who have come under my observation in the army and on campaigns pulled out in fair shape and led good lives, many of them raising families afterwards. But this murderer had no friends on earth that his comrades ever heard of, and sure I am that he had no family near or remote to weep over his crimes. His name was Jackson, and it is but just to his comrades that no mistakes be made in the name.

Sergeants Cuddy, Cook and Drummond were discharged towards the last of the year 1853, and new noncommissioned officers took their places. All three were employed by the quartermaster, and the following spring Cook and Cuddy went with Colonel Steptoe's command, the former as wagon-master and the latter in charge of strings of lead horses to Salt Lake the first year 1854, wintering there and going through to California the following season.

When Walker went on his filibustering expedition to Nicaragua, Cook served as a captain in his command, escaped when Walker was executed, came back to San Francisco and died in poverty. He was a native of Nova Scotia, had been a sailor, and I never knew a stauncher, braver man.

Cuddy was a shrewd man, with money-making tendencies, dropped into the cattle ranch business in California, married a Spanish woman with large Spanish grant, cattle and horses, and the last I heard of him was raising a good family.

Russell, O'Meara, McDonald, Bustwick and others were also discharged and went their various ways—Russell to setting type on the *Missouri Republican*; Bustwick, the farrier, married a wife and farm in Clinton County, Missouri, and was killed at Vicksburg in 1862, while a major in the Confederate army. O'Meara declared he had money enough to take him back to the "Old Dart," and he was going there. I will have occasion to mention McDonald later.

Recruits came from Carlisle before the close of navigation on the Missouri.

The Major applied for and was given authority to purchase twenty-five horses for his troop, subject to his own inspection, and made an arrangement with a Mr. Calvert, of Weston, to furnish them. Two or three times at evening stables the Major pointed out to Mr. Calvert the kind of horses he wanted, the models that suited him best, all to be sorrels of solid color—chestnut or red sorrels would do, but no light colored ones, no white noses—white feet not absolutely barred, but unless exceptionally sound would be rejected. Sound feet, flat, sinewy legs, sound hocks and knees, arms and quarters well muscled, short, sinewy back, high withers, rangy neck, bony head, bold eye—no "hog eyes"—fine ear, deep chest, plenty of room to carry his forage, five to seven years old, fifteen to sixteen hands, preferably fifteen and a half, all natural trotters and well broken to saddle—about filled the Major's idea, reserving the right to reject any of them for any reason satisfactory to himself. The quartermaster paid for the horses on the Major's order. They came in fine shape, were put in our stables, and thoroughly tried before being received. They were a fine lot and the deal satisfactory all around. The old and least serviceable of the troop horses were turned over to the quartermaster to make room for the new ones, and mine was one of them. I saw him sold at auction to a Missouri farmer for \$50.00 and requested him to see that the horse was well cared for, which he promised to do, told me where he lived, and invited me to see him, which I did two years later, dined with him and told him and his wife the horse's history. His wife was riding him in her visits about the neighborhood, and she declared that he should never do any other kind of work. In those days everybody rode horseback. A few wealthy people had old-fashioned, roomy carriages for use on special occasions, but every man and woman, boy and girl, generally rode horseback.

I had the choice of the new lot of horses, and chose a deep chestnut, without a white spot, sixteen hands, fine from ear to hoof, a little nervous, but had not been spoiled, and soon

became a great pet. And now came the task of adjusting this fine lot of horses so as to make the best use of them. It was an ironclad rule that every man must be gentle with his horse. Abusing a horse was the unpardonable sin. Peevishness, kicking, jerking, swearing at, unnecessary spurring or violence of any kind would not be permitted to go unpunished, and noncommissioned officers were sure to report any infraction of the rule. Everything must be done for the comfort of the horse. The noncommissioned officers who wanted to change old horses for new did so, and then came the privates with the least serviceable horses. If, after assignment, a horse was found unsuited to the man or the man to the horse a change was made, whether the man liked it or not, be he noncommissioned officer or private, and from first to last, whatever would add to the efficiency of the troop was done, whether in drilling horses or men. Within five miles of the flagstaff west of the river there was not a nook or corner that we did not drill over, giving strict attention to the skirmish drill.

I have heretofore not mentioned the manner of feeding our horses; they were always watered before feeding. Prairie hay was used—there was no other in the country at that time—and *there was no better "roughness" for horses*. Ear corn was the kind of grain always used in garrison. One can easily see whether corn on the cob is sound or unsound. Shelled corn might be musty or some bad corn mixed with it and none but an expert could tell, while any man would know a sound ear of corn; and more than that, horses do not eat ear corn so fast; they like to bite it from the cob—masticate, relish and digest it better. Of course on the plains one must use shelled corn, but in garrison, in a corn growing country, there is no feed equal to ear corn and prairie hay. I know that now there is a great habit of feeding oats to cavalry horses; farmers, teamsters and livery men did that in the Northern States when I was a boy; it was the best feed they had and oats were nearly always well cured and free from must and dust, and they did not raise corn as they do in the West. Here oats do not do as well as in New England or Canada, are not so easily cured, and are

often both musty and dusty, and as a rule chaffy and light, with little nutriment compared to Northern oats. Corn is the cleanest and best feed; there is nothing equal to it for strengthening or fattening man or beast. Barley and wheat are good feed where corn is not raised, but where it grows in abundance there is nothing equal to corn; for man, for horses and mules, for cattle, for hogs, for fowls, it is the king of products to make muscle and fat. The Southern planters fed corn and bacon to the negroes because it made them strong and healthy; they fed corn to their plantation mules for the same reason. At the salt mines in the Island of Bonair the strongest negro men and women I ever saw were allowed a bushel of corn a month and no other food except some fish that they could catch occasionally. They could parch the corn, grind it between two rocks, or eat it without cooking—no mills to grind it with; 'twas corn that made them big and strong. Probably this has nothing to do with cavalry horses, but all the same I have never seen better or more enduring ones than were in "B" Troop, and *prairie hay, corn and good care* made them what they were. The nutriment in prairie hay does not equal that in timothy, clover or alfalfa when well cured, but it is much easier cured; the nutriment is in sound ear corn.

As heretofore stated, the man who was the instigator of the fire in Cuddy's orderly room deserted, and with his wife stayed about Weston. His occupation was "recruiting deserters;" that is, he would find men with money after pay day, persuade them to desert if he could, and often robbed them. One Sunday I tried to capture him but he escaped on horseback while I was hunting him. I found the shanty where he lived with an ill-assorted set of vagabonds in a little corn-field, and represented to Major Chilton that a dozen men could surround it and effect his arrest. The next Sunday Lieutenant Hastings and a dozen men, including Sergeant Peel, went over to Weston, surrounded the house, half the men dismounting and hunting through corn shocks. Out of a shock ran the man into the house, with Peel after him. Peel searched thoroughly in vain. A man and half a dozen women, including the deserter's wife, were sitting at

a table apparently in the act of commencing to eat dinner. 'Twas when big hoop skirts were worn, and being a small man Peel felt sure that he was under his wife's skirts and a blanket thrown round her lap and feet, told her so, and declared that he would have him if he had to go under her skirts. At this juncture Lieutenant Hastings rode up and called Peel out, told him he had no right to enter and hunt through a man's house without a search warrant, which he did not have, and now that he had laid himself liable to arrest they must mount and get across the river, which they did. It was understood that an indictment was found against Peel, and after that he kept away from Weston. A month later the man gave himself up, a consumptive wreck, and died soon after. He confessed that he was under his wife's skirts when Peel was after him.

In March, 1854, I was made a Mason in the Weston lodge and took the first three degrees. I have seen something of masonic lodges since that time, but have never seen a finer set of men or brighter Masons than that lodge contained. "Old Jimmy" Miller was the secretary and "father" of the lodge, and Perry Wallingford conferred the degrees in a manner that the "novice" could never forget. One night every week, when it was convenient for me to be absent, I spent in Weston and attended the lodge. I asked the captain's permission to ride over to Weston in the evening and back in the morning, and it was cheerfully given.

And now the time was approaching for the annual campaign. Headquarters, staff and band and "B" and "D" Troops were ordered to New Mexico and would leave about the first of July. Brydon reënlisted and was transferred to the band. He was getting old, and settled down to the fact that the best way to provide for old age was to go to the Soldiers' Home in Washington. The government had just commenced to collect 12½ cents per month from each soldier for its support. While regretting to part with him I encouraged him to take the step, for, old and out of the army, he would be helpless. He was the only man who had shared my tent for the last two years, except on a few emergencies, and had been my constant friend since we joined the troop.

Towards the last of May "D" Troop, Captain John Adams, came from Fort Snelling by steamboat and camped on the "blue grass," a little southwest of where is now "Merritt" Lake, and the month of June was a busy one for every one preparing for a move that admitted of no return for probably some years.

[*To be Continued.*]



THE JEFFERSON GUARD AT THE LOUISIANA PURCHASE EXPOSITION.

IN the personnel of the officers' staff of the Jefferson Guard, the military force of the St. Louis World's Fair, corresponding to the Columbian Guard at Chicago in 1893, the cavalry regiments of the United States army are well represented. As the Guard is purely an infantry body, this circumstance, although entirely accidental, is an additional proof of the fact that the American cavalry is susceptible of being used in any place.

From an organization of one officer and six men, the Guard has grown to its present strength of approximately six hundred men, with a staff of fifteen officers, the latter all members of the United States army.

Major, now Lieutenant Colonel, E. A. Godwin, of the Ninth Cavalry, was the first commandant of the Jefferson Guard, having been detailed by the War Department for that duty, and having taken charge in February, 1902. In July of the same year, six men were actually placed on duty at the Fair Grounds, forming the nucleus of the present organization. This force was increased, from time to time, as the necessities of the service demanded.

The first considerable increase of strength was at the time of the dedication of the Louisiana Purchase Exposition grounds and buildings, April 30, May 1 and 2, 1903. At this time the Guard consisted of one hundred men and four officers, the latter being Lieutenant Colonel E. A. Godwin, Ninth Cavalry, commandant; Lieutenants Heintzelman, Sixth Cavalry; Shields, Twelfth Infantry, and Clark, Fifth Infantry.

Major A. G. Hammond, Third Cavalry, was detailed for duty, as assistant commandant, and reported on August 18,

1902. In February, 1904, Colonel Godwin was, at his own request, relieved as commandant, and Lieutenant Colonel H. P. Kingsbury, Eighth Cavalry, was detailed to succeed him, as commandant of the Guard. Lieutenant Heintzelman was relieved, at his own request, in September, 1903, and Lieutenant Shields, in January, 1904, to enable him to proceed with his regiment, the Twelfth Infantry, to the Philippine Islands.

With the approach of the opening day of the Exposition, steps were taken to increase the Guard, with the result that, on that day, April 30th, the strength of the Guard was 320 men.

The general affairs of the Guard, in so far as they relate to the financial and other strictly non-military details, are in the hands of the Committee on Police, a standing committee of the Exposition Company, whose membership is as follows: Harrison I. Drummond, chairman; C. H. Turner, vice-chairman; J. J. Wertheimer, W. C. Steigers and Colonel J. G. Butler. Mr. E. I. Prickett, who was connected with the organization before the appointment of a commandant, or the recruiting of the men, is secretary of the above committee.

The following is the roster of the officers now on duty with the Guard:

Lieutenant Colonel H. P. Kingsbury, Eighth Cavalry, commandant.

Major A. G. Hammond, Third Cavalry, assistant commandant.

Captain Arthur Thayer, Third Cavalry, assistant commandant.

Captain W. E. Welsh, Thirtieth Infantry.

Captain George Vidmer, Eleventh Cavalry.

Captain C. H. Conrad, jr., Third Cavalry.

Captain G. H. Shelton, Eleventh Infantry.

Captain R. E. Ingram, Tenth Infantry.

Captain Campbell King, First Infantry.

First Lieutenant C. B. Clark, Fifth Infantry.

First Lieutenant G. Arthur Hadsell, Nineteenth Infantry.

First Lieutenant A. A. Parker, Twenty-fourth Infantry.



THE JEFFERSON GUARD.

First Lieutenant W. O. Reed, Sixth Cavalry.

First Lieutenant J. M. Loud, Twenty-eighth Infantry.

First Lieutenant A. O. Seaman, Fifteenth Infantry.

The commandant of the Guard has full power, subject to the president of the Exposition Company, over the organization, government, discipline and appointment to the Guard, the custody and control of all property, equipments and records belonging to the Guard.

The staff consists, besides the commandant, of two assistant commandants, an adjutant and a quartermaster. The first has already been named. The assistant commandants are Major Hammond and Captain Thayer. The adjutant is Captain C. H. Conrad, jr., Third Cavalry, and the quartermaster is First Lieutenant C. B. Clark, Fifth Infantry. Besides these officers, the administrative officers of the Guard consist of a sergeant major and a quartermaster sergeant, with the requisite clerical force.

The force is at present divided into five companies, each with its captain and lieutenant, its first sergeant and sergeants in the proportion of one to every twenty privates. As the Guard is increased, should necessity arise, new companies will be formed.

A large per cent. of the men on the Guard are ex-soldiers of the regular army, and this fact is evident in the bearing and deportment of the men. The qualifications necessary to be possessed by a candidate for a place on this force are, that he must be at the time of his appointment a citizen of the United States, of good moral character, temperate habits, and in perfect physical condition, able to read and write the English language, between the ages of twenty-one and forty years, at least five feet eight inches in height, and between 145 and 180 pounds in weight. Every applicant is required to present letters from at least two reputable citizens, testifying to his sobriety and good character. He is required to undergo a physical examination, and if accepted must be vaccinated. If the applicant has been in the military service he is required to present his discharge certificate.

There is no fixed term of service for the men. All the Guards are required to remain constantly on the grounds,

unless absent by permission. The pay of the men is \$50.00 per month, and they board themselves. If a Guard remains in the service for six months after receiving his uniform, the money deducted to pay for the same is credited to him, and becomes available to buy a new one. Otherwise after it has been turned in, he is charged a reasonable amount for the time that he has used it. Quarters, bedding, light, heat and water are furnished by the Exposition Company.

While the organization is a semi military one, there is a strictly military tone in the Guard, and the traditions of the army and the customs of the service are preserved whenever possible. All those needing it are given as much military drill as time admits. All are thoroughly drilled in the handling and care of fire apparatus, such as Babcock extinguishers, hand grenades, etc., and the making of couplings and attaching hose to hydrants, as a large part of their duty, in addition to the preservation of peace and order on the Fair site, consists in the prevention of fire. Pursuant to this idea, they are required, immediately on being assigned a post, to familiarize themselves with the location of the fire alarm boxes, water plugs, chemical extinguishers and hose, not only in the buildings in which they are on duty, but also in and about adjacent buildings, and everywhere on the grounds.

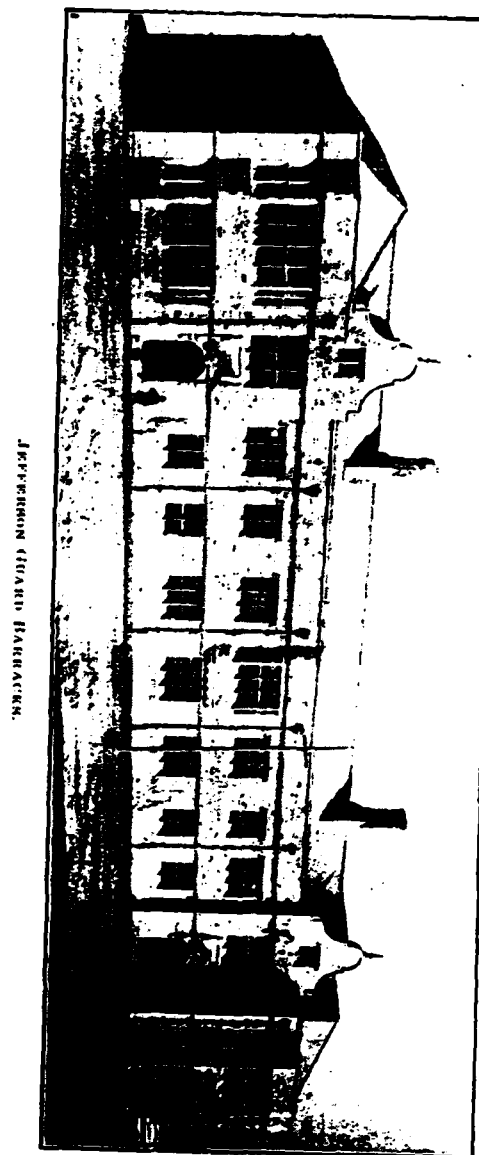
Every member of the Guard is expected to perform his duty in a quiet and orderly manner, courtesy and civility being especially emphasized. They are enjoined to treat all visitors with uniform respect and courtesy, answering all questions as far as possible, but refraining from entering into any extended conversation, or leaving their posts.

In case of accident or any unusual occurrence the Guard first learning of it is required to make an immediate investigation of the matter, obtaining the names and addresses of all the parties concerned, for a full report of the matter, without delay.

The uniform adopted for the Guard is one which is calculated to give them a neat and soldierly appearance. It is of light blue, with the colors of the Louisiana Purchase Exposition. The cap is identical in shape with the present army standard. It has a flat gold band around the crown,

and two rows of one-eighth inch soutache braid, in the red, white, blue and yellow colors of the World's Fair, seven-eighths of an inch apart. The words "Jefferson Guard" are embroidered in front, on blue cloth, between the two rows of soutache. The coat is of sixteen-ounce material, quarter lined, with one inside breast pocket. The collar is one and one-half inches high, of red cloth, braided all around with three rows of soutache, in colors mentioned above, the rows being nicely separated to reduce the width of the red stripe in the center to a little over half an inch. The coat has shoulder straps, with the monogram "J. G." embroidered in red upon it. The sleeves have two rows of white, blue and yellow soutache, running straight around at the cuffs, with a one-quarter inch red stripe in the center. There are three small buttons on each sleeve, and five large ones down the front of the coat. All buttons are of brass and bear the monogram "J. G." The coat is piped with red and has a slit at the side to accommodate the hilt of the short sword, which the Guard wears while on duty, the belt being worn beneath the coat. The trousers are of the same color as the coat, and have stripes down the sides exactly similar to those worn on the sleeve. The Guard is also provided with a khaki uniform, similar in general shape and design, to that worn by enlisted men in the regular army. This is worn at night to enable them to make one blue uniform last for the entire season. The sword worn by the Guard is a short one, similar to that worn by Continental gens d'armes. It is carried in a polished black leather scabbard, brass tipped, and the cross-hilt bears the letters "J. G." A whistle, attached to a nickel chain, is also worn by the Guard, and used to summon assistance, when necessary.

The members of the Guard are sworn in as private watchmen, under the laws of the State of Missouri, to enable them to make the necessary legal arrests of all offenders against the law, or the regulations of the Exposition Company.



JEFFERSON GUARD BARRACKS.

CAMPAIGN OF PLEVNA—TURKO-RUSSIAN WAR 1877-1878.

THE curriculum of the January to June course of the General Service and Staff College at Fort Leavenworth, Kansas, included a series of lectures on the subject of strategy. These lectures, the subjects of which were selected by Colonel A. L. Wagner, Adjutant General's Department, were intended to illustrate some of the principles of strategy. The course was an elementary one, and for lack of time had to be so. The method pursued in this elementary study was one that gave good results, and it is now the tendency to make the next year's course in other subjects taught at the College similar to the strategy course.

For the lectures, which were delivered by the instructors, the entire student class (ninety-one officers) were assembled in the lecture room. A printed pamphlet containing a synopsis of the campaign was issued to each student prior to the lecture. A reading of the pamphlet assured a certain familiarity with the campaign, and made the lecture more interesting. The lecture, which lasted about one hour, went over the entire campaign, laying especial stress on the principle or principles of strategy to be illustrated by it.

After the lecture the different sections into which the student class is divided assembled for recitations on this campaign. Besides the printed pamphlet and the map, each student was given a set of questions on the campaign, answers to these being found in the pamphlet. During the recitations or quizzes these questions were propounded to the students and their answers corrected. At the end of the course a written examination was held to determine the relative proficiency of the students in these subjects. Three questions were selected from each of the ten campaigns in the course.

The following short synopsis of the campaign of Plevna

gives an idea of the pamphlets issued. For some of the campaigns this matter was taken from Hamley's *Operations of War*, but a few campaigns in the course are not treated in Hamley, and the synopsis in those cases were written by the instructors.

The campaign of Plevna is here published to show the character of the work done. It was also selected on account of the interest attaching to it by reason of the present war in which Russia is engaged.

The synopsis was written by Major W. W. Wotherspoon, Sixth Infantry, instructor in the Department of Tactics, General Service and Staff College.

The material for this lecture is taken largely from General Francis V. Greene's "*Russian Campaign in Turkey, 1877-78*," a standard work on that campaign.

"On the 24th of April, 1877, the Emperor of Russia promulgated at Kishineff his manifesto, reciting his warm interest in the welfare of the oppressed Christian races in Turkey and his desire to ameliorate their condition, which desire was shared by the whole of the Russian people, and stating that for two years—ever since the disturbances in Bosnia—he had constantly striven, in concert with the other European powers, by peaceful negotiations, to induce the Porte to introduce those reforms to which it was solemnly bound by previous engagements, and by which alone the Christians in Turkey could be protected from local exaction and extortion; that these negotiations had all failed through the obstinacy of the Porte. And now all peaceful methods being exhausted, the moment had arrived for him to act independently and impose his will on the Turks by force, and therefore the order had been given to his army to cross the Turkish frontier."

The "Army of the South," under the command of the Grand Duke Nicholas, which was ordered to cross the frontier on April 24th, consisted of four corps stationed near Kishineff, and two rifle brigades. A few days later three more corps, the Fourth, Thirteenth and Fourteenth, which had been mobilized from 400 to 800 miles back from the frontier, were

placed under his orders, and moved forward by rail to the frontier. These seven corps and two rifle brigades, amounting in round numbers to 200,000 men and 800 guns, were deemed a sufficiently strong force with which to undertake the invasion of Turkey, notwithstanding the probability that the usual casualties from sickness, detachments, etc., would reduce it by ten per cent., or to 180,000 men, by the time it could cross the Danube River.

The exact number of troops which Turkey had under arms in Europe at the outbreak of the war cannot be stated. In round numbers she had 250,000 men and 450 guns, all regulars, and stationed as follows:

In her Western European provinces	35,000
On the Upper Danube at Widdin	10,000
In the fortresses Rustchuck, Silistria, Varna, Shumla	50,000
Detachments at minor points along the Danube	15,000
South of the Balkan Mountains at Sophia, Philippopolis, Adrianople and Constantinople	100,000
Total	250,000

Of these, 165,000 were immediately available for operations in Bulgaria, that is, that province of Turkey lying between the River Danube and the Balkan Mountains, where the first encounters must take place. By drawing in detachments and by recruiting, Turkey managed to maintain her strength in the theatre of war until the fall of Plevna at about 250,000 men.

The discrepancy in the matter of guns, 800 Russians to 450 Turkish, was made up for in a degree by the superiority of the Turkish over the Russian; the former had Krupp steel breech-loaders against the inferior bronze guns of the Russians. The Turks also had an advantage in that the small arms of their army were superior to those of the Russians.

THEATRE OF OPERATIONS.

The theatre of war, in which military operations were to be undertaken, lay between the Russian boundary on the north, the Sea of Marmora on the south, the Black Sea on the east, and the spurs of the Carpathian and Balkan Mountains on the east, where the fortress of Widden stands at the

bend of the Danube. So much of this theatre of war as lies north of the River Danube and south of an east and west line through Philippopolis, can be dismissed with a few words. Roumania, which lies between the Russian boundary and the Danube was friendly to Russia; its territory slopes gently from the Carpathian Mountains southward to the banks of the Danube, where they are as a rule low and flat. No fighting took place in this area.

From Philippopolis, south, runs the valley of the Maritza River, leading by Hermanli and Adrianople to Constantinople, bounded on the east by a range of hills and the Black Sea, and on the west by a range of mountains; as the war in this area was subsequent to the fall of Plevna, we may omit a more minute detail of it, after noting the railroads which were used to bring supplies and reinforcements to the Turks.

Confining the description then to the area lying between these two zones it is noted that the Danube River bounds it on the north; this river is deep and swift, cut up into many channels by islands, and no where passable except by bridges or ferries. The bridges were at Widdin, Nikopolis, Sistova, Rustchuck, Silistria and Galatz. From these places fair roads ran southwards to the passes in the Balkan Mountains, and were connected by roads running east and west. The southern bank of the Danube is high and steep from the spurs of the Balkan Mountains which run down to it, thus affording strong positions facing the river. Between the Danube and the Balkan Mountains the country is rolling, but under cultivation for the most part.

The Balkan Mountains cross the theatre from east to west in the southern part, turning north toward Widdin near Sophia. These mountains are high and rugged, their crests being from 3,500 to 5,000 feet above sea level, but are passable at certain points by good wagon roads, and at others by trails. The principal passes are: Sophia-Orkani towards Plevna; Shipka Pass from Eski-Zagra by Kazalink to Gabrova and Tirnova; Yamboli-Kazan to Osman Bazar and Aidos to Shumla. These passes reach the heads of valleys in which certain rivers rising in the Balkans flow

north into the Danube as follows: The pass from Sophia, to the valleys of the Isker and Vid, the Shipka Pass, to the valley of the Yantra; the pass from Yamboli by Kazan, to the valley of the Lom; the pass from Aidos to Shumla leads to the railroad connecting Varna on the Black Sea with Rustchuck. These are the principal passes through the Balkans; others more difficult lie between. Railroad communications are shown on the map. Russia received her supplies through Bucharist, Turkey from Constantinople by Yamboli, Hermanli and Philippopolis, and by sea to Varna, and thence by rail to Shumla and Rustchuck.

The theatre represents a great basin bounded on the north by the Danube, behind which Russia could prepare for her advance, and on the south by a chain of rugged and difficult mountains, in the passes of which the Turks might bar the way to the south and their capital, Constantinople.

RUSSIAN PLAN OF CAMPAIGN.

Had Russia controlled the Black Sea, the natural plan of campaign would have been to advance by the way of Galatz, near the mouth of the Danube, Galatz being the terminus of the railroad from the north, then to march its army near the coast, using the seaports as bases of supply, capturing the Turkish fortress at Varna, the only one on the coast, and masking the other fortresses she could have crossed the Balkans where the passes were lowest and thus, basing herself on the Black Sea, have reached Adrianople. Such a course was not, however, possible, as Turkey controlled the sea, and it would have been impossible to have protected her long line of communications with the Turks holding the sea on the east, and a line of fortresses on the west of the line.

The plan therefore adopted was to seize the railroad bridge at Galatz, thus securing the line of railroad, to cross a corps at that point to protect their rear against an attack from the Dobrudja, and to march the bulk of their army through Roumania and across the Danube between Nikopolis and Rustchuck, then to post a strong force along the

line of the River Lom to protect that flank from operations from the east, another strong force along the line of the River Vid, or Esker, to act against the enemy at Widdin, and the two flanks being thus protected, to march south between these two walls towards Adrianople across the central passes of the Balkans.

Had the Russians opened the campaign with 375,000 men, the number found necessary before the close of the war, instead of with 200,000, this plan might have been carried out, but with the insufficient force at hand, having crossed the Danube, posted its two flanking forces and seized a pass across the Balkans, there were no troops left to send south of that mountain chain against Adrianople, and by the time sufficient force had been obtained affairs had taken a different turn.

Greene divides the campaign into three stages:

1st. Ten weeks, from April 24th to July 3d, occupied by the concentration of the army in Roumania, the passage of the Danube, and the establishment of the army on the south bank.

2d. Twenty-three weeks, July 4th to December 10th, the operations in Bulgaria.

3d. Twelve weeks, December 11th to March 3d, the passage of the Balkans and march on Constantinople.

The campaign of Plevna belongs in the second period, its position on the flank of the Russian advance was the cause of the long delay of twenty-three weeks, which comprises that period, and it was during that period that the events took place which are under consideration.

The first period of the war, from April 24th to July 3d, was occupied as stated by the passage of the army through Roumania, and its crossing the Danube. This was effected by marching the troops over the excellent roads and leaving the railroads free to transport the guns and munitions of war. On the 24th of May, one month after passing the frontier of Roumania, the army was concentrated opposite that portion of the Danube selected for the crossing, the bulk of it, two and a half corps near Bucharist, with half a corps on its right flank near Slatina, and a strong cavalry force with infantry

supports along the river from Nikopolis to Silistria. The date of passage had been set for June 6th, but a heavy rise of the river and delays in the arrival of bridge material, caused a postponement until the last days of June and first few days of July. The crossing of the Danube was effected with but slight opposition, notwithstanding the advantageous positions of the Turkish army on its south bank, the advance guard under Gourko July 3d, the Thirteenth Corps on the 3d and 4th, the Twelfth, Ninth, Eleventh and Fourth Corps from July 5th to 20th. The Thirteenth Corps had been pushed across the river in advance to hold the southern banks, and was in position during the early part of the above movement.

In accordance with the general plan previously explained, Gourko with the advance guard was to push forward rapidly to the Balkans by the main road passing through Tirnova. the Eighth Corps was to follow the same road, the Thirteenth Corps followed by the Twelfth was to take the line of the River Yantra, the Ninth Corps was to attack Nikopolis, and the line of the Vid on the right, and the Eleventh and Fourth Corps were to be held in reserve.

On the 5th of July the Russians captured the town of Beila on the Yantra, on the 7th Gourko captured the town of Tirnova. The possession of these two towns practically secured the line of the Yantra, and the Twelfth and Thirteenth Corps, combined into the Russian left wing, gradually moved forward to the River Lom, thus carrying out the original plan on the Russian left.

The force under General Gourko, acting in the center, consisted of 8,000 infantry, 4,000 cavalry and thirty-two guns. Following out the general plan, he was to push south and open a pass through the Balkans. After the capture of Tirnova July 7th, four days were spent by the general gathering information about the enemy and the mountain passes. He learned that there were no troops in any of the passes except the main one at Shipka, which was held by about 3,000 Turks with a few guns and a small force of irregular cavalry. Upon the information gathered, Gourko determined to leave all his baggage at Tirnova, to march his force by a blind

trail over the mountains between the Elena and Travana Passes, to turn to the west on issuing from the mountains and to attack Kazanlyk and Shipka Pass from the south. He planned this attack to take place on the 17th, on which date part of the Eighth Corps, marching south from Tirnova, was to attack the pass from the north. On the night of the 12th Gourko was eighteen miles south of Tirnova; on the 13th he crossed the divide, and at 2 A. M. of the 14th surprised the Turkish garrison of 300 at Hainkioi; on the 15th he rested at Hainkioi. On July 16th Gourko left Hainkioi and began his march towards Shipka, intending to reach Kazanlyk that afternoon and to attack Shipka the next morning, according to the plan agreed upon. The Turks were, however, found ten miles in front of Kazanlyk. They were not driven from their position until so late that Gourko was compelled to camp. On the morning of the 17th Gourko pushed forward again, met the Turks five miles out of Kazanlyk, but did not capture the town until noon. In this way it happened that he could not make the attack on Shipka on the 17th. The attack was, however, made from the north. This attack met with but partial success. On the 18th, Gourko planned a simultaneous attack from the north and south, but his note failing to reach the northern force, he attacked alone and failed. On the morning of the 19th both detachments prepared to renew the attack, but the Turks had evacuated their position, and on that date the pass was in the hands of the Russians.

Thus by the 19th of July two parts of the Russian plan had been successfully carried through. Their left was securely guarded by the Twelfth and Thirteenth Corps, along the line of the Lom, and a pass over the Balkans opposite their center had been secured.

Before detailing the movements of the Russians' right wing, the movements of the Turks must be referred to.

The passage of the Danube by the Russian army, and the appearance of General Gourko south of the Shipka Pass, produced the most profound effect upon the Turks; intense alarm prevailed in Adrianople and all the territory south of the Balkans. Every effort was made to get together an

army to oppose the Russian march on Adrianople and by great exertions the Turks, by the last week of July, had gathered an army of 50,000 men at the junction of the railroads, near Hermanli (Tirnova). By July 29th, this army, which was commanded by Suliman Pasha, was moving north upon Shipka by way of Yeni Zagra, where it was met by Gourko, and by him delayed for a few days by very skillful movements. By the 5th of August, Suliman had moved his army up to Yeni-Zagra, and Gourko, owing to events north of the Balkans, which prevented his reinforcement, had retired into the Pass of Shipka.

On the Russian left, facing their corps along the Lom was Mehemet Ali with 65,000 men. This force and the garrisons of Rustchuck and Varna held the Russians in check on the east. On the Turkish left the army of Osman Pasha, from 40,000 to 50,000, started its march eastward from Wididin towards Plevna during the latter part of June. Nikopolis was already occupied by the Turks with a garrison of from 10,000 to 12,000 men intrenched in its neighborhood.

Turning now to the movements of the Russian right wing, which was charged in the general plan already described with the duty of protecting the right flank of the advance by taking up a position on the Vid or Esken, the first task was its capture of Nikopolis, and the dispersion of the Turkish force in its vicinity. This task fell to the Ninth Corps, under General Krudener, which had crossed the Danube on July 10th. On July 15th the Turkish position was occupied, and on the 16th the garrison surrendered. Meanwhile, the army of Osman Pasha was advancing on Plevna. It was first heard of on the 17th, but the Russians seemed to have no idea of the strength of the force marching on their right flank. On July 20th Krudener attacked the Turkish advance at Plevna with a small part of his force, 6,500 men, and suffered a severe defeat, losing 2,771 men, and nearly two-thirds of the officers. Not yet appreciating the force against them, the Russians on July 30th, made a most determined assault upon Plevna, which was at that date occupied by Osman Pasha's army of 40,000 men, strongly intrenched. The Russian force of 30,000 men attacked in

two columns, not in supporting distance of each other, and was severely defeated with a loss of 169 officers and 7,136 men. The dead were left on the field, and Krudener retired with his corps about ten miles to the vicinity of Porodim. Osman Pasha did not follow up his success, but contented himself with strengthening his lines around Plevna and gathering reinforcements from the south.

The decisive defeat of the Russians at Plevna and the appearance of Suliman Pasha in front of Gourko at Yeni-Zagra with 50,000 men brought the Russian advance to a standstill.

The positions of the opposing armies on this date were as follows:

The Russians occupied a figure nearly elliptical in shape and extending from Nikopolis through Porodim in front of Plevna, Selvi, Gabrova, Shipka, Elena, Cesarevo, Katselevo and the line of the Lom to the Danube near Rustchuck. From Sistova to Shipka Pass the distance by road is about eighty miles; from Porodim to Katselevo the distance is about ninety miles. The six Russian corps occupying this space had lost in killed and wounded about 15,000 men. Their total strength July 30th was probably about 120,000 infantry, 12,000 cavalry and 648 guns.

The Turks were on the exterior of this ellipse and occupied in force three points: Plevna with 50,000 men under Osman Pasha; Yeni-Zagra with 40,000 men under Suliman Pasha, and Rasgrad with 65,000 men under Mehemet Ali. They also had strong detachments at Lovtcha, south of Plevna, and Osman Bazar, south of Rasgrad, as well as in the fortresses Rustchuck, Shumla and Varna. Their total force was about 195,000 men.

All idea of carrying out the original plan of campaign by the Russians had naturally to be abandoned. There was nothing to be done but to leave the troops on the defensive, and quietly await reinforcements. The corps on the line of the Lom and those on the line of the Vid each had an enemy numerically superior in its front, leaving nothing with which to cross the Balkans, except the Eighth Corps which had in its front Suliman Pasha's army of 40,000 men.

The great mistake of starting the campaign with too small a force now became apparent, and Russia took steps to meet the situation as follows: On August 3d the Emperor directed the mobilization of the Guard, the Grenadiers, and two divisions of the line; two other divisions of the line had been previously mobilized and the first ban of the militia had been called out. The effect of these measures was to call out 120,000 men for service at the front, and 230,000 more to replace losses and do ordinary duty: these troops arrived on the Danube as follows: Two divisions in August, the Guard and one division in September, and the Grenadiers and one division in October. But as only a small part of this force could be expected during the early weeks of August, the Emperor appealed to the Prince of Roumania to put his army of 32,000 infantry, 5,000 cavalry, and eighty-four guns in the field. This army had been mobilized in May, and on receipt of the appeal from the Emperor it was promptly ordered to cross the Danube.

While these measures were being taken to strengthen the Russian army it was ordered to restrict itself to the defensive, holding the positions it then occupied.

This was the time when the Turks should have taken the offensive and by rapid concentration on their right have struck a blow at the Russian line of communications. Owing to divided councils no concerted action took place. Sulliman Pasha began an attack upon Shipka Pass in his front August 21st, and kept it up for nearly four months, without other results than great loss to his army. Osman Pasha on August 31st made a weak attempt from Plevna, which resulted in nothing. Mehemet Ali attacked the Russian left wing on the Lom August 30th and drove it back to the Yantra, but in a few days retired to his old position, and the Russians resumed their position on the Lom.

Towards the end of August the Russian right wing had been reinforced by two divisions and the Roumanian army, bringing the total strength of that wing to about 105,000 men. The greater part of this force was on the north and east of Plevna, the remainder between Selvi and Lovtcha. On September 3d the Russians with 20,000 men attacked the

Turkish force of 15,000 men at Lovtcha, defeating it and cutting it to pieces. From this date the Russians held Lovtcha, and from thence extended their lines towards the Esker in the attempt to cut Osman Pasha from supplies and reinforcements which were arriving from Sophia and Widdin. On September 7th the Russians opened the great artillery attack upon Plevna with 442 guns, which continued until after the 15th. On September 11th was made the great assault upon the Turkish redouts around Plevna which though successful in part must be accounted a failure. It was the last great attempt to capture the town by force, and from that date the Russians waited for the turning movement, which was to shut the Turks off from supplies from the south and west, by depriving their army in Plevna, which had by now been reinforced to 55,000 men, of its communications with Sophia and Widdin.

The investment of Plevna did not become effective until General Gourko assumed command of the corps of investment on the west bank of the Vid during October. The Turks held four strongly fortified positions, Dolni-Dubnik, Gorni-Dubnik, Telis and Radomirtza along the Sophia Road protecting their line of communication. To General Gourko was assigned the task of capturing these positions and closing the Sophia Road. On October 24th he assaulted the works at Gorni-Dubnik and took them. After two assaults Telis surrendered October 28th. By November 1st he was ready to attack Dolni-Dubnik, but without awaiting the attack the Turks abandoned their works and withdrew. By November 12th all of these fortified positions had been taken, the investment of Plevna was complete and General Gourko free to operate towards the south and west.

After the close investment of Plevna but little fighting took place between the two armies in and around that place. Meanwhile Osman's army was running short of provisions. On November 13th he was summoned to surrender but declined. On December 10th he attempted to cut through the Russian lines and escape, but failing in his effort, with a loss of 6,000 men killed and wounded, surrendered his entire

army, 45,000 men, seventy-seven guns, and enormous quantities of ammunition.

The fall of Plevna closed the second stage of the Russian campaign. For twenty-three weeks Osman Pasha had held the Russians back from the advance south of the Balkans, had caused them to call out an immense increase of force over that with which they had started the campaign, and had caused them the enormous loss of nearly 40,000 men in killed and wounded, thus illustrating the manner in which the advance of an army can be checked by the presence of a hostile force intrenched on the flank of the line of march.





EXTRACTS FROM ENGLISH ARMY REGULATIONS PERTAINING TO THE CAVALRY.

THE First King's Dragoon Guards have upon their service roll the following: "Blenheim," "Ramillies," "Oudenarde," "Malplaquet," "Dettingen," "Waterloo," "Sevastopol," "Taku Forts," "Pekin," "South Africa, 1879." Each regiment of the British service has, what are known as the regimental standing orders, and the following extracts are taken from the standing orders of this regiment:

Officers Commanding Squadrons.

10. As regards the distribution of duties, the general principle of training an understudy for every position must underlie all arrangements that are made.

Officers in General.

7. When an officer obtains a leave for a week or more he will leave the key of his quarters with the quartermaster, and inform him how many chargers he is leaving in barracks.

8. If his leave is over three days he will see that his servants, except those that are required to work in the stable, are sent back to their duty.

9. He will inform the adjutant of his address or any change of it.

10. All officers returning from leave are required to make themselves acquainted with the orders issued during their absence.

11. No officer is permitted to take his servant away with him on leave without permission of the commanding officer.

13. No officer on the sick list will appear in the mess, or leave his house or quarters unless recommended by the doctor to do so for exercise, nor will he appear at any entertainments or public places of amusement.

15. Punctuality to the dinner hour must be observed at mess, and all officers must appear as correctly dressed as if on dress parade.

20. No officer will ride a troop horse without permission of the commanding officer, when he must clearly state how often he wants to do so.

Noncommissioned Officers in General.

3. A noncommissioned officer will not exercise the power of placing an inferior under arrest, or confining a man in the guard room, when he is able to refer the case to an officer, but if he has done so at any time he will at once report the case.

10. They are forbidden to have money transactions with any inferior, and if they are found to be running into debt, they will seriously jeopardize their chances for promotion.

Regimental Sergeant Major.

10. He will receive a fee of two guineas from each young officer for instructing him in drill, and will be expected to give them such private instruction as they may require as long as it does not interfere with his other duties.

Regimental Quartermaster Sergeant.

6. He will visit daily the kitchens occupied by the servants of unmarried officers, and see that they are kept clean and tidy. He will also apportion passages and stairs of officers' quarters to servants, and see they are kept clean.

Sergeants.

1. Sergeants are required to know everything about their squads, both men and horses, and in the absence of

their troop leader to take command of the troop to which they belong.

2. They are expected to be thoroughly capable of leading a troop in the field, to have a good knowledge of "pace," and to understand clearly the duties of the commander of a patrol.

6. They are not to walk out with privates.

Privates.

10. If an officer passes a soldier at any time, the latter will, if he has any cap or head dress on, invariably come smartly to attention and salute. If he is one of a party, such party must be called to attention by the senior man present, who will himself salute.

11. All soldiers when walking about the streets of any town will invariably wear both gloves, and if not on duty under arms, will carry a whip or cane.

14. If any wish to improve themselves in or carry on the work of any trade they are acquainted with, they will apply to the quartermaster, who will give them any assistance in his power. All soldiers are reminded that in the service many facilities exist for learning trades, and that they will do well to avail themselves of the chance of thus ensuring their future in civil life.

Noncommissioned Officers on Canteen Duty.

The duties of the canteen corporal are as follows:

2. He will be posted by the regimental orderly sergeant half an hour after reveille, and will not leave the canteen except for necessary purposes, when he must leave the cashier in charge till first post sounds.

3. He will report himself at the guard room at watch setting.

4. He will allow no dispute or disturbances to take place in or about the canteen.

5. He will allow no man the worse for liquor to be served.

6. He will allow no noncommissioned officer to obtain drink inside the canteen except the corporals in their own room.

8. He will have in his possession a list of the defaulters and will not allow them into the canteen except between 7:15 P. M. and 8:15 P. M.

Sergeant of the Guard.

6. Prisoners are not to be allowed out of the guard room except under escort, and no excuse will be taken if they escape.

7. The use of books or papers is not permitted to prisoners, except in the case of men committed to trial who desire to prepare their defense.

Stable Guards.

2. The first relief will be posted at dismiss from midday stables and remain on duty until relieved at 4 P. M., when the second relief will take over the duty till relieved by the night sentry. This second relief will be posted again at reveille the following day and remain on duty till dismiss from midday stables.

3. The stable guard will be responsible for the safety of the horses, the custody of stable utensils, forage and saddlery, the cleanliness and ventilation of the stables.

Stable Duties.

1. There will be three regular stable hours daily, viz: morning, midday and evening. All officers will attend midday stables or after a parade.

2. (a) Morning stables will be at an hour regulated in orders according to the season. At the call for morning stables all noncommissioned officers and men, including employed men and servants, will fall in on the squadron parade and answer their names. The work will be distributed as follows: Cleaning the stables: water: grooming: feeding: cleaning steel work.

(b) Midday stables from 1 to 11 o'clock, or after parades as required; roll will not be called, but the squadron orderly sergeant will ascertain from sergeants of squads if their men are present.

3. When "stables" sounds all the noncommissioned offi-

cers and men will go straight to work, and officers will attend at 11:45 A. M., or when "officers' call" sounds.

4. On return from parades, drills, etc., if the orders are to leave saddles on, every man will unbridle his horse and rack up, then loosen girths, and cross stirrups, unfasten the breast plate. Then go to barrack rooms, change and return to stables when the "call" sounds.

5. The first five minutes must be spent in wiping over all steel work with an oil rag.

6. The following general rules for grooming will then be carried out:

1. Take off saddle and dry back.
2. Pick out feet.
3. Sponge eyes, nostrils and dock.
4. Groom legs and belly.
5. Groom body near side, front to rear, then off side.
6. Groom head.
7. Brush out main and tail.
8. Whisp with damp whisp.

No horse is groomed well unless it is groomed quickly.

7. Officers will remain at stables until it sounds "dismiss;" noncommissioned officers until the saddlery is put up.

8. No man is to commence cleaning his saddlery until his horse has been passed by the noncommissioned officer of the squad to which he belongs.

9. One officer must go round each squadron in the afternoon or evening to see that everything is finished.

10. The great object to be obtained is that the men should learn to clean their horses and saddles quickly, when they should be allowed to leave stables.

11. *Evening Stables.*—When the "call" sounds all noncommissioned officers and men, including employed men and servants, will fall in and hear the orders read. The men will then go to stables. The work will be distributed as follows: Water: grooming and whisping: bed down: feed.

Officers' Servants and Batmen.

1. Officers' servants and batmen will be carefully selected from men of good conduct and character.
2. No man will be taken as an officer's servant without permission of the commanding officer.

Officers' Chargers.

1. Every officer must be in possession of two thoroughly trained chargers.
2. The first must be undocked, and, if possible, the second also.

Orderly Officers' Report.

——— BARRACKS, the — day of ——— 190—.

SIR:

1. I have the honor to report that yesterday the I visited the cook house at reveille and tested the cocoa and found it was
2. I attended morning stables from o'clock to o'clock and there were men absent.
3. I ascertained that all the horses not excused were sent out to exercise or work, and I superintended all the watering other than at midday stables.
4. I went round all the stables and saw that all the horses received the morning feed.
5. I saw the meat issued at o'clock, the bread at o'clock, the groceries at o'clock, and sent these supplies away to the cook-houses under charge of the squadron orderly corporals. I saw the forage issued at and found it
6. I ascertained the orders for ventilation of stables from the veterinary officer, and issued them to squadrons at o'clock.
7. I attended midday stables at o'clock and found
8. I was present at guard-mounting at o'clock, and visited the guard room and cells and found
9. I turned out the guard at o'clock by day, and at o'clock by night.
10. I visited the sentries at o'clock by day, and at o'clock by night, and found them alert and acquainted with their orders, and the horses properly tied up and correct.

11. I visited the forge and shops at o'clock, and found the tradesmen at work.

12. I attended evening stables from o'clock to o'clock and found, and saw that all the horses were fed.

13. I went round the men's breakfasts at o'clock: the dinners at o'clock; the teas at o'clock and found

14. I saw all the horses on the long chain at 2 P. M., and all the stable buckets filled with water at dismiss from evening stables.

15. I received watch-setting reports, and ascertained that the lights were out at 10:15 P. M.

16. The canteen was reported cleared and closed at o'clock.

17. ✓ visited the cook-houses and ablution rooms and found

18. I visited the sick horse lines at o'clock and at o'clock, and found and the men were reported

19. I did not leave barracks during my tour of duty, except by order of the commanding officer.

..... Lieutenant.

Orderly Officer First King's Dragoon Guards.
To the Adjutant First King's Dragoon Guards.

Orderly Sergeant-Major's Report.

I certify that I visited the workshops during my period of duty and found them

I visited the stablemen frequently during my period of duty and found them posted according to order, and the stables clean.

I paraded the noncommissioned officers and men for school and found all

I visited the whole of the stables at P. M., and saw that the horses were properly secured.

I paraded the picquet at P. M.

I visited the guard and sentries at P. M., and found all correct.

I saw the canteen cleared and closed at P. M.

I saw the lights out in the corporals' mess at P. M.

I saw the lights out in the sergeants' mess at P. M.

I was present at stable guard-mounting at P. M.

I saw the water troughs cleaned out and filled after evening water.

I saw the dung put in the dung pits.

I was present at exercise.

..... 19 .

Regimental Orderly.

Regimental Orderly Sergeant's Report.

1. I collected the reports from the squadrons, and reported to the adjutant and regimental sergeant major at A. M.

2. I paraded the sick and took them to hospital at A. M.

3. I posted the corporal detail for canteen duty at A. M.

4. I visited the whole of the stable men at and found them on their posts, and the stables were The ventilation was as ordered.

5. I accompanied the orderly officer round the breakfasts, dinners and teas.

6. I read the orders to the night guard.

7. I saw the dung pits kept clean.

8. I showed the orders to the commanding officer, second-in-command, adjutant, quartermaster, and riding master.

9. I cleared and closed the canteen at P. M.

10. I took command of the guard from watch setting to reveille.

..... Sergeant.

Regimental Orderly Sergeant.

CAVALRY MACHINE GUNS.

BY LIEUTENANT CESBRUN-LEVAU.

TRANSLATED FROM THE "REVUE DE CAVALERIE"

BY CAPTAIN CHARLES CRAWFORD, TWENTIETH INFANTRY.

WHICH is the best machine gun? We shall not inflict upon our readers descriptions of ancient contrivances such as the blunderbusses or the bombards, nor the more modern machine guns with the revolving barrels, having the appearance of the Roman fasces, worked by hand and called by French or foreign names. At the present time we find in machine gun records two rivals which have the field to themselves—the Maxim and the Hotchkiss. Others, such as the Nordenfeldt, the Bergman, the Colt, etc., are not without great individual merit. However, we are forced to keep within some limits in this discussion, and will confine ourselves to the first two named.

Maxim and Hotchkiss are cosmopolitan gun makers. Their specialization, their patents, the excellence of their products and their display at the Exposition of 1900, caused several States to make them offers for the supply of their perfected arms, which were to be made under the supervision and to stand the test of their respective artillery officers. These houses have their representatives and their houses in the different capitals of the world.

The Hotchkiss is an automatic, single-barreled arm of standard rifle caliber, using therefore the ordinary cartridge, and not one of special make. To get an idea of it, imagine a barrel the length of the infantry gun barrel, under this a tube similar to the barrel but smaller, and like the wooden ramrods of old time guns. The latter tube closed in front and joined at the center to the main barrel by a short vertical tube; at the back end the small tube enters the breech mechanism, which is about the size of a cigar box. At the first shot the powder gas expands into the lower tube during the brief time the projectile is between the connecting tube and the

muzzle. In the lower tube is a piston which, forced back by the gas, presses a spring and puts in motion all the mechanism. The piston works at the rate of ten shots a second, quicker than the needle of a sewing machine. To continue the fire the only thing necessary is to feed it and press the trigger. The fire may also be delivered shot by shot. Take away the hand from the firing mechanism, and the trigger spring thrusts a shaft behind the piston which becomes fixed and the fire ceases. The movement just explained performs all operations necessary to the continuance of the fire: that is, discharge, ejection and loading.

The idea of the automatic arrangement is to use part of the energy of the powder to work the machine without shortening the range. This energy is utilized in moving a piston as steam works in a steam engine. This steam-of-powder machine differs entirely from other similar arms which are worked by the force of recoil. Recoil does not even exist in the automatic powder gas arms, for the propulsion backwards is taken up by the propulsion forward of the piston.

The arrangement of the Maxim machine gun is very different, in that the working of this arm has been, until very lately at least, governed by the principle of utilizing the recoil of the closed barrel. Only recently the manufacturers, realizing that it was impossible to be sure of the working of a contrivance which made use of the recoil, have constructed another machine which works by the action of the powder gas; still there are many points in which it differs from that of the Hotchkiss Company. Maxims are made with and without coolers. With the cooler arm the barrel is immersed in a jacket which is filled with water, and the enormous heat developed during the fire is taken up in the evaporation of this water. The artillery has demanded of these manufacturers a machine gun of the same type without a cooler, the water jacket being discarded for the reason that the steam produced by it can be seen at long ranges.

There seems, however, to be an advantage in keeping the cooler with which there may be fired 2,000 or 3,000 rounds without stopping. After 1,000 rounds continuous firing the

barrel is at white heat. Freezing of the water in the jacket during a winter campaign is no disadvantage, ice being rather desirable under the circumstances. In the tests made by our board of investigation, the Hotchkiss appears to be a superior arm to the Maxim, and in 1899 it was adopted by the Minister of War, General Gallifet, for the purpose, as stated over his signature, of "defending the Alps, and for the colonial service."

At first sight one is struck by the simplicity of the Hotchkiss gun. While its system is similar to that of the Maxim, it has a far less number of pieces. It is dismounted, and dismounted in a very short space of time, by hand and without tools. During experiments made lately at Cherbourg, for the purpose of making an official report on the gun, it was found that replacing a broken extractor after 1,200 shots had been fired continuously, and without inspecting, cleaning or greasing the apparatus, required only seventeen seconds.

It has great stability, due to the rigid tripod and the size and shape of the feet, thus avoiding a source of nervousness to the firer and utilizing all the ballistic power of the cartridge: therefore, at extreme distances the bullet is still deadly. As the sights permit fire to be used at ranges up to the limit of vision, it is no longer possible for a body of troops to maintain deep formations like those of route when they face cavalry or infantry armed with this valuable auxiliary. This precision is due to the rigidity of the barrel and mechanism which weighs fifty-three pounds, stability being added also by the weight of the mounting. The use of a field-glass, range finder, and of fire at different elevations, gives the exact range. The first twenty-four shots fired in quick succession, striking together, raises a little cloud of dust perfectly perceptible to the eye up to 1,300 yards. It would be the same upon firing at a line of the enemy when the men would be seen falling.

The pointing apparatus can be clamped and the dispersion of the shots is then over a very contracted space, but this space may be enlarged by an arrangement which oscillates the barrel laterally or vertically, or a motion may be

given it combining these two. Therefore, if the distance be not accurately known, the sheaf of fire may be dispersed so that part of the projectiles will strike the target. At short distances where the enemy is grouped in rapidly moving spots, the gun may be unclamped and aimed with the butt at the shoulder. The dispersion is thus tripled and results produced capable of annihilating in a few seconds an assaulting column, or even a cavalry charge. The heating of the barrel injures the fire when it exceeds a certain limit. To obviate this, the Hotchkiss has screwed on the gun radiating rings or flanges which have the same role as the studded projections or radiating leaves in automobile cylinders. These are the five disks or plates which appear on the barrel in illustrations of the arm. As to weights, compared with the Maxim, the Hotchkiss with tripod weighs ninety-two pounds and the Maxim one hundred and eighteen pounds.

While the latter gun looks like a small cannon with its water jacket, the former takes up little more room than an ordinary rifle, and can be carried in the hand or on the shoulder. The tripod, when folded, is no more cumbersome. The Hotchkiss is loaded from an arrangement that looks like the flute of Pan—a thin brass plate punched with holes through which the cartridges are thrust, twenty-four and thirty rounds in one plate, which is carried in a special case. There is also a woven belt several yards long, containing 250 to 300 cartridges, like the Circassian or the Boer shoulder belt. In the Cuban war these were found wet and distended by the moisture, but the great defect of this system is that it is difficult to disengage the long belt when it has been started through the mechanism, and there is a temptation, therefore, to exhaust the ribbon by firing it through to the end.

Where the metal loader of rigid brass is preferable is in that it permits better control of the fire, of which the gunner is perfect master.

It is recommended that the empty chargers be gathered up after firing and not left on the field, for they may be re-filled with loose cartridges with the aid of a special device for that purpose, and if need be by hand, and such loaded

chargers will be of great use if the original ones are exhausted.

WEIGHTS.

The horse of the light cavalry carries (estimating at minimum weights) 242 pounds; the horse of the dragoons, 264 pounds; of the cuirasseurs, 286 pounds.

LOAD OF THE MACHINE GUN PACK HORSE.

Gun Pack.

Packsaddle	42 pounds
Packsaddle frames	12 "
Gun	53 "
Tripod	20 "
Two filled ammunition cases	53 "
Box spare parts	12 "
	<hr/> 220 "

Ammunition Pack.

Packsaddle	42 pounds
Pack frames	12 "
Six filled cases	15 "
	<hr/> 220 "

Equilibrium of weights on sides of machine pack horse.

	Off Side.		Near Side.
Gun	53	Tripod	40
Arm Case	20 1/2	Arm Case	20 1/2
	<hr/> 73 1/2	Spare Parts	12
			<hr/> 72 1/2

The weight of the pack saddle is given with its padding. Besides this there are some straps and the mantas. The new Puteaux tripod weighs forty-six pounds. The Hotchkiss tripod weighing forty pounds, is less bulky, and seems to us better for our arm. The ammunition cases are very light, each one enclosing ten clips of twenty-four rounds each, so that we have on the two packs 480 plus 1440, or 1920 rounds.

We think it best to hold down the weights on these two horses and their oats can be carried by the other horses of the organization. The men serving with the gun carry revolvers instead of carbines, and this permits them to carry more on their horses.

DISPUTE BETWEEN WHEELS AND PACKS.

This, at the present time, is an old question. Each system has its own peculiar advantages and disadvantages. In the majority of countries the cavalry have given us their opinion on this point and seem to prefer transportation on wheels to that on pack saddles. Germans, Austrians, Belgians and Danish use wheels, while both wheels and packs are used in England, and Norway and Sweden have nothing but pack saddles. The discussion is rather tactical than technical, and will be spoken of later, but at present we will content ourselves with saying that we prefer the pack. Wheels carry more ammunition, but with the pack horse we can travel quicker and over more kinds of ground than with wheels.

SADDLERY.

As to horse equipment for the machine gun, we must have a simple, solid, light pattern, permitting the machine to follow us always across country at all gaits and over all obstacles. An adjustable pattern that will not injure the horse's back, and not like those mountain pack saddles, which are themselves veritable mountains, suitable only to a mule gait, and which cannot be used on a galloping horse. We must have, not a tall built, wobbling frame work, but an arrangement that is close fitting and tightly fastened near the body of the horse, the center of gravity being neither too high nor too low, giving full play to the horse's muscles and to his breathing movements; in short, a cavalry equipment more like a saddle to carry a man than like a pack saddle.

Our pack saddle was gotten up with suggestions taken from foreigners, especially the Swiss and the English. These saddles are not bulky and fit the shape of the horse closely, but are still defective in our eyes, in having the articles of the load suspended on hooks, which are fastened in the pad carried on the animal's back. The load, thus arranged, compresses the horse's sides, and on the march injures them by pounding, especially at the fast gaits. A stiff frame work instead of this limber one, which will protect the sides of the horse, is much to be preferred. Thanks to the army

contractors, Messrs. Hotchkiss & Gendron, we have been furnished with a pack saddle which has all the desirable qualities.

Gendron's patented pack has been used several years to carry arms of different kinds, and was exhibited at the exposition of 1900. This saddle has forks of tempered steel, and the joint at the top permits adjustment of their width to the size of the horse. Once adjusted they are absolutely rigid throughout their whole length, the frame work being able to support any load without compression of the sides, and without injury to the horse even in case of a fall. The load, that is, the machine, the tripod and the ammunition cases, do not touch the stuffed cushion which is next the horse. The whole weight of the load is made to rest on the strongest part of the back by means of two plates of thin flexible steel, slightly turned up at the ends and edges. The dimension of the gun, the tripod and of the cases are considered in the construction of the saddle as well as in the adjustment of the angle of the forks by means of screws. As to transport of reserve ammunition, it is the intention to have a regimental cart, a light two-wheeled vehicle like the English model, drawn by two horses tandem, and a division caisson like the artillery model, with four or six horses.

As to cost, a piece of artillery with its equipment costs, without horses, about \$6,000. The machine gun is cheaper, although the price is variable according to the kind of gun and the size of the order. A pack horse machine gun — the kind we will speak of hereafter — is worth, completely equipped, between \$1,000 and \$1,200. The minimum for a large order would be \$1,000. The gun mounted on wheels complete without its caisson, would be worth two-thirds more. They are costly enough, but the cost brings such an excess of fighting power and places us in such a state of superiority that the investment will yield good revenue in military success. The four or five good troop horses that represent the money value of one of these machines, are they equal in destructive power to one of these guns? France is certainly rich enough to issue machine guns to its cavalry. One to a regiment for

trial purposes would cost for all the cavalry of France \$100,000.

USE IN THE TRANSVAAL WAR.

It is interesting to see how these weapons behaved during the three years they were used in the Transvaal and what the opinion of the soldiers who accompanied them was as to their usefulness.

The following is from a report of an English officer who served in South Africa during the campaign of 1900, 1901 and 1902. Each regiment had one or two Maxims. The Hotchkiss, of which he speaks, was experimentally issued to a regiment of lancers. This gun, attached to a squadron, took part in all the operations and fights of this squadron from the 7th of May, 1900, to the 30th of October, 1901, and continued to serve throughout the war. Extracts from the reports are as follows:

"Several days ago an official report on the Hotchkiss machine gun was forwarded, as well as one on two Maxims we have with the regiment. Except two jams, which were fixed at once—due to dust and to pushing the clips into the machine with too much force—it has worked well. There has not been a single break and no part has been replaced. The gun was in more than twelve different engagements and has been transported on horseback a little more than seven months. The maximum number of shots fired at a single time was about 400. The heating of the barrel was negligible. Compared to the two Maxims we have had in the regiment the Hotchkiss has been much the more satisfactory, not only because of its working better, but because of its wearing better. The two Maxims have been put out of order for one reason or another. We had for some time in the brigade a Colt gun, but it was very difficult to make it work in a satisfactory way, and finally it was discarded."

Another English officer said:

The Maxim stopped sometimes, the Colt worked sometimes, but the Hotchkiss worked all the time. This war has clearly proved that the wheel mounting is not the one for the machine gun; it makes the gun too plain a target and is easily silenced by artillery fire or even by that of infantry.

The Hotchkiss tripod is a very practical one, and permits a frequent use of fire while lying prone."

Another report of later date is not less favorable to that arm:

"Thanks to the fact that the machine gun is carried on a pack saddle, it has accompanied the regiment wherever it went and over all terrains, which were sometimes so rough and difficult that the men were obliged to dismount and lead their horses. Wherever we could not find natural shelter for the gun it was placed prone on the ground, and it always gave satisfactory results. After daily comparison of the relative merits of the Maxim-Nordenföldt and the Hotchkiss, the latter arm seems to meet all the conditions of service that a machine gun must have to accompany cavalry."

"This gun took part in twenty-seven fights or skirmishes, and fired a total of 10,370 rounds of ammunition in them. The greatest number of shots fired without interruption was 960. Taking account of the character of this war we must note for our future organization of ammunition supply that during the days of hottest fighting the consumption of ammunition never reached 1,000 rounds. Ten thousand rounds were fired in six months. Whether any principle could be deduced from this which would be valuable to apply in a European war would be a question: still the expenditure of ammunition is not so great as one would generally suppose."

Statistics of late wars have taught us that breech-loading rifles are fired at the most at the rate of twenty rounds per day. Automatic arrangements it is true increase the consumption. The machine gun is a great eater, but we believe that it is less subject to stampedes than a line of men. With a picked, intelligent personnel, few in numbers, the machine gun officer is master of his command. The kind of feeders used facilitates adjustment and supervision.

The Hotchkiss, the work of which we have just reviewed, was the only one of its kind among the belligerent squadrons. All the other machine guns in the English army were Maxims. All the foreign armies except Norway and Sweden and Belgium have adopted the Maxim. Why, then, the Hotchkiss for our cavalry? The qualities of the two arms are almost the same. Firing 300 to 600 shots per minute,

the targets made by them cannot be distinguished apart; the shots have the same grouping vertically and laterally. But it is necessary to choose. The Maxim is a good arm, has been thoroughly tested, and is highly prized in Europe. We hardly need do more though than note the delicacy of the mechanism and bulkiness of the water-jacket. This jacket increases the weight of the machine and makes packing it much more difficult. The Hotchkiss is an excellent machine gun; its graceful lines, the simplicity and strength of its mechanism, its cooling radiator and its lightness make it a perfect type of an arm for its proposed service. It is a cavalry arm in every acceptation of the term.

The Hotchkiss has been for several years the machine gun for the French army—on land and sea, in the Alps, the Vosges and the colonies, where the officers who have handled it are partisans to its adoption and do not hesitate to declare it the best machine gun in existence at the present time.

SCHEME OF ORGANIZATION.

MATERIEL.—For each regiment, two machine guns, four pack saddles, one for each gun and one for its ammunition.

It may be thought by some that a better plan would be to have one gun to a squadron, but we must not ask too much at a time.

PERSONNEL.—To man a single gun is required:

1 Noncommissioned officer	1
2 Cannoneers	2
2 Troopers (pack horse leaders)	2
<hr/>	<hr/>
5	5

An officer, a captain or lieutenant, has charge of the two guns, the personnel, both men and horses, form a part of the designated platoon. The noncommissioned officer is the gunner, and should be a sergeant. The men, chosen for their aptitude and placed under the direct command of the corporal, are part of the same squad called if desirable the machine gun squad. They are called machine gun men, as others are called sappers, scouts, etc.

RECRUITMENT OF THE PERSONNEL.

It is certainly more difficult to find men who are telegraph operators and sappers understanding high explosives than to find men suitable for service with machine guns: the regimental resources should be sufficient. The men must specialize, that is certain, but the relative number of men is very small.

To-day mechanics, chaffeurs of automobiles, builders and other workers in metals are not rare. Any one will do who has natural mechanical ability. To transform these trained, intelligent, skillful men into troopers first and good marksmen afterward is nothing very difficult. Machine gun fire is rifle fire with the great advantage of firing from a support and being seated. As to the mechanism, the soldier with the average amount of intelligence can understand it.

POSITION OF THE GUN DETACHMENT.

In garrison it is not proper that it should turn out every time the regiment does, but when the captain who commands it wishes to take it out, or when the colonel decides to "bring the machine guns" where shall the detachment be stationed? It must be provided for beforehand. Shall it be kept without the field of maneuver of the squadron, wandering here, there and everywhere? We hear maledictions upon it: "Confound the pom-pom!" A blunder is made: "It was the pom-poms: they are always between our feet!" It should not be so. If, as we have said before, the machine gun is a part of the platoon, we must avoid these complaints, which are perfectly justified. The inconvenience of having the guns in the road is not the only thing to be considered. The gun should be like a revolver—always at hand and ready when its services are needed.

At the command, "Cease firing" it must rejoin the platoon at a swift gait. In the moment of action the sabers of the gun detachment are not too many, and the enemy could pounce upon the undefended guns, drive off the men and make away, if detachment operates alone. It is essential that the detachment be embodied with and bound to its proper unit. In column of route the detachment is on the

left or behind the platoon to which it is attached, formed in threes, the pack horse being given the space of two troopers. The noncommissioned officer is abreast of the last three, ready at a signal to disengage the gun from the column by the free side of the road. In line of battle the detachment is in single rank and forms the left of the second rank, covering the last eight troopers of the front rank. When the platoon is in single rank the detachment is on the left. At the charge all draw sabers, even those who are leading the pack horses. It might be that these leaders should have a whip instead of a saber, but we think that the pack horses which are well trained and led will follow without urging by the leaders, and that these leaders themselves will be more at their ease with a saber in their hand instead of a whip. Whether the charge is made in line or as foragers, and the leaders are with or without sabers, they should charge with their platoon. It is not the time for leaving them behind.

PASSING AND JUMPING OBSTACLES.

The detachment must be drilled to move over rough ground so as to accustom the horses to jump and to pass all kinds of obstacles with their leader. It would be well before putting the machine or ammunition on their backs to accustom the pack horses to the breast strap and the breeching, tightening it up by hand while traveling at a fast gait. When it comes to jumping, if we could avoid broken arms and runaway horses, even after being thoroughly drilled, it would be well for the noncommissioned officer or one of the cannoneers to go behind with an artillery whip to urge the lazy or stubborn when they need it.

IN BATTERY.

The machine gun does not do away with the old fighting on foot; but it simplifies it and reinforces it so much that the most of the time the troop commander can keep nearly everybody mounted and get the effect of sixty carbines with the little detachment of five men. The guns may be used in couples as the Swiss do, or singly, or they may be grouped together in batteries. With a single gun,

to "fight on foot" is executed as follows: Upon indication of the troop commander the machine gun officer brings his detachment to the place designated. There all dismount and each of the leaders takes four horses, the pack horses being on the side next to the gun and apart from the other three, to save time in repacking. While the officer uses a field-glass range-finder the two cannoneers quickly unbuckle and place on their shoulders, one the gun and the other the tripod. The noncommissioned officer takes charge of the case of ammunition and the box of accessories. In from one to two minutes, depending on the range of the enemy, the gun is mounted in the place chosen by the officer, and the noncommissioned officer, seated on the tripod leg seat with his eye at the rear sight, awaits the signal to fire.

During the firing the cannoneers feed the piece, the leaders prepare the pack saddle for loading and watch the approaches. There may be a special support, mounted or on foot, if necessary, but generally the entire mounted squadron remains near by behind some shelter, ready to finish with the saber the work of the fire. It is a squadron or squadrons fighting alone. Then too, the machine gun can continue its play all by itself while nine-tenths of the troop leaves it to make a turning movement.

We do not know how to insist enough on this point: that the machine gun is at the disposition of cavalry, and that neglecting it would be more than an error: it would be the renunciation and even the end of our arm. We return to this in the chapter on "Tactics," but the word support from now on means in short that it is better to shoot with a machine gun than to permit ourselves to be hypnotized into paralysis by the idea of conservatism.

In case of alarm, and you must run to save your gun and yourselves, dismount the machine in the twinkling of an eye, carry it off in two pieces across the saddle like a simple carbine. If you are pushed, throw it into the brush or in a pool even and come back for it at night or to-morrow—if you can.

The lightness of the gun and the mounting permits it to be carried about without the horse, over rocks, through woods or copses. Or it may be simply hooked on the horse,

moved to the desired place and taken down again. Fifty pounds of metal on a man's shoulder will make itself felt after some distance if the gait is too fast. An infantryman marches some miles with his equipment of more than fifty pounds, but it is because he is trained to that kind of work daily. If the gun is too heavy for one man to carry, it can easily be carried between two.

1. By what is packed on the horse.
2. By what is carried in the regimental caisson.
3. By what is carried in the division caisson.
4. In depots.

Machine guns have an appetite, and their rations, which must not be touched by carbines, must be made sure of because they are served only in the peculiar form of feeders. We hesitate to give to the machine another ammunition carrier, for that would mean a leader for the pack animal, two horses, and possibly another cannoneer, that is to say, two men and three horses more. This equipment would hinder troop movements, and it is essential that the detachment should be unperceived. Our squadron baggage wagons cannot receive the least excess of baggage: besides, they are too far away in the regimental train. We dreamed for a moment of confiding to the horse artillery the task of making provision for ammunition supply. But the place of artillery is with the larger bodies of troops. Regiments can be detached on special missions, and upon cantonment in the evening would find the resupply of ammunition sometimes impossible.

Each regiment then must have its own cart to provide for its immediate use. It would go along with the light ambulance, and thus not interfere with the regiment's movements. Any thing more or less would be a serious embarrassment. This two-wheeled regimental cart, with the horses tandem, would be attached to the regimental fighting train. One driver would be mounted on the leader and an artificer on the seat of the wagon. This vehicle is loaded with 10,000 rounds of ammunition in belts, packed in cases, and also carries tools and spare parts; (1,000 rounds weighs 100 pounds; each horse draws 660 pounds). The division

caisson will be modeled after the light artillery wagon, four wheeled, drawn by four horses in charge of a corporal, who is mounted on a fifth horse. The wagon carries 20,000 rounds in belts and cases, with spare parts and accessories. The complete system gives us:

For the regiment:	
Detachment packs, 2,000 rounds each	4,000
Regimental caisson	10,000
	14,000
For a division:	
12 Detachments of machine guns	24,000
1 Regimental caissons	10,000
1 Division caisson	20,000
	54,000

This is merely a plan of supply and has nothing definite about it. It seems to us more simple and less cumbersome than many foreign systems. However, we may have committed the error of estimating the ammunition supply at too small an amount, at least with the lesser units. We could remedy this, however, as follows:

1. By having two ammunition pack horses with each gun.
2. By giving the regiment the four-wheeled caisson instead of a two-wheeled cart.
3. By making the division caisson a six-horse vehicle carrying 30,000 instead of 20,000 rounds.

Then we would have:

For a regiment:	
With the two detachments	8,000
On regimental caisson	2,000
	10,000
For a division:	
12 Gun detachment packs	24,000
1 Regimental caissons	10,000
1 Division caisson	30,000
	64,000

With its 3,000 sabers, its 2,400 carbines, its twenty-four machine guns and its eight cannons and, in spite of this heavy and redoubtable material, as free and light as formerly, the modern cavalry division, armed to the teeth can act in the fullness of its strength under any circumstance of

war. The lack of a cuirass seems to matter no longer. *It has no more need of infantry.* Its horse machine guns are its reinforcing battalions. It carries them along almost without noticing it, just where they are wanted at whatever pace it pleases. It is characterized by the horse, cold steel and fire action, the three arms synthetized, and while remaining wholly itself it constitutes a veritable army corps, a very much reduced army it is true, but complete. It is well that it should be so, since the exigencies of war now demand such a condition. Whether we like it or not cavalry will be obliged more than once, if it wishes to see daylight, to transform itself into an arm fighting with fire action. At these times, and may they be as brief as possible, but which will be more frequent than we think, we cannot always choose our methods, and it behooves us to have the best fire action at our disposition. Whether we will or no, it will be fire against fire. We will find ourselves facing large bodies of well trained infantry, which is undisturbed by the blows of our battering rams and we must needs have an arm which will promptly reestablish the equilibrium in our favor. Therefore, reproaching us for seeking to transform cavalry into mounted infantry is undeserved, since we have but one end in view while writing these lines—the search for the best way of fighting on foot while remaining mounted, and breaking down with the least loss of time the barriers which arrest the movements of our squadrons.

THE USE OF MACHINE OR AUTOMATIC GUNS FOR CAVALRY.

BY CAPTAIN E. R. HEIBERG, SIXTH CAVALRY

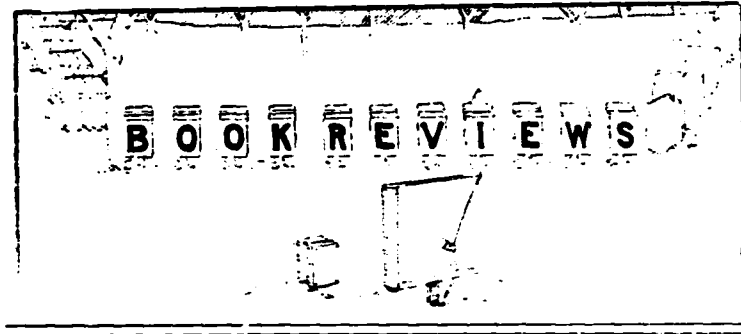
THE machine gun is strictly a defensive weapon, hence its desirability for use with the cavalry arm becomes limited to rare occasions. When such occasions do arise, however, a machine gun becomes a powerful reinforcement. Cavalry rear guards, harassing patrols, and small forces of cavalry (single troops for instance) operating alone, would perhaps be most benefited by the addition of a rapid-fire gun. The knowledge that the troop had a powerful weapon of defense would render it still more independent and able to take greater risks.

There is no necessity for any regular organization, in my mind. By that I mean that machine guns and crews would not be permanently assigned to organizations, their existence with a body depending upon the nature of the service that body was about to undertake. To this end, post ordnance officers should be supplied with the gun adopted for use with cavalry, and squads from each troop detailed for instruction in its use, so that every troop would have always in readiness a squad prepared to take charge at a moment's notice.

To a single troop only one machine gun should be assigned; more would make the troop too dependable on the guns, and would require more men and horses than could be spared.

Several of the volunteer cavalry troops which served in Porto Rico during 1898 were provided with Colt's rapid-fire guns. Two men were trained to manipulate each gun, and between them carried all the parts of their gun—barrel, tripod, etc., on their horses. I frequently saw these guns operated, and was impressed at the time with their simplicity, light weight, and all around fitness for use with cavalry on occasions.

The calibre should be the same as that used in our small arm.



**Napier's
Peninsula
War.***

The Hudson & Kimberly Publishing Company is keeping up its good work of providing a military library, including the best military books extant. We have just received the first volume of their new undertaking of bringing out an edition of "The Peninsula War." The first volume is nicely bound in green cloth. This volume contains nineteen plates, which are good and clear reproductions, and are legible throughout, as is not always the case with maps and plans in military books. For this provision the publishers are to be commended.

Major W. A. Shunk, Eighth United States Cavalry, formerly instructor at the infantry and cavalry school, has assisted in the preparation of this edition, and has prepared a complete and comprehensive index, a feature in which this edition differs from and surpasses all others. These books form a valuable edition to the already long list of Mr. Hudson's publications.

*HISTORY OF THE WAR IN THE PENINSULA AND IN THE SOUTH OF FRANCE FROM THE YEAR 1807 TO THE YEAR 1814. By Major General Sir W. F. P. Napier, K. C. B., Colonel Twenty-seventh Regiment. With fifty-five maps and plans. Published by Hudson-Kimberly Publishing Company, Kansas City, Missouri.

The Service of Security and Information.* It would hardly seem necessary to comment on this new edition of Security and Information, the simple announcement being sufficient for such a well-known and thoroughly appreciated work. As the author says, the principles set forth in his book have had practical application in war in Cuba, Porto Rico, the Philippines and China, and the army will add that they have satisfactorily stood the test. The author says: "While the recent campaigns of our armies in the West Indies and the Orient have evolved nothing radically new on the subject treated herein, they have afforded some valuable illustrations of the application of old principles to new conditions, and have lent additional emphasis to many of the matters set forth in former editions of this work." The entire army can testify that the book has stood the practical test of war, and has stood it well. The work had provided for all cases and a thorough knowledge of the book was a great help to officers and enlisted men alike.

The book has been adopted by the War Department as the authorized text book at all the schools. It now remains to introduce it in the noncommissioned officers' school universally. It may not be necessary, some will say, to teach the noncommissioned officers everything in the book, but just where to draw the line between what to include and what to exclude will be a difficult matter. It should and must of course be left to the instructor of the school. In the April and in the July issue of the CAVALRY JOURNAL will be found essays on this subject. Both essays use the "Security and Information" as a reference book and as a model in preparing for the practical work. The book lends itself so admirably to this purpose that we need search no further for a manual on the subject.

While the book has been used as a text book for study and recitation and for the acquirement of theoretical knowledge, and has been proven a most excellent authority, it is as a practical guide for the instruction of a command that its

*THE SERVICE OF SECURITY AND INFORMATION. Tenth edition. Revised in the Light of Recent American Campaigns. By Colonel A. L. Wagner, Adjutant General's Department. Hudson-Kimberly Publishing Company, 1903.

greatest use is to be found. The essays mentioned above point out the manner in which the book may be used to provide for practical work. All the problems undertaken by a small garrison, or a large one for that matter, may be taken right from the text. Patrolling is such an important duty that more time should be taken for the instruction of the enlisted men. This subject is thoroughly and exhaustively treated in a most lucid manner and with a logical arrangement. It is on that account that the book is so well suited for progressive practical instruction. It is not only a text book for officers but a model of its kind for practical work with all grades. It is to bring out this value in practical work of this most excellent book, that this review of it is inserted in the CAVALRY JOURNAL.

**Napoleon's
Maxims
of War.***

This little volume of 144 pages contains much interesting matter put together in a very pleasing and readable manner. It contains seventy-eight maxims, taken from Napoleon's writing, giving them tersely and concisely. Each maxim has about a page of foot notes giving an historical example illustrating the principle laid down in the maxim. The last maxim in the book explains the excuse for the publication:

"Peruse again and again the campaigns of Alexander, Hannibal, Cæsar, Gustavus Adolphus, Turenne, Eugene and Frederick. Model yourself upon them. This is the only means of becoming a great captain, and of acquiring the secret of the art of war. Your own genius will be enlightened and improved by this study, and you will learn to reject all maxims foreign to the principles of these great commanders."

The author of the notes, General Burnod, adds to this:

"It is in order to facilitate this object that I have formed the present collection. It is after reading and meditating upon the history of modern war that I have endeavored to illustrate by examples how the maxims of a great captain may be most successfully applied to this study."

*NAPOLEON'S MAXIMS OF WAR. With notes by General Burnod. Published by Hudson-Kimberly Publishing Co., 1904.

The book would seem to be of especial use to the student of military history in locating examples which illustrate certain principles. It is too bad on that account that this edition is not supplied with a good index, which would make the book a more valuable reference volume. This is, however, a fault quite common in military books.

**The People's
War in France.
1870-1871.***

We have received for review from Hugh Rees, London, a very handsomely bound and well printed volume on the Franco-German War. To those who have not the opportunity for a thorough perusal of that excellent work, the German official account of this war, this present work should be a welcome addition to the history of that year. The author, Colonel Lonsdale Hale, states that he has endeavored to produce an easily readable account. It will not be necessary to study this book and follow the events with a pair of dividers on an intricate map. As an aid to avoid this close following on the map, usual with official accounts, the author has appended to the name of each place when first mentioned, in rectangular brackets, the distances to important points, and further illustrations and explanatory remarks.

The author lays no claim to polished language in his text, and yet the chapter on "Human Nature in War and the Persönlichkeit of the German Leaders" is splendid reading and interesting also. This is a most important part of the book. The personality and character of those in high command play a most prominent part in war. Hoenig attaches the greatest importance to the knowledge of the character of the soldiers in command for a full understanding of the operations of a campaign. A precis of the introductory chapter of the fifth volume of Hoenig's work, is here given. In this precis the relation of commanders and their chiefs of staff is well brought out.

This, however, is not the only interesting chapter in the book. They are well written and in narrative form, not

*THE PEOPLE'S WAR IN FRANCE, 1870-1871. By Colonel Lonsdale Hale. Published by Hugh Rees, Limited, London, 1904.

mere accounts with voluminous tables of organization and recapitulation of forces and their strength which furnishes so much tedious reading matter in official accounts.

In the introduction of the book are given the reasons for calling the latter part of this gigantic struggle "The People's War." It also shows how the Germans made errors, and why a people's war differs from others. The author says: "The German authorities made mistakes similar to those our own authorities made in the 'People's War' in South Africa and which will be made in every 'People's War' that ever takes place. For in every such war, owing to the density of the 'fog of war,' that confronts and surrounds the invader, his plans and combinations are frequently based on guesses and hypotheses only, and his operations are then those of blindfolded strategy and blindfolded tactics."

Withal it makes most interesting reading, and its perusal is well worth close attention.

Field

Fortifications.*

The present is the fifth edition of this work, the scope and intention of which is fully described in the title. This edition is revised to May, 1904, and while intended primarily for officers of the British service is equally useful for others. The ground covered is about the same as that in Beach's Manual. It is not in text book form, but rather in the shape of a succession of memoranda, and has many notes and suggestions of value. The chapters on fire of rifles, machine, field, and siege guns, with the various projectiles, and on the location, arrangement and concealment of trenches, are particularly good. The book contains a number of problems on the dimensions of earth works, tasks, strength of materials, power of tackle, etc., and is concluded by a number of suggested examination questions in good shape as an aid to self review of the subject.

*FIELD FORTIFICATIONS. Notes on the text books. Specially designed and arranged for the use of officers preparing for promotion examinations. By Major-General H. D. Hutchinson. Published by Gale & Polden, Ltd. London. Four shillings, post free.

Manual for Non-commissioned Officers.*

This is a small pocket edition and will prove a valuable addition as an assistant to instruction in security and information. The purpose of the author is to save time to others who may desire to carry out a progressive scheme of instruction in this important subject by making available to every troop officer a scheme instantly ready for use. The purpose of the author has been well carried out, and the pamphlet deserves general circulation in the cavalry arm.

*MANUAL FOR NONCOMMISSIONED OFFICERS OF A TROOP OF CAVALRY IN SECURITY AND INFORMATION. By Lieutenant J. J. Boniface, Fourth Cavalry. Hudson-Kimberly Publishing Company, Kansas City, Missouri.



JOURNAL OF THE UNITED STATES CAVALRY ASSOCIATION.

Broad Arrow, under date of May 21st, gives space to the following notice of the CAVALRY JOURNAL for April, 1904:

"The April issue of this magazine contains a number of interesting articles. Lieutenant-Colonel S. L. Woodward, Seventh Cavalry, in the opening chapter of 'Grierson's Raid' gives a graphic description of the operations of Colonel B. H. Grierson's brigade of cavalry in Mississippi in April, 1863. The raid was intended as a diversion in the rear of the Confederacy in order to assist General Grant in his operations against Vicksburg and to cut communication between Pemberton in Vicksburg and Bragg in middle Tennessee. In 'Five Years a Dragoon,' P. G. Lowe commences an account of his experiences and adventures on the Great Plains from 1849 to 1854, and describes in an interesting manner the trouble with the Pawnees and the inter-tribal fighting between the Sioux, Cheyenne, Arapahoe and Snake Indians. Lieutenant E. C. Massee, Seventh United States Infantry, writes on the method best suited in the United States army for imparting practical instruction in security and information to the noncommissioned officers of a company of infantry, and includes a scheme for progressive exercises in the subject. The article deals with orientation and map-reading, advance guards, outposts, patrolling, rear guard, and combined exercises. Lieutenant-Colonel C. F. Chase, Twelfth United States Cavalry, describes General Young's campaign in North Luzon in the Philippines in 1899. It is a highly interesting article and is very well illustrated. It gives a capital description of the cavalry operations which resulted in the scattering of Aguinaldo's large army of insurgents. The conclusions drawn from the operations are: (1) The American soldier may live on the products of any country that supports the human race, and his endurance in the tropics itself is superior to the soldier of the tropical countries; (2) Horses may be transported any distance by rail and water,

and be in condition for work at the end of the journey. The American-bred horse constantly showed his superiority in endurance to the native Philippine pony; (3) The superiority of cavalry as a rapidly moving force, capable of fighting on foot or horseback as the conditions demanded; (4) The horse enables his rider to retain his strength and energy for the supreme moment of battle, whereas troops marching on foot, under a hot sun, reach the limit of endurance much sooner, and in any modern conflict the nation which has at the beginning a large force of well trained cavalry will have a marked advantage over one which is without such an arm, or which attempts to improvise it in the emergency. These conclusions are well deserving the attention of our own authorities.

"Other articles included in the JOURNAL deal with the subjects of cavalry machine guns, cavalry arms, and the charge *en l'air* of the Russian cavalry. The Russo-Japanese War is dealt with by way of extracts from various sources and there are several important notes, reprints and translations.

"The JOURNAL, which occupies nearly 300 pages and contains numerous illustrations, is a most creditable production, and speaks highly for the *esprit de corps* of the United States cavalry. The Association and the editor of the JOURNAL are to be congratulated on the success with which they have carried out a truly remarkable enterprise. If we may be allowed to make a suggestion, it would be that specimen copies be sent to our principal Service clubs and institutions, in order that officers of our own mounted branch may see what their brother officers in the United States are doing, and perhaps, in the spirit of emulation, be encouraged to follow so admirable a lead."

ST. MENIN PORTRAITS.

Dr. William J. Campbell, the well-known bookseller of Philadelphia, is writing an elaborate work on St. Menin Portraits. It will be in eight volumes, with over eight hundred and thirty engraved portraits, all on separate pages. The basis of the book will be the famous "collection" of 761 proofs, made by the artist himself, which has recently come into Dr. Campbell's possession.

The Corcoran Gallery of Art and the Library of Congress, both of which have extensive collections, are coöperating

with the author, giving him the free use of any portraits that are not in his own collection.

Any of our readers who have information, either biographical or genealogical, about any portrait that St. Menin made, or any information as to the present location of any original crayon, coppers or engravings, will confer a favor on the author by communicating with him.

Due credit will be given in the book for all information received.

Dr. Campbell's address is 1228 Walnut Street, Philadelphia.

PALAIS DU COSTUME.

The management of the Palais du Costume on the "Pike," at the Fair, has just closed a deal that will probably add much to the popularity of the exhibition as it will be seen in St. Louis.

It is generally known that the Palais du Costume was one of the features of the Paris Exposition most admired by the public.

In one sense of the term it is a historical collection of the gowns worn by woman from the earliest authentic period to the present. It was made by M. Felix, the famous Parisian costumer, and it required years of time, expense and labor as it was seen at the Paris Exposition, and it is here in its entirety.

It is the most pretentious gown show that has been seen in any country, and in addition to the commercial value of the exhibit, is historically correct.

These costumes will be seen on an immense stage behind a crystal glass curtain and will be arranged in tableaux, representing different epochs of fashion's history.—*St. Louis Special Correspondence.*

NEW COLT TARGET REVOLVER.

The new United States service model revolver made by the Colt's Patent Fire Arms Manufacturing Company, should prove of much interest to all military men. It is fitted with special target sights. The front sight is adjustable for elevation, giving a very wide range, which is especially desirable in a target revolver, to be used at different ranges for varying loads, the sighting always being perfect. The rear sight is adjustable for windage. The stocks are of fine selected walnut, handsomely checked. Full blued finish. The action is hand finished, and is perfect in all details. The guard, straps and trigger are finely checked. The arm, like the Colt's New Army is designated for .38 Long Colt (United States service cartridge). It will also use the special and gallery loads down to the light charge with round bullet.



MEMBERSHIP OF THE UNITED STATES CAVALRY ASSOCIATION.

We give the list of members in the Association in somewhat different form, the names being now arranged alphabetically.

It is the intention to correct this list with every issue. If any errors are noted it will be conferring a favor if you will call attention to them.

The Association is anxious to increase its membership and in its efforts to do this all the members can give their assistance. If you know of any prospective members or subscribers, or any person who might be interested in the JOURNAL, the Council will be glad to have the address so that a copy of the JOURNAL may be mailed.

ALPHABETICAL LIST OF MEMBERS.

Abbott, James E. 1 lt. 6 cav., Fort Keogh, Mont.
 Adams, Sterling P., capt. 14 cav., Manila, P. I.
 Albright, F. H., capt. 26 inf., Lafayette, Ind.
 Alshire, J. B., maj. Q. M., Washington, D. C.
 Allen, Chas. J., brig. gen. ret. 1828 Jefferson Place, Washington.
 Allen, Henry T., capt. 6 cav., Manila, P. I.
 Anderson, E., capt. 7 cav., Camp Thomas, Ga.
 Anderson, E. D., capt. 12 cav., Manila, P. I.
 Anderson, Geo. S., col. 8 cav., Jefferson Bks.
 Andrews, H. M., maj. art., Ft. Leavenworth.
 Andrews, L. C., capt. 15 cav., West Point.
 Andrus, E. P., maj. 3 cav., Ft. Assiniboine.
 Appleton, D., col. 130 W. 39 st., N. Y.
 Armstrong, F., capt. 9 cav., Ft. Walla Walla.
 Armstrong, W. H., 4th P. R., Cayce, P. R.
 Arnold, Fred. T., capt. 4 cav., Ft. Riley, Kas.
 Arnold, Percy W., capt. 1 cav., Ft. Clark, Texas.
 Arnold, Sam'l B., capt. 1 cav., Ft. Clark, Texas.
 Angus, Colon, capt. ret., Evanston, Ill.
 Angus, John A., col. 10 cav., Ft. Robinson, Neb.
 Austin, Wm. A., 1 lt. 4 cav., Ft. Riley, Kas.
 Averb, Nathan K., capt. 7 cav., Camp Thomas.
 Babcock, C. S., 1 lt. 3 cav., Ft. Leavenworth.
 Babcock, J. B., brig. gen. ret., Ballston, N. Y.
 Babcock, Walter C., capt. 13 cav., Manila, P. I.
 Bacht, C. A., 1 lt. 7 cav., Camp Thomas, Ga.
 Baer, Joseph A., 1 lt. 6 cav., West Point.
 Bailey, Harry L., maj. 2 inf., Ft. Logan, Col.
 Baird, Geo. H., 2 lt. 11 cav., Ft. Riley, Kas.
 Baird, Wm., capt. ret., Annapolis, Md.
 Baldwin, Frank D., brig. gen., Denver, Colo.
 Ball, Louis R., 1 lt. 15 cav., Manila, P. I.
 Bamberger, R. S., 2 lt. 7 cav., Ft. Leavenworth.
 Bamberger, Wm. B., maj. M. D., Jefferson Bks. Mo.
 Bangor, R. R., col. Columbus, Ohio.
 Barnard, J. H., 2 lt. 5 cav., Ft. Huachuca, Ariz.
 Barnum, M. H., capt. 3 cav., Jefferson Bks.
 Barringer, Wm. S., 2 lt. 15 cav., Ft. Ethan Allen.
 Barry, John A., 2 lt. 2 cav., Manila, P. I.
 Barry, Thomas H., brig. gen., Atlanta, Ga.
 Barton, F. A., capt. 3 cav., Ft. Yellowstone.
 Barton, R. M., 1 lt. 5 cav., Ft. Huachuca, Ariz.
 Bates, W. E., cornet, Merion, Pa.
 Beach, F. H., capt. 7 cav., Camp Thomas, Ga.
 Beach, Wm. D., maj. 10 cav., Washington.
 Beck, Wm. B., capt. ret., care of Wm. F. Turner & Co., Naples, Italy.
 Bell, Jas. M., brig. gen. ret., Washington.
 Bell, J. F., brig. gen., Ft. Leavenworth.
 Bell, O. W., capt. 7 cav., Camp Thomas, Ga.
 Bell, Sherman L., adj. gen., Denver, Col.
 Bell, W. H., Jr., 2 lt. 1 cav., Ft. Sam Houston.
 Bellinger, J. B., maj. Q. M., Washington.
 Benjamin, J. A., 1 lt. 8 cav., Ft. Apache, Ariz.
 Benson, H. C., capt. 4 cav., Jefferson Bks. Mo.
 Bernard, T. F., 2 lt. 3 cav., Ft. Assiniboine.
 Biddle, D. H., 1 lt. 6 cav., Ft. Meade, S. Dak.
 Biddle, James, col. ret., San Francisco, Cal.
 Biddle, John, maj. eng., Washington, D. C.
 Bigler, George W., 1 lt. 12 cav., Manila, P. I.
 Bigelow, John Jr., maj. 9 cav., Wawona, Cal.
 Bishop, H. S., capt. 5 cav., West Point, N. Y.
 Bishop, H. S., maj. 5 cav., Ft. Apache, Ariz.
 Bixby, W. H., lt. col. eng., Jones bldg., Detroit.
 Black, Frank H., brig. gen., Washington, D. C.
 Blackman, A. P., maj. 1 cav., Ft. Clark, Tex.
 Black, S. R., lt. col. O. D., Rock Island Arsenal.

Boice, Chas. H., 1 lt. 7 cav., Camp Thomas, Ga.
 Bonnus, P. S., lt. col. 6 cav., Ft. Keogh, Mont.
 Boniface, J. J., 1 lt. 4 cav., Ft. Leavenworth.
 Booth, Ewing E., 1 lt. 7 cav., Camp Thomas, Ga.
 Boughton, D. H., maj. 11 cav., Ft. Leavenworth.
 Bowditch, Myron R., 2 lt. 10 cav., Ft. Washakie.
 Bowen, W. H., C. maj. 12 inf., Buffalo, N. Y.
 Bowie, H., 1 lt. 9 cav., Oklahoma City, Okla.
 Bowman, George T., 1 lt. 15 cav., Ft. Ethan Allen, Vt.
 Boyd, Carl, 2 lt. 3 cav., Ft. Yellowstone, Wyo.
 Boyd, Charles T., capt. 10 cav., Reno, Nev.
 Braden, C., 1 lt. ret., Highland Falls, N. Y.
 Brainerd, D. L., maj. C. S., New York City.
 Breck, Samuel, brig. gen. ret., Boston, Mass.
 Brees, H. J., 1 lt. sig. corps, Ft. Wood, S. Y.
 Brett, Lloyd M., capt. 7 cav., Washington, D. C.
 Briand, Christian, 1 lt. 18 cav., Ft. Myer, Va.
 Briggs, Allan L., 1 lt. 13 cav., Manila, P. I.
 Bristol, Matt C., capt. 11 cav., Ft. Sheridan, Ill.
 Brooks, E. C., capt. 11 cav., Ft. Sheridan, Ill.
 Brown, L. T., lt. col. 33d & Smallwood sts., Pittsburgh, Pa.
 Brown, L. G., 2 lt. 12 cav., Manila.
 Brown, Oscar J., capt. 1 cav., Ft. Clark, Tex.
 Brown, R. A., capt. 4 cav., Ft. Leavenworth.
 Brown, William C., capt. 1 cav., Ft. Clark, Tex.
 Brown, R. B., capt. 5 cav., Ft. Huachuca, Ariz.
 Bryant, W. A., capt. Montclair, N. J.
 Buchanan, E. A., 2 lt. 9 cav., Wawona, Cal.
 Buchan, F. E., 1 lt. 3 cav., Fort Leavenworth.
 Bull, Henry T., 2 lt. 13 cav., Manila, P. I.
 Burkhardt, S. Jr., capt. 19 inf., Vancouver Bks. Wash.
 Burnett, Chas., 2 lt. 15 cav., Ft. Myer, Va.
 Burnett, George R., 1 lt. ret., Iowa City, Ia.
 Burroughs, James M., 1 lt. 12 cav., Manila, P. I.
 Bush, F. N., lt. Peoria, Ill.
 Butler, James S., 1 lt. sig. corps, Seattle, Wash.
 Butler, Matt C. Jr., capt. 7 cav., World's Fair Station.
 Butler, Rodman, 2 lt. 6 cav., Ft. Keogh, Mont.
 Byram, Geo. L., capt. 6 cav., Ft. Meade, S. Dak.
 Cabanis, A. A., capt. 21 inf., Ft. Missoula.
 Cable, Wm. A., lt. 103 W 56th st., New York.
 Cabell, De Rosey C., capt. 1 cav., Ft. Clark, Tex.
 Caldwell, E. C., 1 lt. 7 cav., Camp Thomas, Ga.
 Calvert, E., 1 lt. 9 cav., Ft. Walla Walla, Wash.
 Cameron, Geo. H., capt. 4 cav., Ft. Riley.
 Camp, Beauford R., 2 lt. 9 cav., S. Francisco.
 Card, C. S., lt. 139 Clarkson st., Denver, Colo.
 Carlton, C. H., brig. gen. ret., Ft. Monroe, Va.
 Carpenter, E., capt. art., Ft. Totten, N. Y.
 Carpenter, L. H., brig. gen. ret., Philadelphia.
 Carr, Camillo C. C., brig. gen., St. Paul, Minn.
 Carr, Eugene A., brig. gen. ret., Washington, D. C.
 Carroll, Henry, col. ret., Lawrence, Kans.
 Carson, John M., Jr., maj. Q. M. D., West Point.
 Carson, L. S., 1 lt. 8 cav., Ft. Leavenworth.
 Carson, T. G., capt. 10 cav., Ft. Washakie, Wyo.
 Carter, Wm. H., brig. gen., Manila, P. I.
 Cartmell, N. M., 1 lt. 10 cav., Manila, P. I.
 Case, Frank L., 1 lt. 12 cav., Manila, P. I.
 Cassidy, H. C., capt. 225 Aldamette, Chicago.
 Casteele, D. T. E., 1 lt. 7 cav., Camp Thomas, Ga.
 Castro, Thos. E., 2 lt. 13 cav., Manila, P. I.
 Cavanaugh, H. La T., capt. 10 cav., Ft. Robinson, Neb.

Chaffee, Adna R., lt. gen., Washington, D. C.
 Chapman, L. A., 1 lt. 1 cav., Ft. Leavenworth.
 Chase, G. O., Ft. col. 12 cav., Manila, P. I.
 Chase, John, brig. gen., Denver, Col.
 Cheever, B. H., maj. 6 cav., Ft. Meade, S. D.
 Chitty, Wm. D., capt. 4 cav., Columbia, Mo.
 Churchill, C. Robert, capt. 407 Morris Bld., New Orleans.
 Clark, Chas. H., maj. O. D., Springfield, Mass.
 Clark, Will H., 318 Marquette Bldg., Chicago.
 Clark, Wm. F., capt. 2 cav., Manila, P. I.
 Clayton, P. Jr., capt. 11 cav., Jefferson Bks. Mo.
 Clifton, Wm. H., Jr., 1 lt. 13 cav., Manila, P. I.
 Cocke, J., 2 lt. 11 cav., Jefferson Bks. Mo.
 Coffey, Edgar N., 1 lt. 2 cav., Manila, P. I.
 Cole, C. W., 1 lt. 9 cav., Ft. Walla Walla, Wash.
 Cole, Geo. M., gen., Hartford, Conn.
 Coleman, J. A., capt. 6 cav., Ft. Meade, S. Dak.
 Coleman, S., 1 lt. 9 cav., Ft. Walla Walla, Wash.
 Collins, R. L., 2 lt. 2 cav., Ft. Bayard, N. M.
 Collins, Thos. D., maj. Gainesville, Tex.
 Comly, George B., 1 lt. 3 cav., West Point.
 Conklin, John, Jr., capt. art., Ft. Ethan Allen.
 Connell, W. M., 1 lt. 2 cav., Ft. Leavenworth.
 Conrad, H., capt. 3 cav., St. Louis Exposition.
 Conrad, Julius T., capt. 3 cav., Chester, Pa.
 Converse, G. L., capt. ret., Columbus, Ohio.
 Cooper, W. M., 2 lt. 5 cav., Ft. Wingate, N. M.
 Cooper, C. L., brig. gen. ret., Denver, Col.
 Cooley, Harry N., 1 lt. 12 cav., Manila, P. I.
 Coppock, E. R., 2 lt. 1 cav., Ft. Leavenworth.
 Corcoran, Thos. M., capt. 13 cav., Manila, P. I.
 Cornell, W. A., 1 lt. 10 cav., Ft. Robinson, Neb.
 Cornish, L. W., capt. 9 cav., San Francisco.
 Coughlan, T. M., 1 lt. 2 cav., Manila, P. I.
 Counsellman, W., capt. 33 Rush st., Chicago.
 Cowell, T. R., capt. Parkersburg, Va.
 Cowles, W. H., 2 lt. 4 cav., Ft. Riley.
 Cox, Edwin L., 2 lt. 4 cav., San Francisco.
 Cox, A. B., 1 lt. 5 cav., Jefferson Bks. Mo.
 Craig, H. Jr., 1977 Chestnut st., Philadelphia.
 Craig, J. W., capt. 15 cav., Manila, P. I.
 Craig, M., capt. 10 cav., Ft. Leavenworth.
 Craig, Wm. E., capt. eng., Mobile, Ala.
 Craig, D. J., brig. gen. ret., Washington, D. C.
 Crane, J. H., 1 lt. col. 8 inf., San Juan, P. R.
 Craycroft, Wm. T., 1 lt. ret., Dallas, Texas.
 Cress, Geo. O., capt. 4 cav., Ft. Riley, Kan.
 Crimmins, M. L., 1 lt. 10 inf., Ft. Lawton, Wash.
 Croft, E. L., 1 lt. 19 inf., Ft. Leavenworth.
 Crosby, Herbert B., capt. 11 cav., Manila, P. I.
 Crowder, E. H., col. 1 a., Washington, D. C.
 Crozier, Wm., brig. gen., Washington, D. C.
 Cruise, Thos., maj. Q. M. dept., St. Louis.
 Cullen, D., 1 lt. 3 cav., Ft. Yellowstone, Wyo.
 Custer, G. C., 2 lt. 15 cav., Ft. Myer, Va.
 Cunningham, T. H., 2 lt. 5 cav., Ft. Leavenworth.
 Curry, W. L., capt. Columbus, O.
 Cusack, Joseph E., capt. 12 cav., Manila, P. I.
 Dade, A. L., capt. 13 cav., Manila, P. I.
 Dailam, S. E., capt. 5 cav., Ft. Apache, Ariz.
 Dalton, H. F., 1 lt. 6 inf., Ft. Leavenworth.
 Davidson, A. H., 1 lt. 18 cav., Manila, P. I.
 Davis, B. O., 2 lt. 10 cav., Ft. Washakie, Wyo.
 Davis, C. O., capt. Corsicana, Tex.
 Davis, E., 1 lt. 11 cav., Ft. Des Moines, Iowa.
 Davis, F. E., 2 lt. 9 cav., Jefferson Bks. Mo.
 Davis, G. B., brig. gen., Washington, D. C.
 Davis, Ira, capt. Houston, Tex.
 Davis, M. F., capt. 1 cav., Ft. Leavenworth.
 Davis, Norman H., 2 lt. 14 cav., Manila, P. I.
 Davis, W. col. ret., The Albion, Baltimore, Md.
 Day, Clarence R., capt. 5 cav., Macon, Mo.
 Dean, W., 1 lt. 13 cav., Ft. Leavenworth.
 Degen, J. A., 1 lt. 12 cav., Manila, P. I.
 Deltrick, L. L., 1 lt. 13 cav., Manila, P. I.
 Dickman, J. T., capt. 8 cav., Washington, D. C.
 Disque, B. P., 1 lt. 3 cav., Ft. Assiniboine.
 Dixon, V. D., 1 lt. 5 cav., Ft. Wingate, N. Mex.
 Dodd, G. A., maj. 3 cav., Philadelphia.
 Dodge, C. C., gen. 10 E 76 st., New York.
 Dodge, Francis S., brig. gen., Washington, D. C.

Dodge, T. A., capt. ret., New York City.
 Dolan, T. J., capt. 2021 Walnut st., Philadelphia.
 Donaldson, T. Q., capt. 5 cav., Ft. Sill, O. T.
 Donovan, A. E., vetu. art., Vancouver Bks.
 Dorcy, B. H., 1 lt. 4 cav., Ft. Leavenworth.
 Dorst, J. H., col. 3 cav., Ft. Assiniboine.
 Dougherty, C. A., 2 lt. 13 cav., Manila, P. I.
 Drake, C. B., capt. 14 cav., Manila, P. I.
 Dudley, Clark D., 1 lt. 14 cav., Manila, P. I.
 Duff, Robt. J., capt. 5 cav., Ft. Riley.
 Duval, W. P., maj. art., Washington, D. C.
 Eyer, Ed. H., maj. Rutland, Vt.
 Early, Orson L., 2 lt. 5 cav., Ft. Riley.
 Eaton, W. R., lt. box 932, Denver, Col.
 Edgerly, Winfield S., col. 2 cav., Manila, P. I.
 Edmond, C. W., 1425 Walnut st., Philadelphia.
 Edwards, Frank A., maj. 4 cav., Rome, Italy.
 Edwards, Frank B., 1 lt. art., Ft. Hamilton.
 Edwards, Frank B., 2 lt. 4 cav., St. Paul, Minn.
 Edwards, W. W., 2 lt. 10 cav., Ft. Robinson, Neb.
 Elliott, S. H., capt. 11 cav., Ft. Des Moines, Ia.
 Ellis, R. B., 2 lt. 13 cav., Presidio, S. Francisco.
 Eltinge, LeRoy, capt. 15 cav., Ft. Ethan Allen.
 Ely, J. J., 2 lt. 15 cav., Ft. Ethan Allen, Vt.
 Eng, F. E., capt. 3 inf., Ft. Sam Houston, Tex.
 Engel, E., 2 lt. 5 cav., Ft. Walla Walla, Wash.
 English, E. G., 2 lt. 3 cav., Ft. Wingate, N. M.
 Enos, Copley, 2 lt. 1 cav., Ft. Clark, Texas.
 Erwin, J. B., maj. 9 cav., Ft. Walla Walla, Wash.
 Estes, Geo. H., capt. 30 inf., Manila, P. I.
 Evis, Thos. B., 2 lt. 9 cav., Three Rivers, Cal.
 Estes, H. L., lt. 140 Jackson ave., New Orleans, La.
 Evans, E. W., capt. 5 cav., Jefferson Bks. Mo.
 Evans, Geo. H., capt. ret., Pittsburg, Pa.
 Fair, John S., 1 lt. 9 cav., San Francisco.
 Farber, Chas. W., capt. 5 cav., 33 Broadway, Albany, N. Y.
 Farmer, Chas. J., 1 lt. 10 cav., Ft. Robinson.
 Farnsworth, Chas. S., capt. 7 inf., Manila, P. I.
 Farnum, F. H., 2 lt. 10 inf., Ft. Du A. Rising.
 Faulkner, A. M., 1 lt. art., Ft. Du Pont, Del.
 Fecher, Jas. E., 1 lt. 9 cav., Ft. Leavenworth.
 Fenton, J. W., capt. paym. cav., Manila.
 Fisher, Ronald E., 2 lt. 14 cav., Manila.
 Fitch, Roger S., 1 lt. 1 cav., Ft. Clark, Texas.
 Fleming, L. J., capt. 9 M., San Antonio, Tex.
 Fleming, R. J., capt. 10 cav., Ft. Robinson.
 Foerster, L., 1 lt. 5 cav., Ft. Huachuca, Ariz.
 Foltz, Fred S., capt. 2 cav., Manila, P. I.
 Fonda, Ferd. W., 1 lt. 10 cav., Ft. Leavenworth.
 Foote, S. M., capt. art., Ft. Myer, Va.
 Forbush, W., 1 lt. col. ret., The Markeen, 1291 Main st., Buffalo, N. Y.
 Foreman, Milton J., maj. 3412 Vernon Ave., Chicago.
 Forsyth, Jas. W., maj. gen. ret., Columbus, O.
 Forsyth, Wm. W., capt. 6 cav., Ft. Keogh, Mont.
 Fortescue, G. R., 1 lt. 10 cav., Washington.
 Foster, A. B., capt. 19 inf., Ft. Lawton, Wash.
 Foster, Fred W., capt. 3 cav., Ft. Apache, Ariz.
 Foster, Leo F., capt. art., Ft. Moultrie, S. C.
 Fountain, S. W., lt. col. 4 cav., Jefferson Bks.
 Foy, Robert C., 1 lt. 1 cav., Fort Clark, Texas.
 Fraser, Walter, vet. 15 cav., Manila, P. I.
 Freeman, H. B., brig. gen. ret., Leavenworth.
 Fuller, C. J., capt. Salinas, Cal.
 Fuller, A. M., capt. 9 cav., Knoxville, Tenn.
 Fuller, Ezra B., maj. 7 cav., Columbia, S. C.
 Funston, Fred, brig. gen., Vancouver Bks.
 Furlong, J. W., capt. 5 cav., Ft. Meade, S. Dak.
 Galbraith, J. W., maj. 1 cav., Ft. Leavenworth.
 Gale, George H., S. maj. 1 g. d., Star Building, St. Louis.
 Gardenville, W. C., 2 lt. 15 cav., Ft. Ethan Allen.
 Gardner, Edwin F., lt. col. M. D., Atlanta, Ga.
 Gardner, John H., capt. 2 cav., Manila, P. I.
 Garity, George, 1 lt. 2 cav., Manila, P. I.
 Garrard, Joseph, lt. col. 11 cav., Manila, P. I.
 Gaston, Joseph A., maj. 1 cav., Ft. Clark, Tex.
 Gatley, Geo. G., capt. art., Manila, P. I.
 Gaujot, Julien E., 1 lt. 11 cav., Ft. Des Moines, Iowa.

Gibbins, H. 1 lt. 9 cav., Ft. Walla Walla, Wash.
 Gilles, Alvan C. 1 lt. 4 cav., Dallas, Texas.
 Glasgow, Wm. J. capt. 13 cav., Manila, P. I.
 Gleason, S. R. 1 lt. 1 cav., Ft. Sam Houston.
 Godfrey, E. S. col. 9 cav., Ft. Walla Walla, Wash.
 Godson, W. F. H. 1 lt. 10 cav., Ft. Robinson.
 Godwin, E. A. 1 lt. 10 cav., San Francisco.
 Going, R. B. 1 lt. 15 cav., Ft. Ethan Allen.
 Goldman, H. J. capt. 5 cav., Ft. Apache, Ariz.
 Goodale, Geo. S. capt. 25 inf., Manila.
 Goode, George W. capt. 1 cav., Ft. Clark, Tex.
 Goodspeed, Nelson A. 2 lt. 3 cav., Ft. Assiniboine, Mont.
 Gordon, Geo. A. col., Savannah, Ga.
 Gordon, Wm. W. 2 lt. 2 cav., Manila, P. I.
 Gould, J. H. vetn. 11 cav., Ft. Riley, Kas.
 Graham, Alden M. 2 lt. 1 cav., Ft. Sam Houston, Tex.
 Granger, R. S. 1 lt. 10 cav., Ft. Riley.
 Grant, Frederick D. brig. gen., Chicago, Ill.
 Grant, Walter C. 1 lt. 4 cav., St. Paul, Minn.
 Gray, Alonso, capt. 14 cav., Manila, P. I.
 Greely, Adolphus W. brig. gen. chf. sig. off., Washington, D. C.
 Gresham, John C. maj. 15 cav., Ft. Myer, Va.
 Grisham, B. H. brig. gen. ret., Jacksonville, Ill.
 Grierson, C. H. capt. 10 cav., Ft. Robinson.
 Griffith, F. D. Jr. 2 lt. 6 cav., Ft. Meade, S. Dak.
 Griggs, Everett G. capt., Tacoma, Wash.
 Groome, J. C. capt., 1221 Walnut st., Philadelphia, Pa.
 Gross, F. W. col., 142 Logan Ave., Denver, Col.
 Grove, W. B. capt. sub. dept., Kansas City.
 Grunert, G. 2 lt. 11 cav., Ft. Sheridan, Ill.
 Grutman, W. H. vetn. 15 cav., Ft. Myer, Va.
 Guent, John, capt. ret., Washington, D. C.
 Guilford, J. F. maj. 4 Cav. Dept., Washington.
 Haigh, C. S. 1 lt. 4 cav., World's Fair Station.
 Haldeman, Horace L. lt. col., Real Estate Bldg., Philadelphia, Pa.
 Hall, W. P. brig. gen., Washington, D. C.
 Hammond, Andrew G. maj. 3 cav., St. Louis.
 Hammond, C. L. 427 Greenwood Ave., Chicago.
 Hanna, M. E. capt. 3 cav., Havana.
 Harbord, James G. capt. 11 cav., Manila, P. I.
 Hardeman, L. capt. 11 cav., Ft. Des Moines, Ia.
 Hardin, Francis E. maj. 14 cav., Manila, P. I.
 Hardin, E. E. maj. 7 inf., Manila, P. I.
 Harper, Roy B. capt. 3 cav., Ft. Yellowstone.
 Harris, E. R. 2 lt. 11 cav., Ft. Des Moines, Ia.
 Harris, F. W. capt. 4 cav., Vienna, Austria.
 Harris, Moses, maj. ret., New York City.
 Harrison, Ralph, capt. 2 cav., Manila, P. I.
 Hart, A. C. 1 lt. 10 cav., Ft. Robinson, Nebr.
 Hartman, J. D. L. capt. 1 cav., Ft. Leavenworth.
 Harvey, Charles G. 1 lt. 2 cav., Manila, P. I.
 Hamon, John P. 1 lt. 6 cav., Ft. Meade, S. D.
 Hathaway, C. E. 2 lt. 9 cav., Monterey, Cal.
 Hawkins, Clyde E. capt. 2 cav., Manila, P. I.
 Hawkins, H. S. capt. sub. dept., Denver, Colo.
 Hay, W. H. capt. 10 cav., Ft. Robinson, Nebr.
 Hayden, John L. capt. art. San Francisco.
 Hayden, Ralph S. 2 lt. 7 cav., Camp Thomas.
 Hayne, Paul T. Jr. 1 lt. 14 cav., Manila, P. I.
 Hazard, Oliver P. M. 1 lt. 3 cav., Manila, P. I.
 Hazard, Russell T. 1 lt. 1 cav., Ft. Clark, Tex.
 Heard, J. W. capt. 3 cav., Ft. Assiniboine.
 Heaton, Wilson G. 1 lt. 15 cav., Manila, P. I.
 Hedekin, C. A. capt. 3 cav., Ft. Apache, Ariz.
 Heiberg, E. R. capt. 4 cav., Ft. Meade, S. Dak.
 Heidt, Grayson V. 1 lt. 14 cav., Manila, P. I.
 Hein, O. L. lt. col. 10 cav., Hot Springs, Ark.
 Heintzelman, S. 1 lt. 6 cav., Ft. Keogh, Mont.
 Hemphill, J. E. 1 lt. sig. corps, Ft. Wood, N. Y.
 Henderson, P. J. 2 lt. 5 cav., Ft. Huachuca.
 Henry, Guy V. capt. 12 cav., Manila, P. I.
 Henry, J. R. Jr. 2 lt. 4 cav., Fort Leavenworth.
 Herman, Fred J. 1 lt. 9 cav., Wawona, Cal.
 Hero, W. S. lt., 622 Commercial Place, New Orleans, La.
 Heron, Joseph S. capt. 2 cav., Manila, P. I.
 Hersher, F. W. 1 lt. 4 cav., Ft. Leavenworth.

Hickey, J. B. maj. 11 cav., 25 3d Ave., N. Y.
 Hickman, E. A. 1 lt. 1 cav., Ft. Leavenworth.
 Hickok, H. R. capt. 15 cav., Ft. Myer, Va.
 Hilgard, M. B. 1 lt. 16 inf., Ft. Slocum, N. Y.
 Hill, Wm. P. vetn. 12 cav., Manila, P. I.
 Hill, Zeph T. maj., Denver, Col.
 Hirsch, Harry J. capt. 20 inf., Manila, P. I.
 Hodges, H. L. 2 lt. 10 cav., Ft. Sam Houston, Tex.
 Hodgeson, F. G. maj. Q. M. D. Vancouver Bks.
 Hoff, J. V. R. lt. col. M. D. Ft. Leavenworth.
 Holabird, S. B. brig. gen. ret., Washington, D. C.
 Holbrook, L. R. capt. 5 cav., Ft. Huachuca.
 Holbrook, W. A. capt. 5 cav., Whipple Bks.
 Holliday, Milton G. 2 lt. 15 cav., Ft. Myer, Va.
 Hope, F. W. lt. Broad and Front sts., Red Bank, N. J.
 Hopkins, A. T. lt., Watertown, S. D.
 Hopkin, C. B. maj. 15 cav., Ft. Ethan Allen, Vt.
 Hornbrook, J. J. capt. 12 cav., Manila, P. I.
 Horton, W. E. capt. Q. M. D. Ft. Jay, N. Y. City.
 Howard, H. capt. 14 cav., Manila, P. I.
 Howard, J. H. 2 lt. 9 cav., San Francisco.
 Howell, J. R. col., Bohemian Club, San Francisco.
 Howe, R. L. capt. 4 cav., Washington, D. C.
 Hoyte, George S. maj. ret., Atlanta, Ga.
 Huggins, E. L. brig. gen. ret., St. Augustine, Florida.
 Hughes, J. B. capt. 4 cav., Jefferson Bks., Mo.
 Hughes, Martin B. col. 1 cav., Ft. Clark, Tex.
 Hume, John K. 2 lt. 14 cav., Manila, P. I.
 Hunsaker, I. L. 2 lt. 3 cav., Ft. Apache, Ariz.
 Hunt, Levi P. maj. 11 cav., Manila, P. I.
 Hunter, G. K. maj. 6 cav., Ft. Meade, S. Dak.
 Hunt, Geo. G. col. ret., Carlisle, Pa.
 Huston, James, 1 lt. 10 cav., Ft. Leavenworth.
 Hyde, A. P. S. 1 lt. art., Ft. Terry, N. Y.
 Hyer, B. B. capt. 13 cav., Lexington, Mo.
 Ingerton, W. H. capt., Amarillo, Tex.
 Irons, J. A. maj. insp. gen., Washington, D. C.
 Jackson, Henry, brig. gen. ret., Leavenworth.
 Jackson, R. F. 1 lt. 3 cav., Washington Bks.
 Jacobs, Douglas H. 2 lt. 14 cav., Manila, P. I.
 Jeffers, S. L. 1 lt. 7 cav., Camp Thomas.
 Jenkins, J. M. capt. 5 cav., West Point.
 Jennings, T. H. 2 lt. 7 cav., Camp Thomas.
 Jervey, E. P. Jr. capt. 19 cav., Oklahoma City.
 Jewell, Jas. H. vetn. 13 cav., Manila, P. I.
 Jewell, James M. 2 lt. 11 cav., Manila, P. I.
 Johnson, A. capt. 13 inf., Alcatraz Island, Cal.
 Johnson, C. P. capt. 10 cav., Ft. Robinson, Nebr.
 Johnson, F. O. maj. 5 cav., Ft. Wingate, N. M.
 Johnson, F. C. 1 lt. 2 cav., Ft. Leavenworth.
 Johnson, H. B. 2 lt. 3 cav., Ft. Assiniboine.
 Johnston, G. 1 lt. sig. corps, Ft. Myer, Va.
 Johnston, J. A. brig. gen., 2111 Mass. ave., Washington, D. C.
 Johnston, W. T. capt. 15 cav., Ft. Meyer, Va.
 Jones, C. B. 2745 Fourth st., Philadelphia.
 Jones, F. M. 1 lt. 9 cav., Three Rivers, Cal.
 Jones, G. capt. 11 cav., Ft. Des Moines, Ia.
 Jordan, H. B. 1 lt. O. D., Andy Moor, N. Y.
 Joyce, K. A. 2 lt. 6 cav., Ft. Meade, S. Dak.
 Jurich, A. Jr. 2 lt. 4th cav., Jefferson Bks., Mo.
 Karnes, Wm. L. 1 lt. 6 cav., Omaha, Neb.
 Keller, Frank, 2 lt. 3 cav., Jefferson Bks., Mo.
 Kelly, Wm. 1 lt. enr., P. O. Bldg., New London, Conn.
 Kelly, W. Jr. capt. 9 cav., West Point, N. Y.
 Kelly, William H. capt. 10 Glenway st., Dorchester, Mass.
 Kendall, Henry F. maj. 12 cav., Manila, P. I.
 Kendall, Henry M. maj. ret. Soldiers' Home, Washington.
 Kennedy, W. B. maj. ret., Los Angeles, Cal.
 Kennington, Alfred E. capt. 7 cav., Washington, D. C.
 Kerr, J. B. col. 12 cav., Manila.
 Kerr, James T. lt. col. g. Washington, D. C.
 Kerth, Monroe C. capt. 25 inf., Manila, P. I.
 Ketcheson, J. C. Leavenworth, Kan.
 Keyes, Allen C. 2 lt. 14 cav., Manila, P. I.
 Keyes, E. A. 2 lt. 4 cav., Ft. Leavenworth.
 Kilbourne, Louis H. 2 lt. 3 cav., Ft. Sill, Okla.

Kilian, Julius N. capt. sub. dept., Manila, P. I.
 Kimball, Gordon N. 1 lt. 12 cav., Manila, P. I.
 King, Albert A. 1 lt. 9 cav., Ft. Sill, Okla.
 King, Charles, brig. gen., Milwaukee, Wis.
 King, Ed. L. capt. 2 cav., West Point, N. Y.
 Kirkman, Hugh, 1 lt. 8 cav., Ft. Sill, Okla.
 Kirkpatrick, George W. capt. 15 cav., Ft. Ethan Allen, Vt.
 Kline, J. brig. gen. ret., Ft. Snelling, Minn.
 Knight, J. T. maj. gen. dept., Philadelphia.
 Knox, R. S. 1 lt. 24 inf., Ft. Missoula, Mont.
 Knox, Thomas M. 1 lt. 4 cav., Ft. Riley, Kas.
 Knox, T. T. col. ret., New York City.
 Koehrsperger, S. M. capt. 2 cav., Manila, P. I.
 Koehler, L. M. capt. 4 cav., Ft. Leavenworth.
 Kramer, J. L. maj., Parkersburg, W. Va.
 Kromer, L. B. 1 lt. 11 cav., West Point, N. Y.
 Krumm, Herbert Z. 2 lt. 1 cav., Ft. Clark, Tex.
 Lacey, F. E. Jr. capt. 1 inf., Ft. Wayne, Mich.
 Lahm, F. P. 2 lt. 6 cav., West Point.
 Lake, H. M. capt. 10 cav., Denver.
 Landis, J. F. R. capt. 1 cav., West Point.
 Langston, J. G. 1 lt. art., San Francisco.
 Langborne, G. T. capt. 11 cav., Manila, P. I.
 Lanza, C. H. capt. art. corps, Birmingham, Ala.
 Leach, S. S. maj. eng., Ft. Leavenworth.
 Lear, B. Jr. 1 lt. 13 cav., Ft. Ethan Allen, Vt.
 Leary, E. N. capt. 11 cav., San Francisco.
 Lebo, Thos. C. col. 14 cav., Manila, P. I.
 Lechtman, J. col., Kansas City, Mo.
 Lee, Fitzhugh, brig. gen. ret., Richmond, Va.
 Lee, Fitzhugh, Jr. 1 lt. 12 cav., Manila, P. I.
 Lee, Geo. M. 1 lt. 4 cav., Ft. Riley, Kan.
 Lee, J. M. brig. gen., San Antonio, Tex.
 Leber, R. W. 2 lt. 5 cav., Ft. Yellowstone, Wyo.
 Lewis, H. H. 2 lt. 11 cav., Manila, P. I.
 Lewis, J. H. 1 lt. 5 cav., Ft. Myer, Va.
 Lewis, LeRoy D. 2 lt. 4 cav., Ft. Riley, Kan.
 Lewis, T. J. capt. 4 cav., Louisville, Ky.
 Lincoln, James R. brig. gen., Ames, Iowa.
 Lindsey, J. R. capt. 15 cav., Ft. Ethan Allen.
 Lindsey, Elmer, capt. 1 cav., Ft. Clark, Tex.
 Lininger, Clarence, 2 lt. 10 cav., Ft. Clark, Tex.
 Lippincott, Aubrey, 1 lt. 10 cav., Manila, P. I.
 Littlebrant, W. T. capt. 12 cav., Manila, P. I.
 Liverman, H. T. capt. Mansfield, La.
 Livermore, B. L. capt. 10 cav., Ft. Bayard, N. M.
 Lockridge, P. D. capt. 13 cav., Manila, P. I.
 Lockridge, James, maj. 4 cav., Ft. Riley, Kan.
 Lockwood, J. A. capt. ret., 1434 Ave. N. Y.
 Logan, A. J. col. 11 cav., Pittsburg, Pa.
 Long, John D. 1 lt. 12 cav., Manila, P. I.
 Longstreet, Jas. Jr. 1 lt. 11 cav., Manila, P. I.
 Lord, Abraham, capt. 4 cav., Ft. Meade, S. D.
 Lord, John S. maj. ret., Washington, D. C.
 Love, Moss L. 2 lt. 2 cav., Manila, P. I.
 Love, Robt. R. 2 lt. 9 cav., Three Rivers, Cal.
 Love, Geo. E. 1 lt. 7 cav., Camp Thomas, Ia.
 Lowe, A. W. maj., Lynn, Mass.
 Lowe, Wilson, maj., Upper Merion, Pa.
 Lowe, Wm. L. 1 lt. 13 cav., Manila, P. I.
 Ludington, M. L. maj. gen. ret., Skaneateles, N. Y.
 Luedeka, E. C. 1 lt. 25 seminary ave., Chicago.
 Luby, Wm. L. 1 lt. 11 cav., Ft. Riley, Kan.
 Lull, T. E. lt. art., Ft. Worden, Wash.
 Lusk, Wm. V. vetn. 2 cav., Manila, P. I.
 Lynch, Frank E. 2 lt. 2 cav., Manila, P. I.
 Lyon, C. A. col., Sherman, Texas.
 MacAndrews, Jos. R. 1 lt. 1 cav., Manila, P. I.
 MacArthur, Arthur, maj. gen., San Francisco.
 MacLeod, Norman, lieut., North American Bldg., Philadelphia.
 McCabe, E. R. W. 2 lt. 6 cav., Ft. Keogh, Mont.
 McCain, Wm. A. 2 lt. 5 cav., Ft. Riley, Kas.
 McCarthy, D. E. maj. Q. M. D. Ft. Leavenworth.
 McCaskey, D. 1 lt. 4 cav., Ft. Leavenworth.
 McCaskey, Wm. S. brig. gen., Manila, P. I.
 McLernand, E. J. maj. a. g. St. Louis, Mo.
 McClintock, J. lt. 5 cav., Ft. Wingate, N. M.
 McClure, A. W. 1 lt. 5 cav., Ft. Huachuca, Ariz.
 McClure, N. F. capt. 5 cav., Huachuca, Ariz.
 McDord, J. H. lt. col., St. Joseph, Mo.

McCormick, L. - maj. 7 cav., Ft. Leavenworth.
 McCormack, W. H. capt. 3 cav., Wawona, Cal.
 McCoy, Frank R. capt. 3 cav., Manila, P. I.
 McCrossin, E. J. 614 Nat. Bank Bldg., Birmingham, Ala.
 MacDonald, A. vetn. 11 cav., Ft. Des Moines, Ia.
 MacDonald, G. H. capt. 1 cav., West Point.
 McDonald, J. B. capt. 3 cav., Ft. Assiniboine.
 McEnhill, Frank, 2 lt. 2 cav., Manila, P. I.
 McFadden, J. F. R. 121 Chestnut st., Philadelphia.
 McGee, Oscar A. 1 lt. 2 cav., Manila, P. I.
 McGonnigle, J. A. lt. Leavenworth, Kan.
 McKenney, Henry J. 1 lt. 14 cav., Manila, P. I.
 McKee, Will J. gen., Indianapolis.
 McKinley, James F. 1 lt. 14 cav., Manila, P. I.
 Macklin, J. E. lt. col. 3 inf., Columbus Bks., Mo.
 McMullen, J. L. 2 lt. 15 cav., Ft. Ethan Allen, Vt.
 McMurdo, C. D. vetn. 10 cav., Ft. Robinson.
 McNally, R. E. 1 lt. 3 cav., Gen. hos. Washington Bks., D. C.
 McNamee, M. M. capt. 11 cav., rectory serv. at Railroad Bldg., 135 Larimer st., Denver.
 McNary, F. 1 lt. 6 cav., Ft. Meade.
 Macomb, A. capt. 4 cav., Ft. Huachuca, Ariz.
 Macomb, M. M. maj. art. corps, Washington.
 Maize, Sidney D. 2 lt. 1 cav., Boise Bks., Idaho.
 Mangum, W. P. 2 lt. 2 cav., Ft. Ethan Allen, Vt.
 Mann, H. E. 2 lt. 7 cav., Camp Thomas, Ia.
 Marshall, F. capt. 10 cav., Ft. Ethan Allen.
 Martin, J. - 2 lt. 10 cav., Ft. Ethan Allen, Vt.
 Martin, J. W. 1 lt. 24 inf., Philadelphia.
 Martin, W. F. 1 lt. 2 cav., Manila, P. I.
 Mason, Charles Wm. 1 lt. 11 cav., Manila, P. I.
 Mason, M. P. 2 lt. 10 cav., Manila, P. I.
 Mayo, Charles R. 2 lt. 12 cav., Manila, P. I.
 Meade, Wm. 1 lt. 11 cav., Ft. Riley, Kan.
 Meade, Robert W. capt. 11 cav., Manila, P. I.
 Meigs, Fred, 2 lt. 10 cav., Ft. Leavenworth.
 Megill, S. C. 2 lt. 2 cav., Jefferson Bks., Mo.
 Mercer, W. A. capt. 7 cav., White Oak, Kan.
 Merritt, W. maj. gen. ret., Washington, D. C.
 Metcalf, W. - gen. Lawrence, Kan.
 Meyer, Owen B. capt. 14 cav., Manila, P. I.
 Michie, R. E. L. capt. 12 cav., Manila, P. I.
 Miller, Alex. M. col. eng., Washington, D. C.
 Miller, A. M. capt. 4 cav., Ft. Walla Walla.
 Miller, Archie, 1 lt. 10 cav., Ft. Keogh, Mont.
 Miller, E. L. 2 lt. 3 cav., Jackson, Wyo.
 Miller, O. M. 2 lt. 10 cav., Ft. Meade, S. Dak.
 Miller, Wm. H. 1 lt. 10 cav., West Point, N. Y.
 Mills, Albert, capt. 1 cav., West Point, N. Y.
 Mills, A. 2 lt. 10 cav., Washington, D. C.
 Mills, S. C. 1 lt. 10 cav., Washington, D. C.
 Milton, A. M. 2 lt. 4 cav., Jefferson Barracks.
 Miners, W. gen. ret., The Mitchell Co., Columbus, Ohio.
 Mitchell, George E. capt. 1 cav., Manila, P. I.
 Mitchell, H. E. 2 lt. 3 cav., Boise Bks., Idaho.
 Moffat, Wm. P. 2 lt. 1 cav., Manila, P. I.
 Monahan, J. capt. 10 cav., Jefferson Bks., Mo.
 Moore, Francis, brig. gen., Fort Riley, Kan.
 Moore, J. A. 1 lt. art. corps, Savannah, Ga.
 Morey, Lewis, 1 lt. 12 cav., Manila, P. I.
 Morgan, G. H. maj. 2 cav., University of Minnesota, Minneapolis, Minn.
 Morgan, John M. capt. 12 cav., Manila, P. I.
 Morris, W. A. 2 lt. 6 cav., Ft. Meade, S. Dak.
 Morrison, E. O. Parkersburg, W. Va.
 Morrow, H. M. maj. a. g., San Francisco, Cal.
 Morrow, J. capt. 10 cav., West Point, N. Y.
 Morton, C. E. capt. eng., Washington, D. C.
 Morton, C. K. 1 lt. 14 inf., Ft. Slocum, N. Y.
 Moseley, G. V. H. 1 lt. 10 cav., San Antonio, Tex.
 Moses, G. W. capt. pay dept., Kansas City, Mo.
 Mott, T. B. capt. art. corps, Paris, France.
 Mowry, P. L. 1 lt. 5 cav., Ft. Ethan Allen, Vt.
 Mueller, Albert H. 2 lt. 2 cav., Ft. Riley, Kan.
 Mueller, R. W. capt. Milwaukee, Wis.
 Muller, H. H. 2 lt. 10 cav., Ft. Robinson, Nebr.
 Mumma, Morton, 2 lt. 12 cav., Manila, P. I.
 Munro, H. N. 2 lt. 1 cav., Ft. Sam Houston.

LIST OF MEMBERS.

Taylor, T. B., 1st lt. 11 cav. Jefferson Bks. Mo.
Taylor, W. R., 1st lt. 3 cav. Ft. Assiniboine
Tempany, J., vetn. 9 cav. Ft. Walla Walla
Terrell, H. S., 1st lt. 10 cav. Ft. Mackenzie, Wyo.
Thayer, Arthur, capt. 3 cav. World's Fair, St. Louis.
Thomas, C. O., jr., 1st lt. 1 cav. Manila, P. I.
Thomas, Earl D., col. 11 cav. Ft. Des Moines
Tilford, J. D., 1st lt. 1 cav. Ft. Clark, Texas.
Tomlinson, H. H., col. ret., Westminster, Maryland, Md.
Tompkins, P. D., 2lt. 10 cav. Ft. Mackenzie
Tompkins, E. K., 1st lt. 11 cav. Jefferson Bks.
Towar, Albert S., col. pay dept., Chicago
Towles, J., churchill, maj., Houston, Tex.
Townsend, C. C., capt. Greeley, Col.
Townsend, D. C., Corsicana, Tex.
Townsend, Orval P., capt. Ft. Haver
Traub, Peter, 1st capt. 5 cav. West Point
Treat, B. G., capt. art. corps, West Point
Tremaine, Wm., 1st lt. 15 cav. Ft. Myer Va.
Tripp, S. O., 1st col. Peoria, Ill.
Trippe, P. E., capt. 12 cav. Richmond, Va.
Trout, Harry G., capt. 2 cav. Manila, P. I.
Troxel, Orlando, 2lt. 12 cav. Manila, P. I.
Tucker, W. F., lt. col. pay dept., Portland, Ore.
Turner, Fred, 6, 11c, 4 cav. Ft. Meade
Turabull, W., 1st lt. M. D. Ft. Strong, Mass.
Tuthill, A. M., capt. Morenci, Ariz.
Tyler, Geo. P., 1st lt. 2 cav. Manila, P. I.
Tyn, J., vetn. 10 cav. Ft. Meade
Valentine, Wm. S., capt. 5 cav. Ft. Wingate
Valiant, K. D., 2lt. 3 cav. Ft. Yellowstone
Van Deusen, G. W., capt. art. Manila
Van Leer, S., 1st lt. 15 cav. Ft. Myer Va.
Van Natta, T. F., jr., 2lt. 5 cav. Fort Scott, T.
Vans, Agnew, R. S., ret. 3 cav. Ft. Apache, Ariz.
Van Voorhis, D. 1st lt. 3 cav. Ft. Leavenworth
Vardum, A. M., maj. 7 cav. Camp Thomas, Va.
Vedra, S. P., capt. 10 cav. Silver City, N. M.
Vidmer, Geo., col. 1st cav. World's Fair, Station, St. Louis.
Viele, P., col. ret., Los Angeles, Cal.
Vierra, F. M., lt. salinas, Cal.
Vroom, P. D., brig gen. ret., care Hdqrs. San Francisco.
Wade, James F., maj. gen. Manila, P. I.
Wade, John P., capt. 2 cav. Manila, P. I.
Wagner, A. L., col. 4 g. dept. 233rd Place, Washington, D.
Wagner, H. H., col. ret., 301 W. 43rd St. N. Y. City
Waite, H. De H., 1st ret., Berkeley, Cal.
Walcutt, J., has. 1st, 3 cav. pay. gm. dept. Prescott, Ariz.
Waldo, Rinelander, 1st lt. 17 inf. Manila, P. I.
Walker, K. W., capt. 15 cav. Ft. Myer Va.
Walker, Kirby, capt. 11 cav. Manila, P. I.
Walker, R. W., 1st lt. 5 cav. Ft. Huachuca, Ariz.
Wallach, E. R., 1st lt. 3 cav. Ft. Assiniboine
Walsh, R. D., capt. 2 cav. Ft. Walla Walla
Wassard, J. D., capt. cor. Market and Jackson St. Chicago
Warburton, E., capt. 704 Chestnut St. Philadelphia.
Ward, F. M., col. 43 South street, New York
Ward, F. K., lt. col. 1 cav. Ft. Sam Houston
Warren, Rawson 2lt. 11 cav. Ft. Sheridan
Wassell, Wm. H., capt. 22 inf. Manila, P. I.
Waterman, John C., capt. 7 cav. Grand Rapids
Watrous, J. A., maj. pay dept. Omaha, Neb.
Watson, Jas., capt. 10 cav. Ft. Slocum, Kansas
Watson, J. H., 2 cav. Jefferson Bks. Mo.
Watts, J. H., maj. 5 cav. Ft. Huachuca, Ariz.
Wells, A. B., brig gen. ret., Geneva, N. Y.
Wells, B., capt. Tulleride, Cal.
Wesendorf, Max., capt. ret., Frankenhäusen, Kyffhäuser, Germany
Wesson, J., has. M., 1st lt. 9 cav. West Point
West, E. S., 1st lt. 7 cav. Chickamauga Park, Ga.
West, P. L., col. Insp. gen., Oklahoma City
West, P. W., col. 11 cav. San Francisco
Westmoreland, Wade H., 2 lt. 11 cav. Fort Riley
Weismore, W. B., maj. Allenhurst, N. J.

Weyrauch, Paul H., 2 lt. 14 cav., Manila, P. I.
 Wheeler, Wm. F., 2 lt. 5 cav., Whipple Bks.
 Wheeler, Fred, maj. ret., Berlin, Wis.
 Wheeler, H. W., maj. 11 cav., Ft. Sheridan.
 Whigam, W. H., capt. 30 Loomis st., Chicago.
 White, Geo. F., capt. (cav.) qm. dept. Presidio, San Francisco.
 White, H. A., capt. 11 cav., Ft. Des Moines.
 Whitehead, H. C., capt. 10 cav., Ft. Robinson.
 Whitesides, J. G., lt., 3rd floor Keith Bldg., Philadelphia, Pa.
 Whitlock, F. O., 1 lt. 14 cav., West Point.
 Whitman, W. M., capt. 13 cav., Manila, P. I.
 Whitwade, S. M., brig. gen. ret., Army and Navy Gen. Hosp., Hot Springs, Ark.
 Whitwade, W. W., 1 lt. 15 cav., Ft. Myer, Va.
 Wiseman, Henry, 176 Grove st., Brooklyn, N. Y.
 Wilson, John W., 1 lt. 13 cav., Manila, P. I.
 Williams, A. K., capt. 3 cav., Ft. Apache, Ariz.
 Williard, Harry O., capt. 5 cav., 16th and Dodge sts., Omaha, Neb.
 Willis, H. S., lt., 86 Allen St., Albany.
 Wilson, J. C., maj., 144 22nd st., Chicago, Ill.
 Wilson, James H., brig. gen. ret., 136 Rodney Ave., Wilmington, Del.
 Winans, E. B., jr., capt. 4 cav., Ft. Riley, Kan.
 Windsor, Henry, jr., Revere Copper Co., Boston, Mass.
 Winfree, S. W., 2 lt. 9 cav., Wawona, Cal.
 Winham, F. W., capt., Salinas, Cal.
 Winn, John S., capt. 2 cav., Manila, P. I.
 Winnie, C. L., 1 lt. 5 cav., Ft. Huachuca.
 Wint, Theodore J., brig. gen., Omaha, Neb.

Winter, J. G., jr., 2 lt. 6 cav., Ft. Meade, S. Dak.
 Winter, M. A., col., 339 Pennsylvania ave., Washington, D. C.
 Winterburn, G. W., 1 lt. 9 cav., Fort Leavenworth.
 Winters, Wm. H., 1 lt. 13 cav., Manila, P. I.
 Wise, H. D., capt. 9 inf., Madison Bks., N. Y.
 Wisner, J. P., maj. const. art., Ft. Miley, Cal.
 Wood, Edward E., col., West Point, N. Y.
 Wood, John P., lt., 521 N. 23rd st., Philadelphia.
 Wood, Leonard, maj. gen., Manila, P. I.
 Wood, Robert E., 1 lt. 3 cav., West Point, N. Y.
 Wood, Thomas J., brig. gen. ret., maj. gen., 121 N. Main st., Dayton, Ohio.
 Woodruff, Charles A., gen. ret., Raleigh, N. C.
 Woodruff, Charles A., brig. gen. ret., 2302 Van Ness ave., San Francisco, Cal.
 Woodruff, Wm. S., 1 lt. Porto Rico regt., Carey, Woodward, Samuel L., lt. col. 7 cav., Camp Thomas.
 Wotherspoon, W. W., maj. 6 inf., Ft. Leavenworth.
 Woude, A. J., 1 lt. 6 cav., Ft. Keogh, Mont.
 Wright, E. S., capt. 1 cav., Ft. Sam Houston.
 Wright, Wm. R., lt., 71 Leonard st., New York.
 Yates, A. W., capt. qm. dept., Portland, Me.
 Yates, Wm., capt. 14 cav., Laramie, Wyo.
 Young, E. C., col., Chicago.
 Young, Samuel B., lt. gen. ret., 25 E 6th st., New York City.
 Zane, Edmund L., 2 lt. 14 cav., Manila, P. I.
 Zell, Edward M., 2 lt. 7 cav., Camp Thomas.
 Zion, George A., maj. eng., Wheeling, W. Va.

CAVALRY OF THE NATIONAL GUARD.

NOTE.—The following States and Territories have no mounted troops: Alaska, Delaware, District of Columbia, Florida, Indiana, Iowa, Kansas, Kentucky, Maine, Michigan, Minnesota, Montana, Nevada, North Carolina, North Dakota, West Virginia, Vermont.

Unless otherwise noted location of troop is address of officers of same organization.

ALABAMA

(Headquarters: Camdes, Ala.)

Maj. James T. Beck
 Capt. A. G. Forbes, Adjutant, Montgomery
 Capt. Jno. F. Burns, Q. M., Burnsville
 Capt. L. L. Leaster, Commissary, Montgomery
 Capt. E. H. Kilpatrick, Surgeon

TROOP A—MONTGOMERY

Capt. W. O. Gamble
 1st Lt. W. W. Walker
 2d Lt. Theo. Robinson
 Jr. 2d Lt. C. E. Dexter

TROOP B—CAMDES

Capt. J. D. Jenkins
 1st Lt. O. J. Speer
 2d Lt. E. B. Tait
 Jr. 2d Lt. S. W. McIntosh

TROOP C—SENA

Capt. V. B. Atkins
 1st Lt. John S. Ford
 2d Lt. G. C. Phillips
 Jr. 2d Lt. J. P. Doherty

TROOP D—BIRMINGHAM

Capt. E. J. Merrossin
 1st Lt. C. E. Price
 2d Lt. C. H. Mondy
 Jr. 2d Lt. A. J. Hall

ARIZONA.

FIRST CAVALRY TROOP—NOGALES.

Capt. Charles E. Perkins
 1st Lt. Phil Herold
 2d Lt. Emery L. Halfant

SECOND CAVALRY TROOP—MORENO.

Capt. A. M. Tuthill
 1st Lt. James N. Purdum
 2d Lt. Hugh F. McGonigle

ARKANSAS

Maj. M. C. House, Commanding, Panola
 2d Lt. Jno. F. Reid, Adjutant, Panola

TROOP A—PANOLA

Capt. E. A. Howell
 1st Lt. J. J. Brewer
 2d Lt. J. E. Brown

CALIFORNIA

TROOP A—SAN FRANCISCO

Capt. Charles Jansen, 224 Washington St.
 1st Lt. Chas. F. Wells, 30 Montgomery st.
 2d Lt. Chas. M. Fickert, 50 California St.

TROOP B—SACRAMENTO

Capt. Saml W. Kay, 1114 Q St.
 1st Lt. Oscar J. Bollen, 42 M St.
 2d Lt. Thomas S. Kelly, 1601 10th St.

TROOP C—SALINAS

Capt. Charles Finkle
 1st Lt. Fred W. Wickham
 2d Lt. F. M. Vierra

TROOP D—LOS ANGELES

Capt. Jno. D. Fredericks, Co. Court House
 1st Lt. A. C. Freeman, 46 Laughlin Block
 2d Lt. Earl W. Jones, 717 San Pedro St.

COLORADO

Headquarters—Denver

Maj. Zeph T. Hill, Commanding
 1st Lt. W. R. Eaton, Adjutant

TROOP A—TELLURIDE

Capt. Bulkely Wells
 1st Lt. John K. Railway, Norwood
 2d Lt. Louis J. Romax

TROOP B—DENVER

Capt. ———
 1st Lt. D. W. Strickland
 2d Lt. Carleton A. Kelley

TROOP C—DENVER

Capt. H. D. Smith
 1st Lt. C. C. Carl
 2d Lt. L. Dickinson

TROOP D—NEENAH

Capt. George L. Grant
 1st Lt. George E. Vasher
 2d Lt. Ambrose Odland

CONNECTICUT

TROOP A—NEW HAVEN

Capt. Luzerne Ludington
 1st Lt. William J. Bradnack
 2d Lt. Robert J. Woodruff, Orange

GEORGIA

(Headquarters: Savannah)

Col. P. W. Meldrum, Savannah
 Lt. Col. Beirne Gordon, Savannah
 Maj. B. T. Sinclair, Savannah
 Maj. J. S. Dozier, Atlanta
 Maj. W. P. Waite, Savannah

First Squadron

Capt. W. W. Gordon, Jr., Troop A, Savannah
 Capt. A. G. Cassels, Troop B, McIntosh
 Capt. C. F. Berry, Troop C, Springdale
 Capt. E. J. Jones, Troop D, Reidsville

Second Squadron

Capt. J. W. Hughes, Troop E, Johnston Station
 Capt. Gustavus Ganning, Troop F, Gainesville
 Capt. vacant, Troop G, Darien
 Troop H, vacant

Third Squadron

Capt. H. W. Whaley, Troop I, Jesup
 Capt. vacant, Troop K, Augusta
 Capt. Geo. M. Hoyle, Troop L, Atlanta
 Troop M, vacant

ILLINOIS

FIRST REGIMENT CAVALRY

(Headquarters: 136 Monroe St., Chicago)

Field and Staff

Col. Edward C. Young, 136 Monroe St.
 Lt. Col. Robert B. Fort, Lacon
 Maj. Milton J. Foreman, 100 Washington St.
 Maj. Joseph Wilson, 141 E. 21st St.
 Capt. Willis Counsellman, Adj., La Salle and Jackson Sts.

Capt. Leo Wampold, Q. M., Market and Jackson Sts.

Capt. Burnett Chipperfield, Commissary, Canton

Capt. Henry C. Cassidy, Insp. Rd. Force, 2nd Avenue

Maj. T. Jay Robinson, Surgeon, 187 Grand Boulevard

Capt. Jesse Racine, Asst. Surg., Abingdon

1st Lt. Morton M. Thow, Asst. Surg., 427 Grand Boulevard

1st Lt. Martin Peterson, Squadron A, Chicago

1st Lt. Walter A. Rosenfeld, Squadron A, Rock Island

Capt. Stewart Baker, Veterinarian, Jackson Boulevard

Capt. Rufus A. White, Chaplain, 136 Perry Ave.

First Squadron

TROOP A—CHICAGO
 Capt. Gordon Strong, 25 State St.
 1st Lt. Gustav F. Wheeler
 2d Lt. Joseph W. Mattes

TROOP B—BLOOMINGTON

Capt. Isaac F. Douglass, Shirley
 1st Lt. Louis Foreman
 2d Lt. Bert O. Truener

TROOP C—CHICAGO

Capt. F. S. Dunham, 124 E 48th St.
 1st Lt. Albert E. Butler, 1752 Chicago Ave.
 2d Lt. Ludwig T. Kuehl

TROOP D—SPRINGFIELD

Capt. John W. Vorhes, Middle Hill
 1st Lt. Harry L. Neer
 2d Lt. Charles Waz

Second Squadron.

TROOP E—CHICAGO

Capt. Harry L. Daniels, 527 N. Clark St.

TROOP F—CHICAGO

Capt. Wallace H. Whigam, near Powers Bld.

1st Lt. ————

2d Lt. Warren W. Coffin

TROOP G—PEORIA

Capt. Frank N. Bush

1st Lt. Chas. J. Carlson

2d Lt. Gilbert L. Geign

TROOP H—MACOMB

Capt. E. Lewis Head

1st Lt. Frank M. Russell

2d Lt. Edmond F. Hanson

KENTUCKY

PINEVILLE CAVALRY.

Capt. H. J. Gibson

1st Lt. R. E. Samuel

2d Lt. Mott Lyon

LOUISIANA

FIRST TROOP—NEW ORLEANS

Capt. C. Robert Churchill, 407 Morris Bld.

1st Lt. Wm. S. Hero, 833 Commercial Place

2d Lt. Scudday Richardson, 1436 La. Avenue

Capt. Arthur Nolte, Surgeon, 1308 State St.

SECOND TROOP—MANFIELD

Capt. Henry T. Liverman

1st Lt. R. W. Yarborough

2d Lt. Chas. W. Smith

THIRD TROOP—LAKE CHARLES

Capt. Joseph C. Leiben

1st Lt. S. Arthur Knapp, Jr.

2d Lt. Leland H. Moss

MARYLAND

TROOP A—PIKEVILLE

Capt. Joseph W. Shirley

1st Lt. C. Lyon Rogers, Jr.

2d Lt. J. L. Rodgers

MASSACHUSETTS

(Headquarters: Jamaica Plain)

Maj. Wm. A. Perrins, commanding, Jamaica Plain

1st Lt. John W. Hall, Adj., Boston

1st Lt. John C. Kerrison, Q. M., Revere

Maj. Geo. Westgate Mills, Surgeon, Medford

1st Lt. Arthur W. May, Vet. Surg., Jamaica Plain

1st Lt. Alfred M. Elinn, Paymaster, Roxbury

1st Lt. Albert J. Walton, Inspector of Rifle Practice, Melrose

COMPANY A—BOSTON

Capt. Frank T. Hitchcock, Winthrop

1st Lt. Fred G. Havin, Somerville

2d Lt. Wm. E. Housman

COMPANY D—BOSTON

Capt. Wm. H. Kelley

1st Lt. Eugene A. Coburn, Malden

2d Lt. Samuel T. Sinclair, Cambridge

COMPANY F—CHELMSFORD

Capt. John J. Monahan, West Chelmsford

NEBRASKA

TROOP A—SEWARD

Capt. ————

1st Lt. William S. Baldwin

2d Lt. Amos Thomas

SOUTH OMAHA CAVALRY—SOUTH OMAHA

Capt. Bruce McCulloch

1st Lt. Harry E. Tagg

2d Lt. James H. Duncanson

NEW YORK

Squadron A Three Troops

Headquarters: Madison Ave. and 34th St.

New York City

Maj. Oliver B. Biddemen

1st Lt. Robert C. Lawrence, Adj.

1st Lt. John M. Callaway, Q. M.

1st Lt. Louis V. O'Donohue, Commissary of

Subsistence

1st Lt. Reginald H. Sayre, Insp. of Small Arms

Pract.

Asst. Surg. Capt. Medwin Leale and Russell

Bellamy

1st Lt. George H. Davison, Vet. Surg.

Chaplain David Parker Morgan

TROOP 1

Capt. Edward M. Ward

1st Lt. Merritt H. Smith

2d Lt. Max de Motte Marsellus

TROOP 2

Capt. Howard G. Badgley

1st Lt. Francis C. Huntington

2d Lt. George B. Agnew

TROOP 3

Capt. Herbert Barry

1st Lt. Stowe Phelps

2d Lt. Wm. R. Wright

TROOP B—ALBANY

State Armory, Lark and Elk sts.

Capt. Harry S. Richmond

1st Lt. Ernest L. Miller

2d Lt. Harry S. Willis

TROOP C—BROOKLYN

(North Portland Ave. and Auburn Place)

Capt. Charles I. DeBevoise

1st Lt. James C. McLeer

1st Lt. Edward McLeer

2d Lt. Paul Grout

2d Lt. George J. Morgan

NEW HAMPSHIRE

TROOP A—PETERSBOROUGH

Capt. Chas. P. Davis

1st Lt. Chas. H. Dutton, Hancock

2d Lt. Clifford Gowing

NEW JERSEY

FIRST TROOP—NEWARK

Capt. Wm. A. Bryant, Montclair

1st Lt. Cortland Parker, Jr.

2d Lt. Bertram R. Roome, Arlington

SECOND TROOP—RED BANK

Capt. Edward Field

1st Lt. Frederick W. Hope

2d Lt. Howard Whitfield

NEW MEXICO

Headquarters: Las Vegas, N. M.

Maj. R. C. Rankin, commanding

1st Lt. R. H. Gross, Adj.

2d Lt. R. C. Reid, Q. M., Commissary

TROOP A—LAS VEGAS

Capt. A. P. Tarkington

1st Lt. Edward J. McWenle

2d Lt. Ludwig Wm. Ilfeld

OHIO

TROOP A—CLEVELAND

Capt. Wm. M. Seofield

1st Lt. John E. Morley

2d Lt. Otto Miller

TROOP B—COLUMBUS

Capt. John J. Baird

1st Lt. Robert D. Palmer

2d Lt. Ben W. Chamberlain

OREGON

TROOP A—LEBANON

Capt. Edgar L. Power

1st Lt. Harry A. Elkins

2d Lt. George L. Fry

PENNSYLVANIA

FIRST BRIGADE

Philadelphia City Cavalry

FIRST TROOP

Armory 23d St. above Chestnut

Capt. John C. Groome

1st Lt. J. Franklin McFadden

2d Lt. J. Willis Martin

Cornet, William E. Bates, Merion

SECOND TROOP

Armory 23d and Chestnut Sts.

Capt. Frank Earle Schermerhorn

1st Lt. John P. Wood

2d Lt. Charles Welsh Edmunds

1st Lt. and Asst. Surg. W. A. Newman Dor-

land, 120 S. 17th St.

2d Lt. and Q. M. Randolph Sailer

TROOP A

Armory N. 41st and Mantua Ave.

Capt. Barclay H. Warburton

1st Lt. Norman MacLeod

1st Lt. Albert Sidney Rambo

2d Lt. John Garrett Whitesides

2d Lt. and Q. M. Parker Ross Grubb

SECOND BRIGADE

SHERIDAN TROOP

Armory: Tyrone

Capt. C. S. W. Jones

1st Lt. Luther Fleck Crawford

2d Lt. Harry S. Fleck

2d Lt. and Q. M. Robert A. Zentmyer, Spruce

Creek

THIRD BRIGADE

GOVERNOR'S TROOP

Armory: Harrisburg

Capt. Frederick M. Ott

1st Lt. Charles P. Meek

2d Lt. John M. Major

2d Lt. and Q. M. Edgar C. Hummel

RHODE ISLAND

Headquarters: Pawtucket

Maj. William A. Maynard, Providence, Com-

manding

1st Lt. Leo F. Nadeau, Adj., Providence

Maj. Charles F. Sweet, Surg., Pawtucket

1st Lt. Lucius H. Newell, Q. M., Pawtucket

1st Lt. Henry D. C. Dubrie, Commissary, Provi-

dence

1st Lt. Edward M. Holmes, Paymaster, Cen-

tral Falls

1st Lt. Joseph J. Woolley, Chaplain, Paw-

tucket

TROOP A—PAWTUCKET

Capt. Charles Allenson, Central Falls

1st Lt. P. Henry McKenna, Valley Falls

2d Lt. John T. McAuley, Lonsdale

TROOP B—PROVIDENCE

Capt. John J. Richards

1st Lt. Joseph A. Crowshaw

2d Lt. Frank P. Droney

SOUTH CAROLINA

Headquarters: Georgetown

Col. J. R. Parkman, Georgetown

Maj. S. A. Marvin, White Hall

Maj. W. T. Ellerbe, Jordanville

Capt. J. W. Doar, Adj., Georgetown

Capt. F. H. McMaster, Q. M., Charleston

Maj. M. W. Pratt, Judge Advocate, Georgetown

Maj. Olin Sawyer, Surgeon, Georgetown

Maj. A. M. Braliford, Jr., Paymaster, Mullins

Lt. J. D. West, Bat. Adj., Locust

Lt. G. M. Ellerbe, Bat. Adj., Jordanville

Sergt. Maj. Holmes B. Springs, Georgetown

TROOP A—EDGEFIELD

Capt. N. G. Evans

1st Lt. H. L. Bunch

2d Lt. John M. Mays

Add. 2d Lt. T. J. Williams

TROOP B—EDISTO ISLAND

Capt. M. M. Seabrook

1st Lt. P. Seabrook, James Island

2d Lt. G. D. Oswald, James Island

TROOP C—PANOLA

Capt. H. B. Richardson

1st Lt. P. B. Harvin

2d Lt. D. E. Holladay

Add. 2d Lt. J. Q. Mathis

TROOP D—FAXVILLE

Capt. A. J. Richbourg, St. Paul
1st Lt. J. D. Hoyle, Faxville
2d Lt. B. W. Des Champs, Pinewood
Add. 2d Lt. B. R. Hodge, Tindal

TROOP E—HENDERSONVILLE

Capt. John P. Slattery, White Hall
1st Lt. E. A. Warvin, White Hall
2d Lt. G. E. H. Moore
Add. 2d Lt. S. S. Marvin

TROOP G—GEORGETOWN

Capt. H. T. McDonald
1st Lt. Maham W. Pratt
2d Lt. Miles Ballune
Add. 2d Lt. John J. Johnson

TROOP H—ECTAVILLE

Capt. E. G. Cansey
1st Lt. T. P. Jackson
2d Lt. T. J. Hart
Add. Lt. L. L. Thomas

TROOP I—BARREL LANDING

Capt. R. G. W. Bryan, Levy
1st Lt. J. Dan Crosby, Levy
2d Lt. P. D. Hubbard, Levy

TROOP K—SAMPIT

Capt. B. O. Bourne
1st Lt. D. N. Bourne
2d Lt. W. S. McDonald

TROOP L—CONWAY

Capt. D. A. Seivrey
1st Lt. Charles J. Eppe
2d Lt. S. C. Long

SOUTH DAKOTA

(Headquarters: Watertown)

Major Cyrus C. Carpenter, Watertown
Lt. J. F. Armstrong, Adjt., Faulkton
Lt. Harry G. Boocock, Asst. Q. M., Faulkton

TROOP B—PIERRE

Capt. Samuel Logan
1st Lt. W. C. Notmeyer
2d Lt. Oscar Nelson

TROOP C—WATERTOWN

Capt. Frank E. Munger
1st Lt. A. T. Hopkins
2d Lt. Frank L. Bramble

TENNESSEE

TROOP A—NASHVILLE

Capt. George F. Hagar
1st Lt. W. F. Hardin
2d Lt. W. G. Bush

TROOP B—CHATTANOOGA

Capt. J. P. Fyffe
1st Lt. R. S. Sharp
2d Lt. W. J. Nixon

TROOP C—TULLAHOMA

Capt. Jonathan H. Tripp
1st Lt. Thomas B. Bean
2d Lt. Joel W. Chitwood

TEXAS

(Headquarters: Houston)

Major Churchill Towles, Houston
1st Lt. Paul J. Blackmon, Adjt., Corsicana
2d Lt. Claude C. Cunningham, Q. M., Beaumont
Chaplain Walker K. Lloyd, Paris

TROOP A—HOUSTON

Capt. Ira D. Davis
1st Lt. G. H. Winkler
2d Lt. M. C. Wellborn

TROOP B—AMARILLO

Capt. W. H. Ingerton
1st Lt. John S. McKnight
2d Lt. Frank Douglas

TROOP C—AUSTIN

Capt. W. H. Younger
1st Lt. D. D. Smyth
2d Lt. Frank Corwin

TROOP D—CORRICANA

Capt. W. H. Murphy
1st Lt. C. C. Cunningham
2d Lt. J. F. Cullinan

UTAH

TROOP A—SALT LAKE CITY

Capt. ———
1st Lt. Earl V. Smith, Commanding
2d Lt. Albion W. Caine

VIRGINIA

TROOP B—SURREY

Capt. Henry C. Land
1st Lt. Aurelius W. Bohannon
2d Lt. Robert E. Fergusson, Norfolk, Va.

WASHINGTON

TROOP B—TACOMA

Capt. Everett G. Griggs
1st Lt. Marcus C. Davis
2d Lt. H. U. Palmer

WYOMING

ONE TROOP—CHEYENNE

Capt. Robert LaFontaine
1st Lt. George Gregory
2d Lt. Thomas Myatt

WISCONSIN

TROOP A—MILWAUKEE

Capt. Robert W. Mueller
1st Lt. Wm. J. Classen
2d Lt. Fred H. Coe

Publisher's Notices.

MERCHANT & CO., LTD.

The death of Clarke Merchant, formerly Lieutenant Commander United States Navy, occurred on Saturday, May 7th, at his home in Philadelphia, Pennsylvania. The deceased was founder and president of the well known Philadelphia firm of Merchant & Company, Limited, manufacturers of high grade roofing tin and the Star ventilators, largely used in our modern barracks.

MOUNT TAMALPAIS MILITARY ACADEMY.

The JOURNAL acknowledges the receipt of a very handsomely gotten up prospectus of Mount Tamalpais Military Academy of San Rafael, California. A glance through its pages, which contain many excellent reproductions of its buildings, the grounds and scenes, is almost equivalent to an actual visit to this well known institution. For several years Captain M. A. Batson has been attached to the academy as military instructor and Sergeant Thomas J. Fansing, a retired soldier of the cavalry arm, is the instructor in horsemanship. The official reports upon this institution are among the very best. "There is no institution for training boys in a preparatory course for college superior to it," says the Inspector General of the army. Army officers will do well in noting this before placing their sons. Headmaster Arthur Crosby will be pleased to furnish all the information desired.

JOHN MORRELL & CO., LTD.

At Ottumwa, Iowa, is located the great packing plant of John Morrell & Co., limited. Its brand of "Iowa Pride" has a reputation for delicious flavor. The firm is prepared especially for discriminating buyers who desire the best grade that can be secured. This firm has branch houses in many of the large cities of the United States. Commanding officers should see to it that these goods are kept on hand for garrison trade.

CODE PORTWOOD CANNING CO.

Among the Pacific Coast canning companies none stand higher in the estimation of the trade than the Code Portwood Canning Co. "By their fruits ye shall know them." is the firm's motto, and is well applied. Its canned goods are largely used on the Coast, and a fair share of their business is done with the army and navy. It deserves it.

THE GEO. B. PECK DRY GOODS CO.

The Geo. B. Peck Dry Goods Company of Kansas City has established a reputation that easily places it second to none among the great firms in the West. As is well stated by the company in its advertisement, its rapid growth is due to the system established for the purchase of its stock and the corps of representatives maintained at the firm's expense at all foreign points where manufactures and fashion must be closely observed, that the trade at home may have the benefit of the latest line of goods made and new fashions to appear. The Geo. B. Peck Dry Goods Company is well known in army circles, and their patrons always appreciate its efforts to please them. The JOURNAL is pleased to make this reference to the firm, for it deserves well of all who have dealt with it.

THE E. L. ANDERSON DISTILLING CO.

The E. L. Anderson Distilling Co., of Newport, is among the manufacturers in its line that stands at the very top of

whiskey producers who do a mail order business. A good share of it finds its way into the army. "We have been well and favorably known among the officers of the army and navy for years." is a statement made in its advertisement which the JOURNAL is pleased to carry.

C. L. KNAPP & CO.

The JOURNAL is pleased to call attention to C. L. Knapp & Co., of Leavenworth, who do an extensive business both as wholesalers and retailers in china and glassware. This firm is among the largest importers in this section, and is one of the leaders among the many handsome stores of which Leavenworth has reason to boast.

RICHARDSON & BOYNTON.

No introduction is needed to the Warm-air furnaces and cooking ranges used so extensively in the army and supplied by Richardson & Boynton, of New York and Chicago. Constructing quartermasters should not fail to send to one of these two houses for a descriptive catalogue, which the firm is ready to supply. It is the universal expression among those who have used the furnaces and ranges that they give general satisfaction.

BITTMANN-TODD GROCER CO.

Leavenworth's leader among her wholesale grocers is the Bittmann-Todd Grocer Company. It is among the oldest grocery firms on the Missouri River. It has had, in its time, immense transactions with the commissary department of the army amounting to millions of dollars. Its very high standing in trade circles, and particularly among army men, is proof of the high character of the men who have in the past and do at present manage this great establishment. Its trade in the army is still very large, and is likely to continue so long as its honorable business methods are maintained.

FRANK MILLER'S HARNESS DRESSING.

Frank Miller's Harness Dressing is recognized by cavalry and artillery men as the best material for "getting a shine on" the saddles and harness. It is in general use among mounted men in the army, and by the teamsters in the

quartermaster's department, who take pride in keeping up the harness so that the team driven by them may make a good appearance, is evidence of its popularity.

BRUNSWICK-BALKE-COLLENDER CO.

The Brunswick-Balke-Collender Co., who are known the world over for the standard billiard and pool tables it manufactures, can find its product in almost every troop, battery and company amusement rooms. Of the twenty-five organizations at Fort Leavenworth there is not one without it, and several have two of their tables. The company keeps one man employed here looking after these tables and making repairs that may be found necessary. To give satisfaction is its first desire.

MEXICAN AMOLE SOAP CO.

The man behind the gun heads an advertisement of the Mexican Amole Soap Company, of Peoria, Illinois. Its shaving cream is the soldier's friend because of its handiness for field use. Army barbers find it to be of prime quality. Its Diamond King Soap established a reputation during the Spanish War among troops who were fortunate to be able to make use of it. It possesses not only thorough cleansing, but healing qualities as well. The same company also manufactures shampoo of extraordinary merit, and army men, particularly barbers, will do well to secure these excellent articles.

MEHLBACH SADDLE CO.

Cavalrymen need no introduction to the Whitman saddles, manufactured by the Mehlbach Co., of 106 Chambers Street, New York. They have been tried in hard fields and always found easy for the rider. This company manufactures many specialties for the horseman, and is commended to cavalry officers. At Fort Leavenworth fifty Whitman saddles are in use by the student officers.

SHAEFFER BROS. & PARNELL MANUFACTURING CO.

A pure red oil laundry soap, made according to requirements of the government, finds in the subsistence department a frequent purchaser of large quantities. It is of ex-

cellent quality and a thorough renovator for uniform clothing. It is manufactured by Shaeffer Bros. & Parnell Manufacturing Company, of St. Louis. The company deserves the army patronage for the high quality of its product.

KASPER OATS CLEANER.

A distinguished cavalry officer writes that the Kasper Oats Cleaner, advertised in the JOURNAL, should be in use in every horse and mule stable in the army. It so thoroughly removes dirt, weed, seeds and all foreign matter as to enable the hostler with but very little trouble to give the animal under his charge "clean oats," and clean oats means well-conditioned horses and mules. Officers in charge of public animals should communicate with the firm as to prices. When you write refer to the JOURNAL.

THE HUDSON-KIMBERLY PUBLISHING CO., KANSAS CITY.

Is among the leaders of American publications, particularly of military text books. In this field they are second to none in the United States. In the army they are well known and are rapidly extending their trade among the National Guard, where there is a great demand for text books and such publications as will assist in showing the way to professional advancement.

COLTS PATENT ARMS MFG. CO.

To say anything about the arms manufactured by the Colts Company, of Hartford, Connecticut, in the way of commendation is like adding fuel to the flames. The reputation of this firm is so thoroughly established, and its product so well known among army men, that anything the JOURNAL may say for this firm would give it no higher place in the estimation of those who have used Colts arms. It is a thoroughly American institution, and every American is, of course, proud of its name.

RUDOLPH WURLITZER CO.

To be the purveyors to the army, navy, marine corps, National Guard and military colleges for every article in the music line is a distinction but few music houses in the coun-

try can claim. The Rudolph Wurlitzer Company of Cincinnati is one of such firms, and came to the title because it deserved it. Army musicians have long recognized this music company as leaders. Much of their business comes from every section of the army and musical organizations of other branches of the public defense. Their reputation for square dealing has given them a standing among the musical houses of the country that those who do a mail order business always recognize. If you want a catalogue of what The Rudolph Wurlitzer Company can supply you, send for one. The address is found at the bottom of its advertisement in this JOURNAL.

SAML DODSWORTH BOOK CO.

Among the oldest firms in the Missouri Valley, the Saml Dodsworth Book Company of Leavenworth easily leads. It was established nearly fifty years ago, and is managed to-day by the third generation in direct succession. Its business covers several States. As blank book manufacturers they have tickled the fancy of thousands of government clerks, having supplied the departments for almost the entire period of its existence. As book binders they are excelled by none, and stand at the very top in the matter of low prices.

KOKEN BARBER SUPPLY CO.

A first class barber shop in a troop, battery or company is one of the adjuncts desired by every commander. If managed by a first class barber, which most commanders prefer, only first class furniture will be found in such shops. The prime need of a well regulated shop is a good chair. Many of them are known to be supplied with "Koken's Chair of the Day." It is strong, simply constructed, and exclusive in design. The Koken Barber Supply Company is ready to supply the needs of every barber shop. The firm is well known throughout the army and will be pleased to furnish you a handsome catalogue.

RICHARD SPRINGE, LEAVENWORTH.

The establishment of the General Service and Staff College compelled many Leavenworth firms to make a specialty

of military equipments to meet the requirement of the two hundred and more officers stationed at Fort Leavenworth, and among these Richard Springe easily has the lead. He will quote you prices on application and fill orders for any station within the continental limits of the United States or the islands.

GEO. A. BAYLE.

Geo. A. Bayle, of St. Louis, is a maker of high grade food products, and its quality is the test of its cheapness. These food products are largely used in the army through the commissary department. Special attention is called to the new advertisement in this issue for Bayle's "Original Horseradish Mustard." It makes "eating a great pleasure." Mr. Bayle solicits correspondence, and it is hoped our post exchange officers will avail themselves of this invitation.

DEIMEL LINEN MESH CO.

The JOURNAL is informed that the Deimel Linen-Mesh Co. had an attractive exhibit at the American Medical Association meeting at Atlantic City in June. Dr. Deimel underwear is deservedly popular with the physician, who knows that the linen-mesh is a delight to the skin and that its absorbent qualities quickly remove all bodily moisture, giving a perpetual feeling of cleanliness and comfort.

JOHN G. HAAS.

John G. Haas, the army tailor, with headquarters at Lancaster, Pa., and a branch at Washington, D. C., has first place in the heart of every officer who appreciates a fitting uniform. Mr. Haas, from a very small beginning has succeeded in building up for himself a reputation among army officers for excellence in workmanship and fair dealings, a distinction any man or firm may feel proud to possess.

S. T. SMITH COMPANY.

The S. T. Smith Company, of New York, whose removal from No. 10 Park Place to No. 11 Barclay Street is announced in this issue of the JOURNAL, supplies the old reliable "Diamond" brand typewriter ribbons and carbon papers. In fact, anything in the line of supplies for typewriters is made

a specialty by this firm, and if you write them they will be pleased to send you one of their New Century catalogues.

CHASE & SANBORN.

Chase & Sanborn, importers of coffee, are established in Boston, Chicago and Montreal. Their Seal Brand coffee is well known in the army, where it has a well established reputation. The firm does an immense business in both army and navy circles.

HENRY ETTENSON & SONS DRY GOODS CO.

The largest department store in Kansas is at Leavenworth, known as the Henry Ettenson & Sons Dry Goods Company. During the past twenty years this firm has done an immense business with army people, and make a specialty of catering to the military. Mail orders from any section of the United States are solicited.

C. A. LAMMERS BOTTLING CO.

Troops stationed in Colorado, Wyoming, Utah and New Mexico are staunch patrons of the C. A. Lammers Bottling Company, who are exclusive bottlers for the Ph. Zang Brewing Company of Denver, Colorado. The product of this brewery has a well established reputation and trade once secured is always retained by the firm.

WOOLFE & WINNIG.

Leavenworth boasts of several handsome department stores. Among the recent acquisitions is the firm of Woolfe & Winnig. Army people have been able to find within this department store about everything they desire. Its prices are reasonable and all patrons receive equal treatment. The firm seeks mail orders from any point in America, and will consider favorably applications by officers to open accounts.

W. & L. E. GURLEY.

Transits, levels, compasses, plane tables, etc., in fact any article desired by civil engineers and surveyors is manufactured by W. & L. E. Gurley, of Troy, N. Y. This firm has been doing business since 1845, and is well known through-

out the army. It will furnish estimates and illustrated catalogues on application.

F. R. RICE MERCANTILE CO.

A post exchange store without a "Mercantile," manufactured by the F. R. Rice Mercantile Cigar Company of Saint Louis, in stock, is incomplete. The "Mercantile" is a favorite among those who are judges of a good smoke, and these should not be deprived of the best when the brand can be so easily secured.

SANDFORD & SANDFORD.

No. 176 Fifth Avenue, New York, is the headquarters of the prince of merchant tailoring firms of Sandford & Sandford. This firm is very moderate in its prices and makes every effort to please its patrons. If you are in New York and passing down Fifth Avenue, don't fail to pay the gentlemen a visit. You will receive a hearty welcome, whether you leave an order or not. Remember the number—176 Fifth Avenue.

THE SCHMELZER ARMS CO.

The Schmeltzer Arms Company of Kansas City is the leader in sporting lines west of New York. A visit to its establishment will be proof of this assertion. Its managers possess the vim so characteristic of Kansas City's business men, and who have placed their city in the front rank of commercial centers. The Schmeltzer Company makes special prices to army officers and post exchanges, and solicits their trade. Officers in charge of post gymnasiums will do well to write them before purchasing elsewhere.

HATFIELD & SONS.

Established 1833. This is the claim made by Hatfield & Sons, army tailors. This firm grows with age. It has just been compelled to move into larger quarters, by removing from 389 Fifth Avenue to 450 Fifth Avenue. Hatfield & Sons are importers of their own goods, and their uniforms are always acceptable to their many patrons. The quality is what counts in uniforms, and the name of Hatfield is a guaranty of quality.

"HAPPY THOUGHT" GARMENT HANGERS.

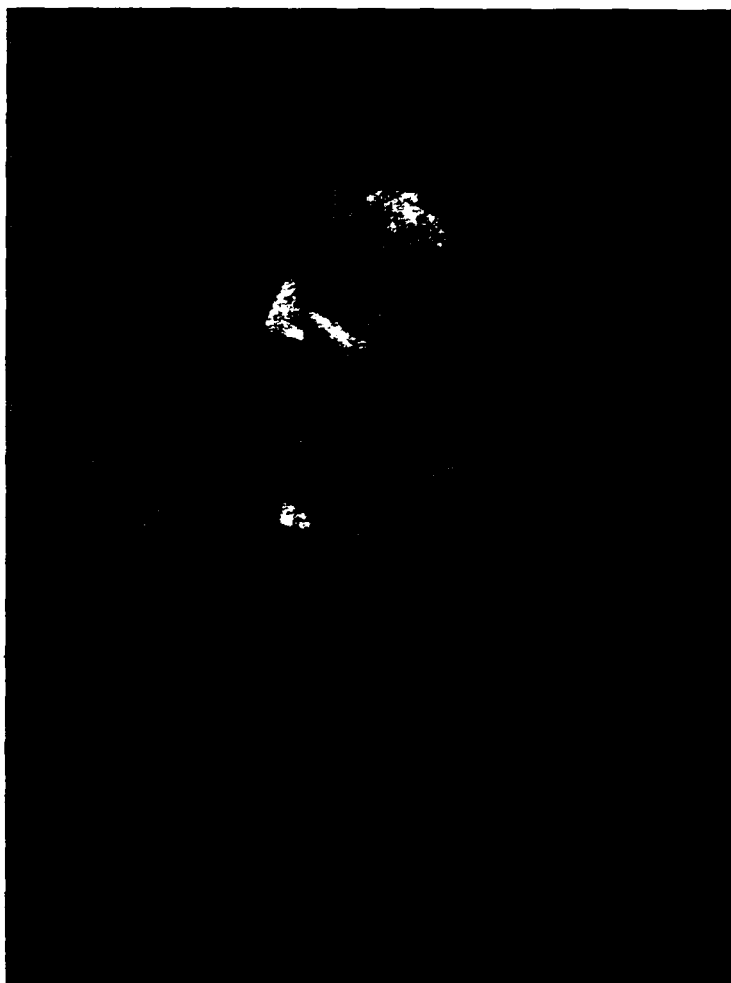
To provide a convenient, inexpensive and efficient device by which a man's clothing may be kept free from wrinkles, "bagging," etc., is indeed a happy thought. This has been accomplished to a most satisfactory degree by the Happy Thought Hanger Co., of Sparta, Wisconsin. Perhaps no one more than a soldier, especially a cavalryman, will appreciate this ingenious device. Both coat and trousers hangers are made of nickel-plated steel wire and are compact, light and efficient. By their use the crease is preserved in the trousers and "bagging" at the knees and wrinkling of the cloth are prevented. The coat hanger is adjustable and telescopes together, occupying little space when not in use, and by their use the uniform is kept in most perfect order. They weigh but a few ounces, and occupy so little space that they are transported without inconvenience. Their use will contribute much to the appearance of the possessor, and they cost but a trifle. They are already in use by many of the officers and men in the army and navy, as well as in the militia, and in many instances whole companies have provided themselves with these hangers, and in every instance purchasers have expressed themselves as much pleased with them. Every officer will appreciate their value, whether used for his own uniforms or by his men in their barracks. They are indeed a "Happy Thought."

CARL HOFFMAN MUSIC CO.

The Carl Hoffman Music Co., of Kansas City, Mo., is one of the oldest established houses in the West. Mr. Hoffman was in business for many years at Leavenworth, and closely identified in business with army people. He understands their needs in the music line, and any order sent the house by mail receives prompt and careful attention.

CASPER COMPANY.

Made by honest "Tar Heel" farmers and aged in the mellow sunshine. Read the adv. of the Casper Co. in another column.



HON. WM. H. TAFT.
SECRETARY OF WAR.



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HON. WM. H. CUSTER
SECRETARY

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AN INCIDENT OF THE YELLOWSTONE EXPEDITION OF 1873.

ABOUT 8 o'clock in the morning of August 11, 1873, on the north bank of the Yellowstone River in Montana, in a spirited fight between eight troops of the Seventh Cavalry under General George A. Custer and Sioux Indians, Lieutenant Charles Braden, of this regiment, was shot through the upper left thigh. The bullet, from a Henry rifle, fired at a range of not over fifty yards, went clear through the leg, badly shattering the bone and splitting it down to the knee. The Lieutenant was dismounted and walking with his right side towards the Indians. The left leg was in the air when struck and as the wounded man fell, his weight coming on the broken bone, caused the ends to pass each other and stick into the flesh, making a very ugly wound. One of the sergeants with his detachment wore a long black silk scarf. This he took off and tied it as tight as he could around the leg above the wound.

Lieutenant Braden's detachment numbered about twenty men of L Troop, and was an advanced guard about a mile ahead of the main command. The detachment met a large number of mounted Indians, but succeeded in holding its



position until several troops of the regiment arrived and drove off the Indians, pursuing them some distance up the valley.

Lieutenant, now Commissary General Weston, rode to where Braden lay, unstrapped an extra blanket from his saddle and left four men and a bugler to take charge of the wounded man, ordering them to put him in the blanket and take him to where Custer had established his headquarters. The bugler was to lead the horses and carry the carbines of the four soldiers, who carefully put Braden in the blanket, and each carrying at one corner, started for the field hospital.

It was necessary to go across several large ravines, and up and down hills. The bugler, who became scared, could not manage his extra horses and carry the four carbines, disappeared. This left the party unarmed. Then one of the contract doctors with the expedition appeared and said the Indians were coming back, and the carrying party had better hurry or they would all be killed. This message greatly accelerated the pace, and the party went as rapidly as possible. Some patches of cactus had to be crossed; the prickles were long, dry and brittle.

For a few minutes the men carrying the blanket were able to keep it from touching the ground, but they soon became tired and the injured man frequently hit the cactus. Many of the prickles went through the blanket into the flesh and broke off. It seemed as if every square inch of his anatomy that had come into contact with the cactus had at least a hundred of such broken spears. They afterwards were the cause of much pain and suffering.

After awhile the party reached headquarters. Dr. Ruger, brother of General Ruger, U. S. A., retired, pulled the pieces of bone out of the flesh and made the patient as comfortable as possible. There were no appliances to dress such a wound, and there was nothing to do but wait for the wagon train to arrive, which it did about sundown.

Dr. James P. Kimball, U. S. A., recently deceased, was the chief medical officer of the expedition. There were no splints or plaster bandages in the medical wagon, so the doctors, aided by a blacksmith and a carpenter, having obtained

a few pieces of boards by breaking up some boxes used for commissary stores, made a trough long enough to hold the entire leg. The trough, or box, was open at the top; across the bottom was fastened a tourniquet, which held two strips of adhesive plaster, about three inches wide, fastened one on the inside and the other on the outside of the leg, and extending up to where the bone was broken. On the left side of the box was screwed an iron rod, reaching along the body and bent at the shoulder so as to pass under the neck. Two other strips of adhesive plaster, about the same width as those used below the break, were put on the leg. One of these strips was stuck to the front of the body and the other to the back, and both were fastened to the iron rod under the neck. The object of these strips was to hold the leg in place and keep the ends of the broken bone from rubbing against each other, and to prevent, if possible, shortening of the leg. Before these strips of adhesive plaster were applied, the leg and body were shaved so that a better hold could be had by the plasters. It is unnecessary to say that the pulling in opposite directions of these strips was not one of the pleasant sensations to which humanity is sometimes treated. A cushion of tow and cotton was made for the box, and the leg, prepared as above described, consigned to what many said would be its last little bed.

The work of making the box and setting the injured leg was done after dark. The only light was from candles held by soldiers, and was very poor. The doctors said that the pain of setting the broken bone would probably be intense as no anesthetic could be given because none was on hand.

Two officers (one, Lieutenant, now Colonel Godfrey, the other's name cannot be recalled now) were asked to hold the patient's hands so as to keep his finger nails from being sunk into the flesh.

A majority of the five medical officers present favored amputation. Dr. Kimball told the wounded man the result of their consultation, saying that in either case the chances to survive the long journey ahead would be about equal if the leg was cut off or left on. The patient decided to keep his leg.

It was realized by everyone that the task of carrying such a severely wounded man was going to be serious. The expedition could not be delayed on his account. He, with the other wounded, could not be left behind with a small guard, for the command was not to return by the route it was to go. General Custer proposed that a raft of dry cottonwood logs be built and the wounded man, with two men as escort, be floated on it down the Yellowstone River to the nearest post, Fort Buford. The distance was about two hundred and fifty miles, and it was calculated that the current would carry the raft about four miles an hour. The floating was to be done by night, and during the day the raft was to be concealed in the bushes. Lieutenant Benjamin H. Hodgson, Seventh Cavalry, a classmate, afterwards killed in the Little Big Horn fight, asked to go along as one of the attendants.

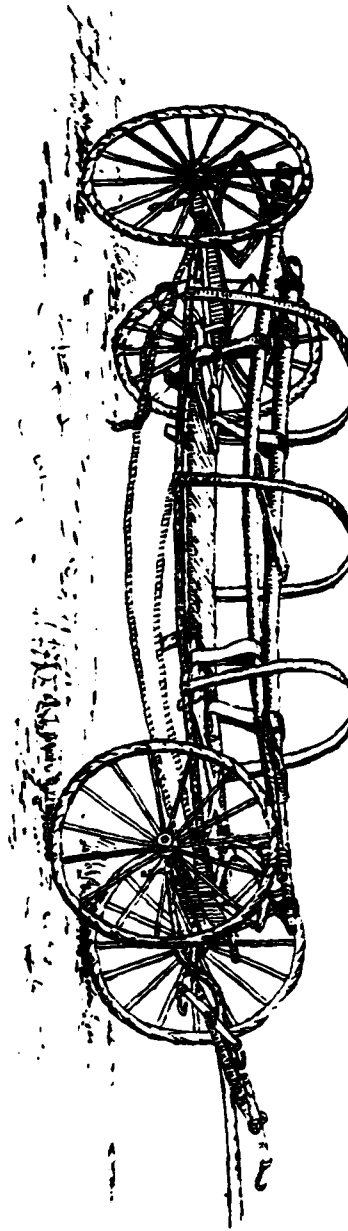
The scheme was not approved by General Stanley, commander of the expedition, for various reasons. One of his characteristic remarks was that it would be more humane to shoot Braden at once rather than have him captured en route by the Indians or have his raft wrecked and he be drowned in the Buffalo Rapids, which were a short distance above the mouth of Powder River.

When the expedition moved out the morning after the fight the wounded officer, with a soldier who had a broken arm, was put in an ambulance.

In order to get the benefit of a beaten road the ambulance was to travel after the wagon train. The jolting of the ambulance was simply awful; the soldier with the broken arm got out and walked. After going about ten miles the doctor reported to the commanding officer that Braden was rapidly losing strength and could not last much longer, so the expedition halted and went into camp.

The next day a new plan was tried. It was proposed to carry him on a stretcher. He was put on one, and at first two men carried it. Each pair carried the stretcher till they were tired, when two others relieved them. Progress was slow, fatiguing to the men, and very uncomfortable to the occupant of the stretcher, who had no protection from the broiling sun. After going three or four miles in about five

IMPROVED STRETCHER FOR LIEUTENANT BRADEN.



hours, the carriers were exhausted and camp was pitched. It was seen that this plan was a failure and suggestions were in order. The wagon-master proposed to rig up a conveyance and was told to go ahead. He used the running gear of an ambulance, took out the reaches and cut two small cottonwood poles about six inches in diameter and thirty feet long. The ends of the poles were securely fastened to the springs of the ambulance. Four slings, made of rawhide, were attached to the poles. Into these slings were inserted the handles of the stretcher. The slings were of such a length and so placed that the stretcher hung in the middle of the conveyance about eighteen inches above the ground. Wagon bows were fastened to the poles and over these bows was placed a canvas wagon cover to keep off rain and sun. The conveyance looked much like what are sometimes, in the country, called "stone-boats," where a low platform hangs from the body of the wagon.

The wheels of the rig were wrapped with hide. The object of this was to widen the surface so that the vehicle would run more easily. Wide tires would have been a great improvement, but the rawhide wrapping was not a success. It was all right while the hide was soft and pliable, but when it became dry and hard there was an uneven surface to the wheels which caused jolting.

On the underside of the stretcher boards were nailed so that the canvas could not sag. A thin mattress was put on the stretcher and on this the invalid lay. The next morning, when all was ready for the start, the handles of the stretcher were inserted in the slings and Lieutenant Braden was strapped to the stretcher so that he could not fall off. Two mules were hitched on, the driver riding one of them. When the mules started or stopped there was an unpleasant jerk, and the patient would have been thrown off had he not been tied fast. He did not mind the swaying of the stretcher from side to side but the longitudinal motion was unpleasant, for at every stop or start there was a jerk which seemed to make the ends of the broken bone rub together and caused intense pain. After the first day's trip it was seen

that the conveyance, with a few changes, would work very well.

Ropes were run from the handles of the stretcher to the opposite axles so as to prevent the longitudinal swing; a stick was nailed across the poles in such a position that Braden could hold on to it. The mules were given up and the wagon was hauled by men. A detail of thirty cavalrymen and three non-commissioned officers was sent, and at Lieutenant Braden's request, Lieutenant Smallwood, Ninth Infantry, a classmate at West Point, was detailed to take charge of the outfit. The detachment was divided into three reliefs of ten men and a corporal or sergeant. The reliefs were changed every hour. Ropes were fastened along both sides of the vehicle and to the tongue. One man walked alongside each wheel; two were at the end of the tongue to guide, and four others pulled at the rope.

The duty of the men at the wheels was to ease them over ruts or stones in the path. The change of motive power from mules to men was a great improvement, for the wagon was started and stopped without any jerking or jolting.

In order to have as good a road as possible, the outfit was made to follow the wagon train. A hospital steward and several attendants accompanied the party. About every half hour he inspected the condition of the patient. The steward was provided with a keg of water and stimulants, and occasionally gave a small quantity of brandy and water. When Braden became weak and exhausted, word to that effect was sent ahead to General Stanley and he always stopped for the day at the next good camping place. At first about one and a half miles an hour could be made under average conditions. One annoyance which could not be avoided, was the dust which was thrown up in quantities by the wheels and covered the stretcher and its occupant.

As the party moved along some wag remarked that the thing resembled the hook and ladder truck of a village fire department.

The command marched faster than the men could drag the conveyance, so the escort was usually from one to several hours late in reaching camp. Braden's tent was always

ready upon arrival, and the stretcher was lifted from its place and put on the ground, where it remained till the next day's march began.

The trip, for the first two weeks especially, was a severe and trying ordeal. No one expected Braden to live from day to day. On the eighth day the march was long, hot and dusty. It was nearly dark when his party reached camp. He was so covered with dust that his features could not be distinguished. A number of officers and men were waiting for him.

Dr. Kimball took hold of his wrist and said, "I can't feel a thing. I guess he is dead."

The report spread that Braden had died and preparations were commenced to make a coffin for him out of a wagon box.

After a couple of weeks the ends of the broken bone had begun to knit and mules were again put to the conveyance, but the four men were kept at the wheels till the journey's end.

It was frequently necessary to ford streams. When this happened one of the men would wade across first. If the water did not reach higher than a certain part of his legs, the conveyance would be dragged over, the bottom of the stretcher sometimes just skimming the water. If the water was too deep, the stretcher was taken out and six men carried it over on their shoulders.

Lieutenant Braden was hauled in this conveyance for twenty-eight days and in it traveled about four hundred miles, as measured by the odometer.

The last day's journey was on the 10th of September, when the reserve camp at Glendive, Montana, was reached. After remaining there some days the sick and wounded were put aboard the steamer *Josephine* for a trip down the Yellowstone and Missouri Rivers. The water in both was so low that the boat spent more time on sandbars than in motion, and it was early in October before Fort Lincoln was reached.

The leg was taken out of the box and the adhesive straps were removed sixty-two days after the fight. It was a long time to be in one position. During the trip, with no proper nourishment, the body became greatly emaciated, and the

flesh in several places was worn down to the bone, causing bad sores. To add to the discomfort, the cactus prickles above mentioned caused ugly little ulcers, which festered. The patient could not be turned over, and in order to attend to these sores, he was held up by six strong men, and the doctor, from underneath the raised body, dressed the ulcerations and put on collodion with a camel's hair brush. It felt like hot coals as the liquid touched the raw flesh.

Several incidents, perhaps worth relating, occurred during the long and awful journey. Two soldiers, one a Holland Dutchman named DeGeer, and an Irishman named Keegan, were detailed to attend Braden. Their tent was always adjoining his, and he could distinctly hear their conversation, and is probably one of very few persons who have listened to the details of their own funerals. One night, about the third or fourth day, when he seemed to be weakening rapidly, he heard Keegan say: "Well, when the Lieutenant dies he will have a dacent funeral. He won't be sewed up in a bag as were Honsinger and Ballaran, but he is going to have a real coffin made out of a wagon box. It has all been arranged." Honsinger, the veterinary surgeon, and Ballaran a post trader with the expedition, were killed by the Indians on August 4th. Their bodies were recovered before the Indians mutilated them; the red-skins had rifled the pockets of the dead men, but were chased away before they could do any scalping. The remains were sewed in canvas and carried one day before being buried. This was done to keep the location of their graves from the Indians, who would undoubtedly have dug up the bodies. They were buried at sundown the night after they were killed. A picket line was put over the burial place and the next morning the entire wagon train passed over it, completely obliterating every sign of a grave.

Keegan and DeGeer were fluent talkers, and their conversation and arguments was the source of much amusement to the wounded officer. The poor, faithful fellows did not attend his "dacent funeral" as they expected to do, but were, it is believed, afterwards killed in the "Custer massacre."

One day an early camp was made near "Pompey's Pill-

lar." Several hundred of the men were in the river and others were washing clothes. Suddenly a small party of Indians, concealed in the bushes across the river, opened fire. The bathers lost no time in getting out of the water. It was a ludicrous sight to see the men, some carrying their clothes, scurrying for camp. Fortunately no one was hit. The Indians quickly mounted their ponies and scampered off before any of our men could shoot at them.

One night Braden's tent was pitched on a patch of dried grass. Early next morning (reveille was at three, breakfast about four, and the advance at five every day) when the striker came into the tent with breakfast, he put his candle on the ground. The candle tipped over and set fire to the grass. The blaze was noticed at once by Braden, who used his lungs to such good advantage that in less than a minute fifty men or more were there. They cut the tent ropes, threw down the tent, and stamped out the fire. It was a narrow escape for the helpless man.

The last day of the eventful journey was on the 10th of September, just thirty days after the fight. The steamboat *Josephine* was in sight, and the end of a tedious journey was within an hour of its close. Suddenly the mules hitched to the conveyance started to run, and ran a mile before they could be stopped. In crossing some patches of cactus, the hoofs had knocked off some dry pieces; a number of these had hit the bellies of the animals and the pain caused a stampede. No damage was done, but imagine the feelings of the helpless occupant of the wagon, who expected an upset, or a breakdown, when the promised haven of rest was so near.

Dr. Kimball took personal charge of Lieutenant Braden's case. He was taken from the regiment and kept with the headquarters of the expedition. About ten days before Glendive was reached, on the return trip, the Seventh Cavalry, under Custer, was directed to cut loose from the main column and take a short route to Glendive, through the "Bad Lands." The infantry with the wagon train was to go where it was known they would have a good trail.

An exceedingly pretty and thoughtful incident happened the day Custer separated from the main command. It may

best be described by the following extract from a letter written by him to Mrs. Custer, and published in her book entitled "Boots and Saddles." * * * "Our mess continues to be successful. Nearly every day we have something nice to send to Lieutenant Braden. Only think of him with his shattered thigh, having to trail over a rough country for three hundred miles! He is not transported in an ambulance, but a long stretcher arranged on wheels about thirty feet apart, pulled and pushed by men on foot. They carry him much more steadily than would horses or mules. It requires a full company of men each day to transport Mr. Braden in this way. He is with the main command, but was doing well when we left. The day the command divided I had the band take a position near the route where the rest of the expedition would pass, and when he and his escort approached they struck up 'Garryowen.' He acknowledged the attention as well as he could."

The acknowledgment consisted of reaching out under the cover and waving a handkerchief.

All of the officers of the Seventh Cavalry assembled to greet their wounded comrade and wish him a safe and pleasant journey. The day Custer left the main column it turned toward the Yellowstone River. The march continued till after dark. No water was found, so a dry camp had to be made. Only a few tents were pitched and the mules were not unharnessed. Some miscreant stole Braden's water keg. It was a contemptible thing to do under the circumstances, and he would have fared badly, with no water to bathe the inflamed wound, had not a small quantity of this necessary liquid been husbanded by the hospital steward. The thief had he been known, would have been roughly treated by the attendants.

General Custer had taken his cook, a colored woman named Eliza, along. Late at night, the day of the fight, while the doctors were busy dressing the wound Eliza came to the tent. She brought a *lemon*, saying it was the last one left in the General's mess, and that it would do Mr. Braden more good than any one else. Kind-hearted Eliza! it surely was a very thoughtful act on her part.

Afterwards, whenever the cavalry camp was near headquarters, Eliza always made some good nourishing soup and sent it over. Had it not been for her kindness Braden might have starved.

Captain Andrew Burt, Ninth Infantry, now Brigadier General, retired, was with the expedition. He was a great hunter, and whenever he succeeded in getting some game, always sent a generous share to Braden. Another gentleman to whom Braden was indebted for a number of kind acts was a Mr. Barron, correspondent of the *New York Tribune*. Mr. Barron is, it is believed, now a clergyman and editor of a religious journal published in Boston.

Upon arriving at Fort Lincoln Lieutenant Braden was taken to the post hospital, a ramshackle, wooden structure, situated on the high bluff where the infantry post was located. The only ward was occupied by enlisted men, so Braden was taken to the attic where there was no heat. Through holes in the roof the stars could be seen at night and the sky in the day time. Between the rafters, where they rested on the frame, was an open space. The place was cold, extremely desolate and dreary.

A few days after being put into this attic, a driving snow storm came up during the night. By morning several inches of snow had drifted through the openings, and it covered Braden's bed with a shroud-like mantle. He was then taken down stairs and his bed placed in the dispensary. There was some warmth there from an old stove, but it was not a pleasant place for an invalid, as it was also the doctor's office, and sick call was held there.

When wounded he weighed about 180 pounds. After being able to hobble on crutches, the commissary scales at Lincoln showed his weight to be only 125.

Could Braden have been taken to a hospital soon after the fight, he might have recovered with quiet and proper care, but the wound completely disabled and unfitted him for further active service. He was subsequently retired as a first lieutenant. The leg became shortened nearly two inches and partially stiff at the knee, but part of the knee stiffness was probably due to an accident at West Point six months

before graduation, when a horse fell with him in the riding hall and injured the knee-cap. For eight years there were two running sores on the leg, from which, before final healing, thirteen pieces of bone, several chips of lead, and fragments of clothing were taken. An X-ray picture made at West Point some years ago shows that many more pieces of bone never came out, but were caught in the callous that formed around the ends of the broken bone.



OUR CAVALRY.

BY MAJOR JOSEPH A. GASTON, FIRST CAVALRY.

FROM the earliest times horses have been used for war purposes, and whether they have been driven in the chariots of the ancient Egyptians or Romans, or ridden by knights or cavalymen of later days, the horse has always proved an important weapon when in the hands of those who knew how to use him to the best advantage.

From time to time, with improved arms, it has been contended that the days of cavalry were gone. This opinion was scarcely formulated, ere up rose some genius in his line and proved to the world that he had grasped the changed conditions, and that the mounted soldier was then, as he had always been, a necessity to any army. To-day the cavalry is the only arm of the service which can stand alone. The artillery needs a support from one of the other branches. The infantry needs the cavalry to do its reconnoitering, while the cavalry goes anywhere—everywhere—alone, and is prepared to face anything except possibly a balloon or a warship.

When our Civil War was being fought European powers were surprised to learn that cavalry, North and South, was fighting dismounted as infantry or charging mounted as cavalry, indifferent as to which they were called upon to do. The cavalry charges of Winchester, Gettysburg and elsewhere show that they were cavalry in the old sense of that word, while Sheridan's cavalry passing Lee's army on its retreat in 1865, taking post dismounted in its front and holding Lee until the arrival of the infantry, shows what dismounted modern cavalry can do. Sheridan and Stuart startled the world by their raids. The damage done by those raids can scarcely be estimated.

To-day the lessons taught by our Civil War are accepted

OUR CAVALRY.

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abroad at their true worth, and the campaigns of 1861-5, as well as those of Napoleon, are studied in their schools and cited as object lessons in war.

The German cavalry in 1870 were the eyes and ears of that army. The French knew nothing of the enemy, while the Germans were kept constantly informed.

Against the Indians on the plains, or in the mountains of New Mexico or Arizona, it was the cavalry which was called upon to do the work. On the plains, because the infantry could not keep up, and in the mountains, strange to say, for the same reason.

In our recent Spanish War, the cavalry was given no chance. Owing to the lack of transportation, the horses could not be taken to Cuba. Well drilled troops were few in number. The cavalry could not be left behind and willingly went dismounted and fought as infantry. Their record at San Juan Hill is engraved in the hearts of their countrymen.

After the Spanish War the necessity for cavalry in Cuba and the Philippines was soon recognized. In the former, to preserve, in the latter to compel peace. The horses were transported with some difficulty and at great expense. At first our American horses did not seem to be able to do their work, but it was soon learned that by clipping the horses and allowing them time to become acclimated and accustomed to the food products of the tropics, they were prepared to do their work there as well as in the temperate zone. The cavalry in Cuba policed the island and did excellent service. In the Philippines, in active warfare against the natives, whether in the mountains or in the rice fields of the valleys, they performed distinguished and invaluable service, and added another laurel to those already won by the American cavalry.

But little use of cavalry has been made in United States for street fighting, but it has been extensively used abroad. A charge of cavalry with sabers drawn frequently dispersing a mob, and thus preventing the necessity of using fire arms and the unnecessary, but consequent slaughter of the innocent as well as the guilty.

The equipment of modern cavalry is a very important question. Our cavalry should be prepared to meet the best cavalry the world affords, and our equipment should be of the best. In the opinion of the writer many improvements could be made. Our bridle and bit could both be improved. The blanket is excellent. The saddle is not nearly equal to the best stock saddles in the shape of the tree and should have what the stock saddle has, the double cinch, higher arch of the pommel, and a rough surface under the side bars to prevent the saddle from slipping.

The arms should be the carbine, pistol and saber, as at present. The new Springfield is said to be an excellent gun, and as the same gun is to be used by both infantry and cavalry, it will place an infantryman and a cavalryman on an equal footing as far as the effect of fire is concerned.

The caliber of our pistol is entirely too small and should be sighted for short ranges only. The saber should be sharpened and carried in a scabbard which would not make any noise nor destroy the edge of the blade. No bright metallic surfaces should be allowed in cavalry equipments.

Our pistol holster is not equal to those used by the cowboys of the plains. In addition, in order to supplement our fire, it is recommended that a machine gun be assigned to each squadron of cavalry. The Hotchkiss and Maxim are the most highly spoken of.

A modern cavalryman should be almost equal to anything. In addition to his regular duties of screening his army and fighting both mounted and dismounted, our cavalrymen have at times been called upon to demolish obstructions, make roads, build bridges, or perhaps act as disbursing officers or governors of large provinces, or perhaps to shoe a horse; signal a ship, use a telegraph line, or perhaps minister to the wants of a sick or wounded comrade or horse in the absence of the medical department, or even to build a bake oven. For the cavalry soldier to learn to ride his horse, and to properly care for his horse and himself, to properly use his arms, perform outpost and reconnoitering duty, learn signalling—rough sketching and how to make reports—the rules of military hygiene and all the various

details of guard duty, drills, both mounted and dismounted, and the customs of the service, takes years of constant service. It is a very expensive experiment in men, horses and money, to use volunteers for cavalry duty in time of war. Volunteer cavalry may be of great assistance. At the best it is only mounted infantry, and can not take the place of well organized cavalry. In order to have good cavalry when a war breaks out, it is necessary to keep it up in time of peace. It is not possible to organize it on the outbreak of war. Hence its proportion in time of peace should be large. When war breaks out, well trained infantry is a necessity, but raw recruits can be much sooner drilled into shape for infantry than they can for cavalry.

The infantry at the outbreak of war can be very largely increased, but cavalry can not, and while a troop of cavalry can be quickly filled up to its maximum strength, each old soldier has his time fully occupied in instructing the new men. A troop of cavalry thus reorganized is incapable of breaking up into small detachments and performing the full duty that is expected of good cavalry.

Raw cavalry cannot be expected to properly perform full cavalry duty. Aside from its lack of knowledge it lacks discipline. Our regular cavalry gradually weeds out undesirable men and thoroughly disciplines the rest. License spreads rapidly among undisciplined soldiers in time of war, and an undisciplined cavalry regiment in front of our army in time of war might and probably would, cause untold suffering among non-combatants, to the discredit of our arms and our reputation as a civilized nation.

The question then arises how much cavalry should our army have in time of peace. The only answer is, as many as the country can afford. While on this subject it may be well to note that General U. S. Grant found that his force of artillery obstructed the roads and he sent back to Washington all he thought he could spare. He kept his cavalry and infantry, and would undoubtedly have been glad of any increase of either of those arms.

The necessity for large bodies of cavalry on our Indian frontier no longer exists, and those not necessary on our

frontier, or in the Philippines, could more profitably be kept in the vicinity of our large cities.

By keeping cavalry on the frontier, its cost to the government is much greater on account of railroad freight bills for forage and other supplies. Railroads keep their surplus cars in the yards of large towns. Troops near those centers can be moved much more expeditiously than those farther away. Our present policy of quartering troops near large cities is undoubtedly the correct one. In 1885, on the outbreak of the Apache war, similar orders were wired at the same time to Fort Clark and San Antonio, Texas, for cavalry to proceed by rail to Deming, New Mexico. The troops from San Antonio reached Deming one day sooner than the Fort Clark troops, although they had about 140 miles farther to travel.

To meet changed conditions, many questions arise from time to time concerning improvements in the arms and equipments, and some person should be held responsible for the condition of such an important and expensive arm of the service as the cavalry. For these reasons our cavalry should have its own head in the War Department to be known as the chief of cavalry. To him should be referred all questions concerning the cavalry, and in a joint conference with the chief of artillery, and the chief of infantry, who should also be appointed, all questions concerning the line of the army could be settled for the best interests of the service.

A cavalryman of the best type is essentially a man of action, quick to grasp a situation and equally so to act. He is full of *esprit de corps*, has a high sense of honor and duty, and his enthusiasm is only held in check by a well tempered discretion and judgment.

In the appointment of a chief of such a body of men, the greatest care should be exercised. Only one who has had long and meritorious service in the cavalry, and who thoroughly understands its capabilities and necessities, should be deemed worthy of such an exalted position.

To such a chief our cavalry would at all times be ready to respond, and show by its deeds that it was prepared to live up to the glorious traditions of its past.

FIVE YEARS A DRAGOON, 1849 TO '54, AND OTHER ADVENTURES ON THE GREAT PLAINS.

PART IV.

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ON the second day of July, 1854, headquarters First Dragoons, "B" and "D" Troops, with a large number of army officers, some families, a large supply train and 600 extra horses led on strings of about forty horses each, left Fort Leavenworth for Fort Union, New Mexico, Colonel Thomas T. Fauntleroy commanding.

From start to finish, the two troops alternated daily in front and rear guard. During my experience I had never campaigned with another troop, hence did not know very much about the management of other troops on the plains and I learned to think "B" nearly as perfect as the conditions permitted. I was as proud of it as I ever have been of anything under my immediate charge. On every hand the troop attracted attention—the manner of marching, care taken of their horses, appearance of horses and men, the short time necessary to put up their tents, and the lightning speed with which they were struck, folded and loaded in the wagons, the neatness and dispatch in everything, and the quietness and lack of confusion on every hand, seemed a wonder to many of the officers of long experience. There was no special effort on this trip more than on others, but somehow we were settled down to one way of doing—a uniformity of thought and action—changes were few and only when circumstances forced them. Officers and noncommissioned officers did not have to reiterate from day to day and from camp to camp, for no man could plead ignorance of a general routine, hence there was little friction; the men had grown into the habit of taking pride in doing everything.

having "some style about them," as McDonald used to say, and every man had grown to know that he must do his share cheerfully, all working together for the general good.

"D" Troop was composed of a fine lot of men and drilled well, but they had been stationed for some years at Fort Snelling, and did not have the long summer campaigns that B had, and for that reason were not up to the daily routine of making themselves comfortable. Most of the men were comparatively new to campaigning, and while fine garrison soldiers, had much to learn and to suffer before they could hope to compete with men who had traveled from 1,500 to 3,000 miles every summer, always in an Indian country, always on the alert and obliged to move with little transportation, little or no forage save the grass that grew in abundance everywhere, and with short rations, depending largely on game which was also generally abundant. Of course, more or less recruits were received every winter (generally fore part of winter) from Carlisle Barracks to replace those discharged, etc. These recruits had special attention in drill, and imagined they were full fledged soldiers by the time we went on the plains, but soon found that half was not learned.

A good deal can be done to discipline men in garrison: but in the field, on the march, in bivouac under the blue sky, in storms, cold and heat, on the trail, caring for self and horses, with always a helping hand for comrades, bearing cheerfully every hardship, there was where the thorough dragoon was made, and a man in his first year's service was not worth half as much as in after years. This applies to a troop where three-fourths of the men were "old soldiers," which includes all men after the first year. This being true, how about a troop or company where there is not more than half a dozen who have seen service before? Take the experience of any man who has served in the regulars and volunteers. See the amount of sickness in the latter compared to the former; see the difference between strict discipline and the reverse; see the comfort of one against the suffering of the other under trying circumstances: see the difference between men who accept their instructions as iron-

KAW INDIAN MIMION AT 'O'N'N'N' GROVE. PICTURED IN 1881.



clad law, never doubting the correctness thereof, and men who argue the point in their minds, if not aloud, the instructor himself in doubt, lacking confidence in himself and the men he addresses—"the blind leading the blind." To hear the rabble, and politicians in particular, talk of how "our brave volunteers" performed such and such feats in battle, one would think the regular army did not amount to anything, and were only a stumbling block in the way of the "gallant men" of this or that State. Who ever doubted the courage of any respectable American—the peer of any man on earth? Surely, not I. But how can a man know anything until he has learned it? Is there any sense in marching young men, after a few months of camp life, into battle against disciplined troops? It won't do to tell us they are brave. Who doubted that? The fact that he is brave does not make his adversary less brave nor his aim less accurate. To stand up and receive the death blow because too ignorant to avoid it, may be admirable, but it is pitiable, and no credit to the nation that places men in such a position. No country on earth has superior material for soldiers, but it is no credit to the United States to expect this material to be transformed from peaceful pursuits to military experts in a few months to meet the stern necessities of battle.

Some one may point to the performance of the First Volunteer Cavalry ("Rough Riders") at Santiago to prove that the very best work was done by that regiment. Such comparison is no criterion. Nine-tenths of them were men who had lived for years in the field, in the mountains, on the plains, accustomed for years to Indian warfare; the best shots and the best horsemen in the world; accustomed to follow the trail and protect themselves and their property everywhere. Turned loose anywhere, singly or in squads, they were self-supporting. Even that portion of the regiment which came from the colleges and society circles of New York were remarkable for athletic accomplishments of all kinds, including target practice. Probably there is not on record an organization of similar numbers where each individual was so nearly self-made and self-reliant as this. The Colonel had distinguished himself as an Indian follower and

fighter in the regular army in Arizona and Mexico as few men ever did, and the Lieutenant Colonel from boyhood up had trained himself in every line of athletics; had ranched with the cowboys of Dakota, Wyoming and Montana, and was the champion hunter of big game in the United States. In his experience in public life he had learned human nature in every grade, and above all, at the age of most complete manhood—not too old for strength and energy nor too young for mature judgment—had learned self-control and the management of men. With their superb courage and patriotism, no wonder Colonel Wood and Lieutenant Colonel Roosevelt led that magnificent band of men, equal to those who died with Crockett at the Alamo, to glorious victory. It will not do to compare this regiment with average volunteers. Every man was a soldier, tried in a school than which there is no better in America. But the officers and men of this regiment will ever stand in respectful acknowledgment of the grand old regulars, who were shoulder to shoulder with them, and without which there would have been few of the "Rough Riders" left to tell the tale. Dogged, stubborn discipline came in time to mingle with desperate gallantry at the crucial moment. Young America, I honor your courage and manhood, but keep your eye on the regulars, and when you want to be a soldier enlist in a good company, in a good regiment, and go to a home where order and decency prevail, and every well behaved man finds peace and comfort.

Of course there was the usual confusion of starting a big caravan on a long journey, but things improved from day to day. Our troop had easy times compared to other organizations. After passing Council Grove, guards were doubled, as they always were on the route west, always expecting depredations of some kind from the Indians if the utmost vigilance was not maintained.

On Coon Creek, now in Edwards county, we met Kiowa Indians in great numbers, mounted on fine horses. They cavorted about us, saucy, insolent and defiant, in fact it looked like trouble was inevitable. "B" was advance guard, and as we were strung out on the road, "D" was more than two miles in rear. Our horses on strings were a great temp-

tation to the Indians, and they could have charged in and stampeded the whole lot with little loss to themselves. Colonel Fauntleroy was riding with Major Chilton and other officers ahead of me, as I rode at the head of the troop, and I heard the conversation. I saw that the Colonel and the Major were disagreeing, and finally the Major lost his temper and said with some spirit, "Well, if I were in command I would corral these trains and horses and wipe these Kiowas off the face of the earth; this is no way to deal with Indians." In answer the Colonel ordered the Major in arrest and to the rear. The Major turned, his eyes flashing, his bristling mustache looking unusually fierce, and rode to the rear. He had taken his last ride in front of his troop. Lieutenant Hastings was detached from the troop, acting commissary officer, hence, when the major was arrested there was no officer left in command of it. The Major had been consulted all along about camps, and had been of great service. Immediately after his arrest, the Colonel called me and said he wanted to go into camp. It was about 11 o'clock. I told him he could not find a better camp than about where he was, where the town of Kinsley now is, and at his order I rode off to assist the quartermaster, Captain Mastin, to arrange the camp. To the troop I gave the order, "Dismount! Graze your horses!" The Colonel looked surprised, but said nothing. I was carrying out a standing rule to rest and graze the horses at every opportunity. I was an hour with the quartermaster, during which time the troop were enjoying the finest grass on the plains.

This camp was made more compact than any we had heretofore, and the guard considerably strengthened. It was but a few miles from the old battle ground.

I reported to the Major after retreat and guard mount for any suggestions he might desire to make. Evidently he felt chagrined at the position he was placed in, and anxious that whatever happened his troop should not be found wanting. While we were talking, Lieutenant Robert Williams called and stated to the Major that he had been detailed to take command of his troop. He had called to pay his respects and to learn from the Major anything he desired to



FAMOUS KAW CHIEFS.

A-l-c-ga-wa-bo.

Wah-ti-an-gah.

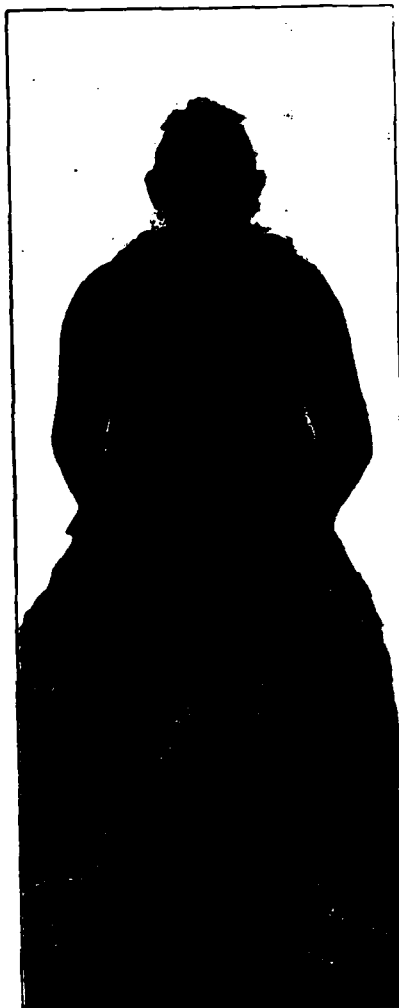
Kah-he-ga-wa-ti-an-gah, known as the "Fool Chief."

impart concerning it. The Major thanked him and said about as follows: "This is Sergeant Lowe, Lieutenant Williams. He has been first sergeant more than two years, knows all about the troop, and will certainly serve under you as faithfully and cheerfully as he has under me. I congratulate you on being detailed to command my troop. You will not be likely to have any trouble with it." Lieutenant Williams commanded the troop two days, when Lieutenant Hastings took command. Lieutenant Williams was one of the best specimens of manhood that I ever met. Nothing ruffled the even tenor of his ways; he always spoke in the same gentle tone, the same perfect English, in the same refined manner. I conceived a friendship for him that a more intimate acquaintance in future years increased to admiration. He was one of the most refined and noble characters I ever knew. His military service ended with his retirement as Adjutant-General of the Army in 1893 on account of age.

On leaving the Coon Creek camp we moved out in double column, troops traveling by fours, wagons and horse strings two abreast. The rear guard furnished a line of vedettes along the bluffs, and orders were strict to keep everything closed up. A few days later we crossed the Arkansas at Cimarron Crossing, thirty miles above where now stands Dodge City, and camped on the south bank. We seemed to have left the Indians all behind, twenty miles below, and the talk that the Colonel had with them the evening before indicated no trouble.

The camp was west of the road, extending up the river fully a mile. "D" Troop was at the upper end (west); "B" was rear guard that day and camped just west of the road, forming the left flank of the camp, the wagon train, except headquarters, company and officers' transportation, was well to the front (south), away from the river, and the horse strings immediately in rear, while headquarters, officers' families, etc., were strung along the bank of the river between the two troops. A bend in the river where "B" troop was, threw it north of the east and west line of the other camps. The ground occupied by the supply train, the horse strings and

"D" Troop was sandy and treacherous. Picket pins went down easily and were easily withdrawn. Our camp occupied firmer ground, and with care we made our horses perfectly safe, knowing well the terrors of the stampede, taking in the treacherous nature of the ground occupied by all except us, and the fearful effects of hundreds of animals with lariats and flying picket pins sweeping over our camp. We hugged the bank of the river below the bend closely, occupying as little room with tents and the two company wagons as possible, and arranging horses so that a direct stampede east would pass them. In other words, a stampede would have to come around the bend to strike any part of our camp.



AB-KE-TAH-SHIN-GAH.
A Typical Indian Brave.

It was noticed by all of our troop that the 600 led horses were always badly picketed: that is, picket pins driven half way down and in many cases two or three lariats tied to one pin. A stampede had been feared by all of us. The man in charge of the horse strings was very ill most of

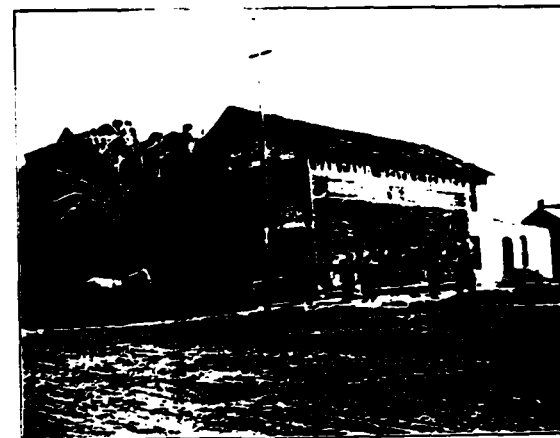
the time, and each man in charge of a string of horses seemed to have no conception of the crash that was sure to come sooner or later. "D" Troop did little better than the horse

strings and "B" was spurred up by me and other noncommissioned officers to see that every picket pin was securely driven in the best ground. I have seen men stick their picket pins in an ant hill because it went down easily. Such a thing in our troop, or the fact that a horse got loose in any way, unless proven to be no fault of the rider, would insure his walking and carrying his arms the next day. Carelessness in picketing horses would not be condoned on this or any other trip that we ever made. A stampede was the terror of terrors on the plains, and this location was like camping on a volcano liable to erupt at any moment.

It was a perfectly bright, starlit night, and peace seemed to reign from end to end of the camp. Visiting was general among the officers, and a feeling of safety prevailed, now that we seemed to be clear of trouble with Indians. A little before nine o'clock the earth seemed to tremble as if in the violent throes of an earthquake. Like a whirlwind a stampede commenced with "D" Troop horses, rushing down through the extra or "led" horses and on through the mules, sweeping everything before it, barely missing officers and B Troop camp. On they went a little south of east down the river, in the mad rush trampling everything under foot, upsetting and breaking a dozen six-mule wagons by catching picket pins in the wheels as the moving mass rushed on; picket pins whizzing in the air struck an object and bounded forward like flying lances. To condense: "D" Troop lost two-thirds of their horses. All the string horses (600) and 600 mules, besides some private animals, were in the mad rush of destruction. One "B" Troop horse, an extra, succeeded in joining the gang. Realizing the full meaning of the terrible calamity, I ordered "boots and saddles," and when Lieutenant Hastings, who was visiting some officers arrived, the troop was ready to mount. The quartermaster sergeant was left in charge of the camp with a cook and bugler. Lieutenant Hastings rode over to headquarters and reported. Returning immediately, we mounted, and were off in the direction of the stampede. A few young officers en route to join their troop in New Mexico, and who were fortunate enough

to have their horses down near the river out of the line of the stampede, mounted and struck out.

The stampede was a mystery at headquarters, one opinion being that it was caused by Indians, another that wolves had frightened some horses and they had started all the others. There was more experience in "B" Troop than in the balance of the command, and the conclusion was that it would be no trouble to bring about a stampede from either cause. One Indian in a wolf skin might have done it, or one horse fright-



"PIONEER STORE" ON THE TRAIL.

ened at anything running the length of his lariat and scaring a few more might bring about the whole thing. We did not believe that any number of Indians were near us, or were making any hostile demonstrations. In short, the treacherous character of the ground made it unfit to picket a large number of horses and mules, and the stampede was almost a matter of course. We might have escaped such a calamity as inexperienced campaigners sometimes do, but the chances, considering the number of animals and want of care were against us.

It was nine o'clock when the troop started on the trail, feeling its way out through the wilderness of wrecked wagons, crippled and dead horses and mules and their lariats and

picket pins, met with in the first two miles, within which nearly a hundred horses and mules were found dead or injured by being pierced with flying picket pins or by being tangled in the ropes and dragged. We did not stop for any of these, but rode on to head off those animals that had escaped in a condition to travel. Within five miles of camp we headed off probably 200 mules. Most of them had broken their lariats and lost their picket pins by being trampled upon by other animals. We rounded them up and sent half a dozen men with them, following the river bank towards camp. Then we spread out and in a mile or two, rounded up another large band, nearly all mules, and sent another squad of men with them. It was my experience then, and always has been in a stampede, that mules tone down after a short run, whereas frightened horses never know when to stop, and run until exhausted. A herd of mules without horses to lead them in a stampede will hardly ever run more than two miles, circle around a little and then either stop to graze or strike a trail at a moderate gait. Within twelve or fifteen miles of camp we had turned back with different squads of men probably 400 mules and half as many horses; and now Lieutenant Hastings and three or four men started back with quite a band, mostly horses, leaving with me about twenty-five men. Following the same tactics and having driven in whatever we could find within a few miles, a small squad of men was started up the river towards camp. A couple of young officers, Lieutenants Lloyd Beall and — Craig, joined me with quite a band of horses about daylight.

At that time I was with a few men in the sand hills, probably a mile from the river. We swung around driving about sixty horses before us towards the river, and suddenly found ourselves close to an Indian camp, a little below it. There was no changing our course so as to avoid the village altogether without abandoning our captured animals. I put spurs to my horse to get between the horses and the Indian camp, followed closely by Hand and the two officers. The horses did not seem to notice the lodges until close on to them, and we rushed through the south edge of the village at a fast gallop. In the meantime the dogs set up a terrible



CHIEF OF CHIEFS

barking, and as we looked back the whole camp seemed to be alive, as men, women and children hustled out of their lodges. Attracted by a large number of Indian horses, two of ours started to join them. Craig made a break to herd them off, and pistol in hand chased them through the Indian herd. Beall joined Craig and with the two horses joined my party in little more time than is necessary to tell it. And now the sun was coming up; we had ridden our horses at all sorts of gaits seven hours. In the band we were driving were several good ones. We rounded them up in a bend of the river and made a change and helped Beall and Craig to change. Knowing that the Indians would be soon scouring the country for horses, and with my small party of men I could accomplish nothing, I determined to scatter out 200 or 300 yards apart and drive all we could find to camp. I knew that the camp we had passed was composed of Kiowas and Comanches, about thirty miles below our camp. When about twenty-five miles below our camp, I saw horses on the opposite side of the river. They must be a part of ours that had crossed over; they were loose and grazing. Through my glass I could count about a dozen. Leaving the balance of the party to go on, driving everything they could before them, I took three men and crossed the river. Below the horses first seen there were no signs of any having passed down. We drove before us all that we saw and probably all on that side and arrived in camp near sunset with thirty-two. At retreat roll call every man of "B" Troop answered to his name. Among the big bands brought in by Lieutenant Hastings and others the dismounted portion of "D" Troop found mounts, and with citizen employees did good service in gathering in and caring for horses and mules.

To the fact that "B" Troop was able to mount promptly, and work systematically and vigorously, Colonel Fauntleroy owed his ability to move without abandoning many wagons, only a few that were badly wrecked. If pursuit had been delayed until morning the Indians would have had most of the horses. It did not take them long to scour the country and pick up what we left. They brought a good many to the camp for which the Colonel paid them.

Two days after the stampede we recrossed the river and found a fine safe camp on the north side.

Nearly all mules not killed or fatally crippled were saved, so that we were short only about fifty. About 150 horses were dead or desperately crippled, and many more not accounted for, probably found by Indians after we left; shortage, 200 or more.

Lieutenant Beall had been in arrest ever since we left Fort Leavenworth, and now he was released. He volunteered to go in pursuit of the stampeded stock, and on Craig's report he was restored to duty. This I understood at the time. Eight years later Captain Craig told me at Fort Union, where he was then quartermaster, that on the way to camp after I left to cross the river, Beall said: "Why the — didn't I think to lead off after those two horses? Here I am a first lieutenant and you just from the Academy: I am under a cloud and ought to have done something to recommend myself." "You did," said Craig, "you followed those horses through the Indian herd, pistol in hand (which was true, following the example of Craig), and I shall so report." And that report induced Colonel Fauntleroy to release Beall.

The history of these two men is interesting. Beall was a captain of artillery at the commencement of the Civil War, resigned and enlisted in the Confederate Army. Dr. M. S. Thomas resided in Leavenworth previous to the war, joined the Army of Northern Virginia as a surgeon, and after the battle following the capture of General Pope's headquarters, while riding over the battlefield near a Confederate battery he recognized a dog that used to belong to Beall at Fort Leavenworth. He knew that the dog was not far from his master, and proceeded to investigate. He soon found Sergeant Beall. A long conversation followed, in which Beall stated that many times he had been recommended for promotion, but on account of his reputation for drinking his endorsements were overruled before they reached the appointing power. I do not know his end. Colonel Craig married a wealthy lady in Ohio, resigned from the army at the close of the war, prosecuted a claim to a large Spanish

grant of land in southern Colorado, won it, and was independently rich, and died before he was fifty.

Colonel Fauntleroy sent for me and said some very nice things to me and of the troop, but there was no mention of the happenings in "orders." I take it for granted that Colonel Fauntleroy included the stampede in his report to the War Department, and that the quartermaster, Captain Mastin, reported the loss of public animals and other property, but no mention of it in newspapers, nor in "orders" anywhere. Men were supposed to do their duty without hope of special commendation. A troop that would do now what "B" did then would be commended by the colonel, by the department commander, by the division commander and by the general of the army in his annual report.

After recrossing the river I called on Major Chilton as soon as I could. I never saw him better pleased with the troop. "B Troop saved the command," said he. "Mr. Hastings tells me that you had 'boots and saddles' sounded and the troop ready to mount when he reached it after the stampede. I am glad you were so prompt and did not wait."

And now we moved off up the north side of the Arkansas by easy marches for several days, on up the river to Bent's Old Fort, and crossed; thence south to Timpas, Water Holes, Hole in the Rock, Hole in the Prairie, crossing Purgetwa—generally pronounced Picketware—below where Trinidad now is.

It was nearly 100 miles farther by this than by the Cimarron route to Santa Fe, hence it had been abandoned: had not been traveled since the Cimarron came into general use. Trees had fallen across the trail, mountain torrents had made great gulleys, and it took Lieutenant Craig's pioneer party—details from "B" and "D" Troops—several days to make the road passable. In the meantime our animals had the finest gramma grass I ever saw, and I never saw animals improve so much as ours did in so short a time.

One day while camped here Sergeant Peel went hunting: he was riding a mule, and when a mile or two from camp a thunder storm overtook him, and he sought shelter under a thick clump of pines. A flock of turkeys ran under a big,

low branched pine, not more than ten yards from him. The rain and hail came down in torrents while the wind blew a fearful gale. Peel had tied his gentle mule securely, and deliberately shot seventeen turkeys, every one in the head. They seemed to think the crack of his rifle a peal of thunder, and the fluttering of the dying turkeys did not frighten them. He finally wounded one and it flew away, the balance of the flock—half a dozen—following. Peel came into camp about dark with all that his mule could stagger under.



GROUP OF KEW INDIANS IN FULL DRESS.

Just before this storm I had marched my detail for guard to headquarters, and guard mounting was just over when the storm struck us. I put spurs to my horse and rode with all speed for camp. I had crossed a dry ravine going, and returning found a mountain torrent. I very imprudently dashed through it, looked back and saw a tree a foot through going down at railroad speed. A second later and I and my horse were hopelessly lost. As it was, nine horses out of ten would have failed, but my noble "Bruce," with courage that knew no faltering, having full confidence in his master, landed me safely and bounded away as if there was nothing the

matter. This horse was my special pet; every soldier's horse ought to be. It may be a little hard for a good soldier of fine feelings to pet a miserable plug, and on the other hand, it may be a little hard for a good horse to think much of his plug master—both combinations that ought not to exist. Good men and horses having faith in each other will follow the right kind of leader to victory or annihilation without a murmur. The horse need not be of any particular strain of blood so that he is of a saddle horse breed, made to gladden the heart of the proud man who rides him; not a thick shouldered, fat headed, short stepping thing, only fit for a huckster, but a horse with flat, muscular legs, short back, well quartered, well cupped sound hoofs, high crest, lean head, bright eyes and brainy. With this latter combination, he may be Spanish broncho, Arabian, Kentucky thoroughbred, or mixed—never ask a man to ride a plug off the farm where he is used to plow. One of the greatest mistakes this government is making is in not using a part of the Fort Leavenworth and Fort Riley military reservations to breed a sample of saddle horse, if for no other reason than to show the farmers of the surrounding country the kind of horse the government requires for cavalry and artillery.

Having gotten the road open and the animals well rested, we moved over the Ratton Pass and camped at a pond at the foot of the mountains. We were rear guard this day and had a tedious time; some wagons wrecked, and we came into camp late. The next morning we were in advance at sunrise. Approaching Red River, a big flock of turkeys were plainly to be seen on the trees; they had never been frightened and knew no fear. I asked permission of Lieutenant Hastings to ride ahead and kill one of them, which I did, shooting a big fellow from the tree with my pistol.

The first settlement that we struck in New Mexico was Maxwell's Ranch, on the Cimarron; the next was Riado, where I Troop was stationed. We here heard the first account of the battle fought six weeks before between I Troop and the Apaches, heretofore referred to. I met my old friend Byrnes, whom I had not seen since we parted at Fort Leavenworth the 1st of April, 1850. Now he was first sergeant

as heretofore related. Headquarters, band and "D" Troop stopped here, while "B" went on.

Arrived at Fort Union, we went into camp by ourselves about two miles from the post. And now the troop was under orders to proceed to Fort Stanton in a few weeks. Major Chilton found his commission as major and paymaster, was ordered to report at Washington, and was released from arrest. As my time would be out in less than two



"COUNCIL OAK."

Under this Oak at Council Grove, treaty was made with the Great and Little Osages for right of way of Santa Fe Trail, Aug. 10, 1825. Estimated age of tree, 250 years.

months I was promised a furlough before the troop would go. Colonel Cook would leave Fort Union for Fort Leavenworth in two weeks with a miscellaneous command, and this was my opportunity to go to the "States."

Pitching two wall tents facing each other and stretching a fly to cover the space between. I had a good orderly room and office, and with Corporal Ferguson for a clerk, assisted by Lieutenant Hastings, we proceeded to straighten up all company accounts, and bring everything up to date before my departure. Nothing in the way of clerical work was left

undone on Major Chilton's account as well as Hastings'. I had never had a company clerk and no assistance except what Lieutenant Hastings was always glad to render, and assistance from Ferguson or some other in comparing muster rolls. The records will show that when I left the clerical work was complete and there would be no unsettled matters between the troop commander and any of the departments, and there would be no dispute or confusion about any man's account.

I bought a mule, and Hastings gave me a saddle, bridle and blanket. I got permission to put my provisions, blankets, clothing, etc., into a government wagon in which I might sleep at night. Transportation was scarce and teams heavily loaded. A man on furlough had no status and no rights. The wagonmaster, Mr. Rice, very kindly invited me to mess with him, which I was very glad to do. The day of my departure came, my last roll call was made at reveille, and I passed from right to left of the troop and shook hands with every man. I was obliged to nerve myself to the utmost to meet this trial, one of the greatest of my life. My work was done, I had turned my back upon my best friends. I would never make better. I never saw any one else similarly affected. I had met and stood as severe shocks as any man of my age that I had ever known, and inwardly prided myself upon being equal to any emergency, but now I seemed bewildered. I went to my tent and pretty soon Hastings came in and said: "'Tis not too late to reënlist; perhaps you had best reconsider your determination to leave the troop." This seemed to bring me to my senses. I straightened up and replied: "Lieutenant Hastings, I appreciate all you say and all of the good will that you have ever shown for me, but I have matured my plans for the future. I am tearing myself away from the best friends I ever had and am doing it as a matter of duty to myself. There is nothing in the army for me, from my standpoint. I am nearly twenty-six years old, and in another five years I would be thirty-one. I have learned all that I can hope to learn in the army that would assist me in civil life. Surely my services will be worth more out of the army than in it. At any rate I have

nerved myself for the trial, the bridges are burned, and there is no retreat." There was one man, Sergeant Worrel, in the hospital. Hastings mentioned the fact thinking I might have overlooked him. I said that I did not have to say "good bye" to him. I had no use for him; he was a thief, and would be guilty of any crime he dared commit, and I gave the Lieutenant satisfactory evidence that what I said was true, and told him that sooner or later he would find that I was right. I have heretofore stated the end of this foul murderer, and will now drop him.

There were two married men in the troop, Sergeants Peel and Espy. Mrs. Peel and Mrs. Espy gave me a farewell dinner, learning which Mrs. Hastings sent them some delicacies not to be had otherwise. Peel's only son, Percival Lowe Peel, was two years old. Having said "good bye" to Lieutenant and Mrs. Hastings and their lovely children, and to Mrs. Peel and Mrs. Espy and their boys, I started out for the first camp, ten miles. When half way I saw Colonel Fauntleroy, staff, band and "D" Troop en route from Riado to Union. The short cut that I was on and the road that they were traveling were a mile apart. I wanted to see Bryden, now of the band; in fact I would have been glad to salute the Colonel for the last time, and the adjutant, Lieutenant Magruder, and to say "good bye" to genial old Bandmaster Hooper, who had been my dancing master several winters. I got under a clump of pinyons, sat on the ground and saw them pass. To go down and shake Bryden's hand would never do; it would be a severe trial to say "good bye" to him, and I did not want to trust myself. And so I watched the column, the dear old fellow near the front, his trumpet over his shoulder, the cheering notes of which I would never hear again. It was my last look at all of them except Sergeant Candy of "D" Troop, now Colonel Candy of the Hampton Soldiers' Home.

Arrived in camp Major Chilton's servant came to say that the Major wanted to see me. When I reported he wanted to know how I was fixed for the trip, I told him I would be all right.

We came in the Cimarron route, leaving the old trail near

Diamond Springs, turned north to Fort Riley and thence to Fort Leavenworth. At Riley I left the command, and arrived at Fort Leavenworth two days later, and by invitation of Levi Wilson, who was general superintendent of teams, etc., I took my meals at his house, a room having been furnished me elsewhere.

Major Ogden told Mr. Wilson to employ me, and I was put in charge of a small train, five six mule teams for Fort Riley and met Colonel Cook's command ten miles out. I was warmly congratulated on being so well employed.

This was the beginning of five years' continuous service in the Quartermaster's Department, the most interesting part of which I will sketch hereafter. I have told the story of Fort Riley in the October number, 1902, and in my next will give my experiences in the ("so-called") "Kansas War" of 1856.

NOTE.—The plates for this paper were kindly loaned us by Mr. Geo. P. Morehouse, of Council Grove, Kansas.

[To be Continued.]



THE SQUAD SYSTEM.

BY CAPTAIN WILLIAM T. LITTEBRANE, TWELFTH U. S. CAVALRY.

A TROOP'S discipline and instruction, therefore its efficiency, which is our aim, are promoted by the subdivision of the troop into squads, which thereby become important units under noncommissioned officers upon whom a constantly increasing reliance should be placed until the attainment of the ideal. This confidence in the noncommissioned officers and the requirement that they perform certain well defined functions, different from and in government of their fellows, the importance that they attain in the eyes of the privates, who recognize them as the medium governing the performance of so many of their duties, gradually inspire them with an increasing respect for their own position and a higher regard for their obligations. In a new organization this sentiment is more easily instilled into the minds of the recruits than it is into that of the old soldier. Some of those selected as noncommissioned officers will not stand the test and must be disposed of. In this new office they are entitled to instruction and encouragement under which many will develop surprisingly. Those who do not must revert to the grade of private. However, in a new troop where the noncommissioned officers are selected at little better than random, there is much material to draw from, and yet, for a troop commander deeply concerned with the welfare of his troop, this is a work of much labor, a trial of patience and a vexation that would willingly be avoided.

The regulations sanctioning this admirable system have not been thoroughly appreciated, and I have never seen the system properly applied. Some years ago, while at Fort Apache on a practice march, I observed the application of

the system in one of its details at stables by an officer stationed there, who informed me that in that respect it worked admirably. At other places I have observed its application in other respects, but never anywhere in its entirety.

Since coming to this post and with a new troop. I have found it the only way to accomplish any results at all, and the whole beautiful scheme has worked itself out, so that now noncommissioned officers in the troop never question their responsibility.

In the application of this scheme it frequently happened that the new noncommissioned officers did not properly respond. This was remedied at first by admonitions, while subsequent repetitions of the neglect or manifestations of indifference were followed by courts martial, which usually rectified the matter. In my troop, with two exceptions, the noncommissioned officers were recruits with the balance of the troop. I had to encourage and instruct them in the business of obeying and commanding, and repeat, and keep on repeating. This done, the subsequent administration and instruction of the troop have been vastly facilitated by the squad system.

THE SYSTEM.

To arrange the troop into squads: The members of the troop, except the noncommissioned officers, having fallen in line, they are arranged according to size, the tallest men in the center and the smallest on the flanks. The troop is then divided into four squads, numbered one, two, three and four, and noncommissioned officers assigned to squads in accordance with their size. Now these men always fall in in exactly the same place for all formations, such as reveille, roll call, stables, drills, mounted or dismounted, etc. Each noncommissioned officer knows all of the men of his squad, and can at any moment call his roll and account for the men of his squad. For mounted drills, the men having marched to the stables and saddled, fall in in squads, each squad (man, horse and equipment) being inspected by the squad chief in a squad formation before leading out to fall in at the command of the first sergeant; so do the men fall out of the

squad formation and fall in in troop formation in exactly the same arrangement in which they are in squads and in line dismounted. The advantages of this so far as the men are concerned are obvious—an advantage in battle heralded from the time of Cæsar.

THE BARRACKS.

In the barracks the men are squadded under their noncommissioned officers, the squads being likewise arranged in sequence, and the noncommissioned officers are held responsible for the cleanliness and order and instruction of the men. I found great difficulty in securing the first two qualifications, but now the squads are required to be marched by the squad chief into the barrack rooms immediately after the reveille drill, where each man is required to sweep beneath his bunk, make his bed, arrange his clothing and shoes, and then to be inspected by the squad chief before the squad is dismissed. Where any exceptions are taken to the condition of the man's effects at the daily inspection, the noncommissioned officer is first heard on the subject and then the man. With the former nothing more than admonitions have thus far been necessary. The noncommissioned officer sees that each man uses sheets and pillow cases as prescribed: that is, two sheets and one pillow case. The top sheet one week is used as the bottom sheet the succeeding week. The men are required to place one sheet and one pillow case in the wash weekly. These changes of linen are made so as to be clean for the Saturday inspection. In case of men failing to take the prescribed baths, as recorded in the bath book in the hands of the noncommissioned officer in charge of quarters, the squad chief is required to march them to the bath house for the necessary ablutions. When any man shows himself after ample instruction, ignorant of duty, his squad chief is required to have him instructed, either by instructing him himself or detailing some other noncommissioned officer in the squad to do so. In case of disorder or neglect, not only the squad chief but other noncommissioned officers in the squad are held responsible and given their share of reproof.

THE MESS HALL.

In the mess hall each squad sits at its own tables, under the observation of its own non commissioned officers, the ranking noncommissioned officers at the ends of the tables and each man in his assigned place, which he at all times occupies. Noncommissioned officers are held responsible for any disorders occurring there, and are required to explain their own and others' conduct in the premises. In view of the fact that soldiers, especially half-starved recruits, are voracious, the mess hall has been my special concern. The mess is in charge of a sergeant, who daily makes out a bill of fare and posting same in the kitchen, gives orders to the cooks and measures out the supply. This sergeant, except when on guard, is always on duty at meals, watching the men, their behavior and the service at meals. This is necessary since other noncommissioned officers frequently, intent on eating, fail to note infractions of the rules. The frequent reports of the mess sergeant have gradually resulted in an improved mess morale.

In view of the fact that men of limited intelligence do not hear but absorb orders and customs, rarely are verbal orders given concerning troop matters, but all are made of record. These orders are pasted together in convenient form and with the Articles of War are read at each meal by the noncommissioned officer in charge of quarters, or some one duly detailed, who obtains his meals before the troop eats. While orders are being read men are forbidden to engage in conversation except that necessary to obtain a supply of food. While of course this requirement is frequently violated, I presume some things are accomplished, viz: better deportment and the infrequent indulgence in boisterous or profane language, horse play, throwing articles of food, etc. Noticeable forbidden acts are reported to me and admonition or other punishment invariably follows. While I hold non-commissioned officers responsible for their squads, no non-commissioned officer present is relieved from responsibility for forbidden acts committed in his presence.

THE MARCH.

On the march by troop, the arrangement by squads is very much superior to any that I have yet seen, and the results accomplished are better. Immediately upon leaving post or camp, the march is by squads, by twos (over trails by trooper) under the squad noncommissioned officers. In case the country is dusty, the columns straddle the road and take such distance from those that precede as to prevent the squads in rear of the first always traveling in a cloud of dust. Any one who has ever ridden in the rear of a troop of cavalry can understand the advantage of this. This distance between squads varies from, say twenty yards to one hundred or one hundred fifty yards, and within general instructions this is left to the squad chief. To fully understand what is accomplished by this method of conducting a march it will be necessary to explain it a little in detail. For three-quarters of an hour after starting in the morning the troop travels at a walk; then follows a halt of fifteen minutes, during which time the men are authorized to fall out and attend to nature's calls. All of the men thoroughly understand this and count upon it. Likewise, here many horses urinate. Then after resuming the march, I proceed at the rate of fifteen minutes' walk and fifteen minutes' trot, and repeat for two hours and fifteen minutes, so as to bring the last pace before halting, at a walk. Then a halt of ten minutes, then a resumption and repetition of the previous two hours and fifteen minutes. Ordinarily during the first period of three-quarters of an hour, two and a half miles will be traversed. After that the regular gaits are pursued. This will then at the end of six hours land you at twenty-eight and one-half miles from the starting point. If the march be thirty-eight or forty miles, it is advisable to halt here for three-quarters of an hour or more. If only thirty-three or thirty-four miles, it is well to halt only fifteen or twenty minutes and resume. This method of conducting a march, both as to the rates of travel and periods between halts is so influenced by temperature, character of the road and water, that it is never lived up to, and no two marches

are conducted the same, but, by conforming to the general idea, the best results are, I believe, accomplished; camp will be reached sooner than otherwise and stock grazed, which both nourishes and rests. If the weather be hot and the roads be bad, hilly, rocky, or sandy, less trot will be indulged in and consequently less distance covered in a given time. In conducting the march thus in level country, all squads take the walk and trot at identically the same time and throughout the column, the last at the same time as the first trooper.

In halting, however, each squad closes up on the preceding squad and dismounts at the squad chief's command. This, thus and then, enables the troop commander to examine the horses. In resuming the march, the leading squad mounts and leads out, the next then when it has its distance and so on, each by command of his squad chief. If the country be irregular, short spaces alone admitting of the trot, the squads do not trot simultaneously, but when they arrive at the point where the trot was taken up by the preceding squad; so likewise when dismounting and walking are concerned. Thus, it is observed that everything is according to the circumstances of the case. In view of the fact, too, that in hot countries, horses' backs are often made sore by repeated and prolonged pressure on the near stirrup due to the commands, "Prepare to mount and dismount," I always omit them, and frequently require men on alternate days to mount and dismount on different sides of the horse.

On the march the squad chiefs are required to frequently ride in rear of their squads, and in case there are two noncommissioned officers with the squad, one must always be in rear, this to observe and prevent men slouching in the saddle. Formerly, I made my walking and trotting periods longer, but I observed that in say one-half hour men at a walk will become loggy and dull and have a tendency to slouch in the saddle. This evil is corrected by the shorter periods, the frequent trots causing the blood to flow through the veins more lively, bringing the flush to the cheek and making everyone feel better. One of my rules is never to

allow a man to change his seat after he once gets into the saddle. To be sure, I cannot prevent some men from at times causing sore backs, which may be due to a thousand causes, but one fertile source of them is removed.

Men very soon learn that if they are caught slouching they must walk, and few relish a ten, fifteen or twenty mile walk. This punishment by walking, by the way, is a most efficacious one and effectually reaches all offenses committed either on the road or in camp. This system thus places each squad (men and horses) immediately under the squad chief, increases his responsibility and importance, and causes the men to look directly to the squad chief as the medium through whom all things are accomplished.

THE CAMP.

While in the field the duties of the squad are plain. Thus upon arrival in camp the first squad takes charge of the officers' tentage, and likewise the following morning it strikes the tentage and binds same for packs or wagons. The second squad hunts wood and likewise cut the wood for the kitchen; the third hunts water and keeps the kitchen supplied with water; the fourth constitutes the guard, taking the led horses. These duties change daily upon pulling out of camp by rotation. The first succeeding to the duties performed by the fourth, the second to those of the first, the third to those of the second and the fourth to those of the third. Likewise do they change their position in the column of march, the guard and the led horses always marching in rear. The squad is thus always kept intact and always under its own noncommissioned officers. In case of great scarcity of wood and water, all squads except the guard seek same upon the completion of their special duties. The guard of course perform herd guard and with the aid of the force ordinarily at the stables, lay the picket rope. In the morning before the horses are taken from the picket line, the noncommissioned officer succeeding to the guard accompanied by the noncommissioned officer of the old guard verifies the horses, and reports, accompanied by him, to the

troop commander for orders. He then has his squad take charge of the led horses. The extra nose bags are turned in to the quartermaster sergeant by the noncommissioned officer of the old guard. The led horses are fed by the guard squad.

Where the camp ground is not well adapted for a properly laid out camp and everything is secure, squad chiefs may be directed to select some convenient location and pitch their squad camps. This is a good innovation, as it promotes a squad esprit.

SECURITY ON THE MARCH.

The method of conducting a march by squads has its advantages for a country such as the Philippines are said to be, where the density of the vegetation prevents the employment of flank guards. Thus, in case of a frontal attack on the leading squad, the second or third squads in column taking advantage of their distance from the front, will be guided accordingly, both or one endeavoring if possible to make a detour to one or both flanks to attack the foe in flank, or one joining the leading squad to aid and support it while the other makes the detour, the guard performing its natural duty in rear, sending such men as it can spare to the front. Noncommissioned officers are instructed that ordinarily the employment of only one flanking detachment is the safest procedure. In case the enemy permits the leading squad to pass and attack an interior squad on the flank, the position of the leading and rear squads, should the country be penetrable, enables them to approach and take the foe in flank, and noncommissioned officers properly instructed will always have in mind such contingencies. In case the country is wooded, but sufficiently open to permit its easy penetration, I believe the employment of skirmishers with forty, fifty or seventy-five yards intervals much superior to the ordinary method laid down for the performance of advance guard duty, because in such a country where it is impossible for the detached parties to see over the tops of the vegetation, noncommissioned officers in charge of them cannot keep in touch with the advance guard or main body. I

have taken my troop into the mesquite south of the post and lost one or two detachments every day for a week. This, notwithstanding their being allowed the greatest latitude in their movements, and this upon ground with which every man is familiar. One noncommissioned officer, a fine horseman and experienced soldier, was lost on identically the same ground on two successive days; hence, I now deploy the leading squad to the right of the road with above stated intervals. Each man to the right and rear (from ten to fifteen yards in rear) of the man with whom he must keep touch, by voice, sight or sound. The base: I make a corporal and place one man ahead of him on the road about fifty yards. The men are numbered to the right and left of him, two, three, four, etc.; the corporal himself is numbered one. Frequently the corporal calls "Number One," and then each man to the right, in succession, calls his own number in a moderate tone, so that his neighbor may hear and keep in touch with him. The second squad is deployed similarly to the left, the men calling off as described for the right flankers and at the same time. Thus a squad of eight men will cover a stretch of country varying from 300 to 500 yards which is ample for a troop in such a country.

In case there are more than eight men in a squad, the squad chief should keep the balance with himself deployed in rear of the center of the squad, or else in column on the road about three hundred or four hundred yards in rear of deployed skirmishers in advance; however, the sergeant or other noncommissioned officer in command of the extended line must frequently ride the line to see that touch has not been lost. In case of attack in front or in front of one flank of skirmish line or to one flank of skirmish line, the same principles obtain as in preceding cases, each squad chief being instructed to assemble his men on the skirmishers most convenient to the point of attack, and then conducts them to the best possible advantage. Of course, circumstances alter cases, and officers are expected to always be on the ground to properly guide the attack, but the principles are as above stated. In case of an attack in rear, the led horses are speedily conducted to the front and the other squads guided

as before, the squad chiefs being instructed to always conduct their men towards the fire, bearing in mind the advantages of an attack on the flank.

While the arrangement of squads is designed solely for a single troop on the road, it might, in exceptional circumstances, be used with variations by a cavalry command advancing across country where the obstacles were of no moment and the footing firm; thus, have the squads march abreast of each other in column of twos, with suitable intervals, guard squad in the center, one lieutenant to follow the troop, the guidon upon which the troop should regulate to accompany the captain in advance.

STABLES.

The horses are squadded and belong to the same squads as their riders. They are so arranged in stalls and are always so tied on the picket line. This acquaints each horse with his neighbor, and noticeably reduces the tendency that horses have to kick and bite strangers. The horses are groomed by squads, and although the whole troop is marched to the stables by the first sergeant, each squad grooms under the immediate supervision of its squad chief, and no man changes horses until the squad chief has inspected and passed upon his work. Since the scheme has been inaugurated I have not observed a single man fail to hustle. It is like task work, which anyone who has worked bodies of men knows accomplishes more and better work than any other system. When the horses of the squad are groomed to the satisfaction of the squad chief, he reports it to the first sergeant, who reports it to the officer present, and if the inspection justifies it the horses are led in. This done, the squad chief marches the squad to the saddle room (where likewise all of the saddles are arranged in squads, and for the arrangement and condition of which the squad chief is responsible) and if the saddles and equipments are not properly adjusted or are dirty, he requires the men to adjust and dust them off. This done, he marches his squad to the barracks and dismisses it. Likewise after all drills, each man is required to dust off and

arrange his equipments, and this under the supervision of the squad chief, who may be summoned at any time of the day and have his attention invited to neglects of his men. However, I have rarely had occasion to take such steps in the matter, since the order requiring the equipments to be adjusted, etc., after stables has impressed upon the men the fact that there is but one way for equipments to be kept. In saddle rooms of the class such as we have here, some things cannot be kept as perfect as other and better conditions would admit of. Each squad is required to keep the earthen floors of their own stalls in good condition, and keep the woodwork lime-washed. In assigning horses originally, the large horses were placed in the center squads and the small horses in the flank squads, so that each man would have a horse according to his stature, and this arrangement has, notwithstanding the vicissitudes of the service, been maintained.

In conclusion, I might say that the addition of recruits does not cause any derangement of the system, his size determining his squad. In case the squads thereby become unequal, the largest men of the small squads are transferred to the large squads, or the smallest men of the large squads to the small ones.

Thus it is seen that there are very few matters arising in troop administration that are not facilitated by the squad system, not the least merit of which is the relief afforded the first sergeant and the troop quartermaster sergeant.

HISTORY OF THE FIFTH CAVALRY IN THE SPANISH-AMERICAN AND PHILIPPINE WARS, MAY 1, 1898, TO OCTOBER 10, 1903.

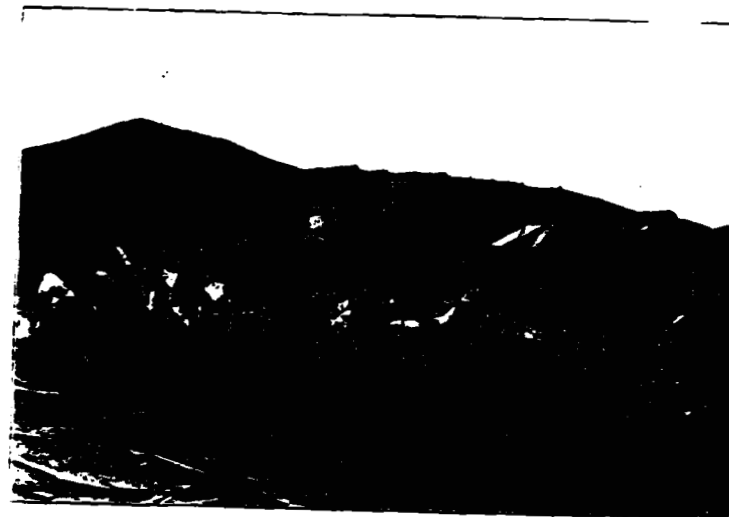
BY CAPTAIN N. F. McCLURE, FIFTH CAVALRY.

THE story of the Fifth Cavalry in the Spanish-American War and in the Philippine disturbances, though not filled with dashing charges and hair-breadth escapes, is still one worth recording. The regiment was ever ready for the front, and it was not the fault of the rank and file, but their misfortune, that they played a part of no more importance in these events.

When war with Spain was declared, the Fifth Cavalry was stationed at various post in Texas. About May 15th it was concentrated, except Troops D and F, at New Orleans. On May 25th the regiment moved by water to Mobile, where the two absent troops joined it, and all these changed stations on June 5th to Tampa. It was supposed at this time that the stay there would be but a few days at most, and a camp was selected convenient to the railroad and without special regard to sanitary conditions. This camp was moved about July 20th to what was supposed to be a better site, and this being flooded by August 5th, necessitated a second change to Tampa Heights. But the seeds of typhoid fever had already been sown, and that awful epidemic now began, which resulted in the record of the Fifth Cavalry for sickness being one of the worst of any regiment, regular or volunteer, in the service.

Several times during this period there were orders to board transports for Cuba or Porto Rico, but, for one reason or another, nothing came of this, except that Troop A, through the individual efforts of its commander, Captain A. C. Macomb, managed to secure passage on the same transport with a light battery, and sailed for Porto Rico July 25th.

After some delay off Fajardo, the troop with its horses landed about August 5th at Ponce, and was attached at once to the left column of the Porto Rican expedition. It behaved with great gallantry in this movement, and was especially conspicuous for good work in the affairs of Hormigueros and Rio Prieto near Mayaguez. But the protocol of August 13th soon cut short its career, and its services from that time until the arrival of the rest of the regiment were confined to preserving law and order and guarding the interests of sugar planters in the vicinity of Tas Marias and Tares.



OFFICERS' QUARTERS DESTROYED BY THE HURRICANE OF AUGUST, 1899,
AT HUMACAO, P. R.

The headquarters and the remaining eleven troops left Tampa August 15th, and went into camp at Huntsville August 18th.

Many cases of typhoid contracted in Tampa developed here, and the wisdom of the change was not at first apparent. But the bracing breezes of the uplands eventually did their work, and by November 1st seventy-five or eighty per cent. of the rank and file were in good physical shape.

On November 4th, headquarters and Troops B, D, E, G, K and L started for Savannah and embarked there November 9th, arriving at Ponce, P. R., on the 14th inst. These troops were scattered over the central and western parts of the island, headquarters, band and one troop locating at Mayaguez.

Troops C, F, H, I and M remained in camp at Huntsville, where the suffering from the inclement weather was considerable, until January 21, 1899, and then took train for Savannah, sailing from that port February 1st for Porto Rico. They disembarked at San Juan February 6th to 10th, and took station as follows: "C" at Hunacao; "F" at Bayamon; "H" at Arecibo; "I" at Ponce and "M" at Cayey.

From the time of leaving Huntsville, November 4th, until the following October, Colonel C. C. Carr commanded the regiment. Colonel W. A. Rafferty then joined at Mayaguez and held the command till his death September 13, 1902.

Troops A, B, C, and D sailed for the United States from San Juan, March 24, 1900, landed at Newport News, Virginia, and reached Jefferson Barracks April 2d.

The third squadron, Troops I, K, L and M, with the band and headquarters, sailed from San Juan, August 7, 1900, landed at New York and took station at Fort Myer, Virginia.

The second squadron, Troops "E," "F," "G" and "H" left San Juan December 15, 1900. Troops "E" and "G" took station at Fort Ethan Allen and Troops "F" and "H" at Jefferson Barracks, Missouri.

REMARKS ON THE SERVICE IN PORTO RICO.

The service of the Fifth Cavalry in Porto Rico was trying, though not specially hazardous. It was well performed. The changes from martial law to military government and from the latter to civil government brought with them much hard work for officers and men. Troops were generally divided up into small detachments, relieving want and destitution, guarding haciendas, patrolling, holding elections, building roads, etc. The rights of the people were upheld and respected universally, and there are few in-

stances recorded of lawlessness or disorder among the men of the regiment.

When the terrible hurricane of August 8, 1899, swept the island it left devastation in its track. From San Juan to Fajads on the northeast coast the storm was less severe, but in the other portions of the island the foliage was whipped from the trees and many of them uprooted; the coconut groves were more than half destroyed; the fruit disappeared; and the towns were leveled to the ground. An unprecedented deluge of rain accompanied the storm and flooded the



BARRACKS OF A TROOP FIFTH CAVALRY DESTROYED BY HURRICANE OF AUGUST 8, 1899, SAN JUAN, PORTO RICO.

lowlands. Two thousand six hundred people lost their lives, of whom five hundred were drowned in Ponce and five hundred in Arecibo.

The sickness and starvation following in the wake of the storm was little less severe than the hurricane itself. Several men in the Fifth Cavalry also perished. Two of these were at Humacao, one being drowned and the other being crushed in the ruins of the large brick barracks which blew down. In many cases the men lost all their clothing and personal effects, for which they were never reimbursed.

To meet the want and destitution caused by the storm, the issue of rations from the surplus in the Subsistence Depot at San Juan was begun, and this was followed by great quantities of food-stuffs, clothing and medicine donated and sent by the people of the United States. To distribute these, the troops of the Fifth Cavalry and a part of the Eleventh Infantry were divided into small detachments and scattered through the devastated towns. Then began months of hard work getting these supplies to the people. Transportation was limited, the rough weather often rendered it difficult to get stores landed along the seacoast, while the rushing waters of the storm had so completely destroyed the roads in many localities that it was well nigh impossible to get supplies to the interior. In many cases it was necessary to use pack horses and pack mules.

Officers and men worked hard and carried relief to many a disheartened and discouraged community. Captain H. W. Wheeler and Captain H. S. Bishop, Fifth Cavalry, were particularly active in this work. The former often accompanied his pick teams over miserable mountain trails to interior towns and hamlets. In some districts the relief was kept up for many months, and I do not hesitate to say that the government, by its prompt action in sending supplies, and the troops by their faithfulness in distributing them, saved thousands of lives. It was long before the fair island was itself again.

The average stay of the troops of the regiment in the United States after the return from Porto Rico was one year, though some troops remained less than that and some longer. On March 18, 1901, headquarters, band and Troops A, B, C, D, I, K, Z, and M sailed for the Philippine Islands, arriving in Manila April 17th. Headquarters, band and the third squadron were stationed in Rizal Province, while the first squadron went to Guagua and Angeles.

On July 1, 1902, Troops E, F, G and H sailed for the Philippines, arriving in Manila July 29th. Two troops took station at Pasay Barracks, one at Angeles and one at San Isidro.

The following is a brief epitome of the service in the

Philippine Islands: Headquarters and band at El Depinto, San Felipe, Neri and Camp Stotsenburg. Troop A at Angeles and Camp Stotsenburg; Troops B and D at San Fernando and Camp Stotsenburg. Troop C at Tarlac for three months and then at Bayamburg, Province of Pangasinan, when in October, 1901, three typhoons were experienced, the last of which destroyed the stables at Bayamburg and nearly all the buildings of the detachment in Banista, thus entailing much suffering and loss of property. In June, 1902, Troop C went to San Isidro, where it remained



NATIVE TRANSPORTATION AT ANGELES, P. I.

until time to return to the United States. Troop F served also at San Isidro and Troop E at Angeles and Camp Stotsenburg. Troops G and H were first stationed at Pasay Barracks and afterwards were engaged in the important work of guarding the Manila water supply, of which more will be said later. Troops I, K and L also took part in the same duty. I Troop was first at Montalbon, but here the stables and barracks were destroyed by a typhoon in October, 1901, and the troop moved to San Mateo, where for a year and a half it performed the irksome and arduous duty

of assisting in the guarding of the Manila water supply. Troop K was first at Pasig, but in November, 1902, it moved to Camp Stotsenburg and was the first garrison at that point.

Troop L was at San Felipe Neri but moved to Camp Stotsenburg in December, 1902. Troop M spent its entire service in the lonely post of Tanay, amid ladrones and insurrectos. The troop was often called out to chase these enemies of the government, or by its presence to overcome them.

The important work of guarding the Manila water supply deserves more than a passing mention. The Fifth Cavalry was engaged in this for some eighteen months, Troops G, H, I, K and L participating. During that time they were materially assisted for five months by a battalion of the Twenty-eighth Infantry and later for about the same period by a battalion of the Second Infantry.

When the Asiatic cholera first appeared in Manila, March 21, 1902, Colonel Rafferty, Fifth Cavalry, at once realized how important it was to prevent the water supply of the city from becoming infected. He was placed in command of all troops in the Mariguina Valley, with full power to take such steps as he found necessary. He first made a careful inspection of the basin of the water supply and this developed the fact that more troops would be needed. He applied for them and about April 25th a battalion of the Twenty-eighth Infantry arrived. A rigid river guard and quarantine service was at once instituted. So effective has this been that, at this time, two years after it was first established, the water supply of Manila has never been infected by cholera germs. When we consider the filthy habits of the people, the dense population of the Valley and the extremely small rainfall of the seasons of 1902 and 1903, this result speaks volumes for the efficiency and devotion to duty of the troops engaged in this work.

After Colonel Rafferty's death, on September 13, 1902, from injuries received in a fall on the 6th of the same month, the command of the troops in the Valley devolved upon Lieutenant Colonel C. A. P. Hatfield, Fifth Cavalry.

He also took command of the regiment at the same time and held it until his promotion May 1, 1903.

In February and March, 1902, and again in May and June, 1902, Troops I, K, L and M were engaged in some very arduous service in pursuit of insurrectos or ladrones in Rizal Province. Many stirring incidents occurred too numerous to record here, but one deserves more than a passing mention.

On Decoration Day, May 30, 1902, seven enlisted men of Troop M, Fifth Cavalry, left Tanay for the purpose of going to Binangonan to decorate the grave of a comrade who had died there of cholera a short time previous. On the way they met a large band of insurrectos and five soldiers were captured, the other two escaping. One of these escaping, soon reached Tanay and gave the alarm. The troops from Tanay, Pasig and San Mateo at once took the field and for three weeks scoured the country trying to catch the miscreants. On June 3d the corpses of the five soldiers were found, badly mutilated, and taken to Tanay for burial. A number of the assassins were afterwards captured, and one got as much as three years in Bilibid. It being time of peace, they had to be tried by civil courts. No wonder the natives often regarded us as being "easy."

About January 1, 1903, half the regiment was concentrated at Camp Stotsenburg, and began the labor of building that post, Colonel Hatfield in command. The long months of hard work brought on much sickness, and for a while the surgeons attributed this to the site and tried to have the place abandoned. But common sense eventually triumphed, and the finest site in the Philippine Islands for a military post was retained by the government. Excellent regimental instruction was also carried on at Stotsenburg, so that the tour of duty of the Fifth Cavalry there was of great value to both officers and men.

On June 6, 1903, headquarters, band, and Troops I, K, L and M, boarded the United States Army transport *Thomas* to sail for the United States, and the remainder of the regiment boarded the *Sheridan* for the same purpose on September 15th, arriving in San Francisco October 10, 1903.

The members of the Fifth Cavalry may well be proud of its service in both Porto Rico and the Philippine Islands. No other regiment can show a greater devotion to duty or a more honorable record.

STATIONS OF THE FIFTH CAVALRY NOVEMBER 10, 1898 TO OCTOBER 1, 1903.

Band.—Nov. 14, 1898 to Aug. 3, 1900, Mayaguez, P. R.; Aug. 13, 1900 to March 10, 1901, Fort Myer, Va.; April 19, 1901 to Dec. 22, 1902, San Felipe Neri, P. I.; Dec. 26, 1902 to June 6, 1903, Camp Stotsenburg.

Troop A.—Sept. 1, 1898 to Feb. 1, 1899, Las Marias, P. R.; Feb. 1, 1899 to March 18, 1900, Arecibo, P. R.; April 2, 1900 to July 18, 1900, Jefferson Barracks, Mo.; July 22, 1900 to March 9, 1901, Fort Huachuca, A. T.; April 20, 1901 to May 15, 1901, Guagua, P. I.; May 15, 1901 to Jan. 22, 1903, Angeles, P. I.; Jan. 22, 1903 to Sept. 13, 1903, Camp Stotsenburg.

Troop B.—July 7, 1899 to March 15, 1900, Adjuntas, P. R.; Nov. 19, 1898 to Dec. 26, 1898, San Juan, P. R.; Dec. 27, 1898 to July 7, 1899, Utuado, P. R.; April 2, 1900 to July 18, 1900, Jefferson Barracks, Mo.; July 23, 1900 to March 7, 1901, Fort Grant, A. T.; April 20, 1901 to May 28, 1901, Guagua, P. I.; May 28, 1901 to Dec. 4, 1902, San Fernando, P. I.; Dec. 30, 1902 to Sept. 13, 1903, Camp Stotsenburg.

Troop C.—Feb. 13, 1899 to Feb. 12, 1900, Humacao, P. R.; Feb. 14, 1900 to March 24, 1900, San Juan, P. R.; April 2, 1900 to July 18, 1900, Jefferson Barracks, Mo.; July 21, 1900 to March 4, 1901, Fort Wingate, N. M.; April 19, 1901 to May 2, 1901, Angeles, P. I.; May 3, 1901 to July 20, 1901, Tarlac, P. I.; July 20, 1901 to June 12, 1902, Bayambang, P. I.; July 17, 1902 to Sept. 6, 1903, San Isidro, P. I.; Sept. 6 to 13, 1903, Camp Stotsenburg.

Troop D.—Nov. 14, 1898 to March 22, 1900, Mayaguez, P. R.; July and Dec., 1899, San German, P. R.*; April 2, 1900 to July 18, 1900, Jefferson Barracks, Mo.; July 23, 1900 to March 9, 1901, Fort Grant, A. T.; April 19, 1901 to May 25, 1901, Angeles, P. I.; July 24, 1901 to Dec. 14, 1902, San

Fernando, P. I.; Dec. 21, 1902 to Sept. 13, 1903, Camp Stotsenburg; May 26, 1901 to July 23, 1901, Penaranda.

Troop E.—July 1, 1899 to Nov. 28, 1900, Mayaguez, P. R.; Nov. 20, 1898 to July 1, 1899, also Nov. 1899, March and May, 1900, San German, P. R.*; March 7, 1901 to August 7, 1901, Fort Grant, A. T.; Dec. 6, 1900 to Feb. 26, 1901, Fort Ethan Allen, Vt.; Aug. 15, 1901 to June 21, 1902, Fort Apache, A. T.; Aug. 1, 1902 to Jan. 12, 1904, Angeles, P. I.; Jan. 12, 1903 to Sept. 13, 1903, Camp Stotsenburg.

Troop F.—Feb. 9, 1900 to Aug. 27, 1900, Humacao, P. R.; Feb. 8, 1899 to July 31, 1899, Bayamon, P. R.; July 1, 1899 to Feb. 9, 1900, also Aug. 28 to Dec. 15, 1900, San Juan, P. R.; Dec. 23, 1900 to Feb. 27, 1901, Jefferson Barracks, Mo.; March 3, 1901 to June 8, 1902, Fort Huachuca, A. T.; Aug. 1, 1902 to Sept. 5, 1903, San Isidro, P. I.; Sept. 6 to 13, 1903, Camp Stotsenburg.

Troop G.—Nov. 22, 1898 to Nov. 25, 1900, Albonito, P. R.; March 7, 1901 to March 23, 1902, Fort Grant, A. T.; Dec. 6, 1900 to Feb. 26, 1901, Fort Ethan Allen, Vt.; March 28, 1901 to June 21, 1902, Fort Apache, A. T.; April 12, 1902 to Sept. 7, 1903, San Mateo, P. I.; July 29, 1902 to Feb. 11, 1903, Pasay Barracks, P. I.

Troop H.—June 15, 1899 to Nov. 28, 1900, Mayaguez, P. R.; Sept., 1899 and Feb., 1900, San German, P. R.*; Feb. 12, 1899 to June 12, 1899, Arecibo, P. R.; Dec. 23, 1900 to Feb. 27, 1901, Jefferson Barracks, Mo.; March 1, 1901 to March 23, 1901, Fort Wingate, N. M.; March 30, 1901 to May 30, 1902, Fort Duchesne; Feb. 11, 1903 to Sept. 7, 1903, San Mateo, P. I.; July 29, 1902 to Feb. 11, 1903, Pasay Barracks, P. I.

Troop I.—Feb. 15, 1899 to Aug. 1, 1900, Ponce, P. R.; Aug. 13, 1900 to March 10, 1901, Fort Myer, Va.; April 22, 1901 to Oct. 31, 1901, Montalbon, P. I.; Oct. 31, 1901 to June 1, 1903, San Mateo, P. I.

Troop K.—Mar. 21, 1900 to Aug. 4, 1900, Mayaguez, P. R.; June 10 to July 10, 1900, San German, P. R.*; Nov. 22, 1898 to Feb. 17, 1899, Ciales, P. R.; Feb. 17, 1899 to March 17, 1900, Manati, P. R.; Aug. 13, 1900 to March 10, 1901, Fort

Myer, Va.; April 19, 1901 to Oct. 29, 1902. Pasig, P. I.; Nov. 1, 1902 to June 6, 1903, Camp Stotsenburg.

Troop L.—May 24, 1899 to Aug. 3, 1900, Mayaguez, P. R.; Nov. 24, 1898 to May 24, 1899, Las Marias, P. R.; Aug. 1899 and January and April, 1900, San German, P. R.;* Aug. 13, 1900 to March 10, 1901, Fort Myer, Va.; April 19, 1901 to April 24, 1901, Caloocan, P. I.; April 24, 1901 to Dec. 22, 1902, San Felipe Neri, P. I.; Jan. 3, 1903 to June 6, 1903, Camp Stotsenburg.

Troop M.—Feb. 13, 1899 to Feb. 13, 1900, Cayey, P. R.; Feb. 16, 1900 to July 27, 1900, Manati, P. R.; Aug. 13, 1900 to March 10, 1901, Fort Myer, Va.; April 19, 1901 to June 1, 1903, Tanay, P. I.

* July, 1899 to July 1900, monthly detachment.

ROMANCES OF TWO WARS.

BY MAJOR J. A. WATROUS, UNITED STATES ARMY.

"HOW does it happen?" asked the veteran General. "that some of the sweetest, prettiest stories born of war experiences are never told?" Everybody at headquarters gave it up, but the Chief Quartermaster believed that the old General had a good story up his sleeve and proceeded to probe for it. After fresh cigars had been lighted, the Quartermaster intimated that probably the reason why some of the sweetest and prettiest stories of war times had failed to materialize was because those who were familiar with the facts had bottled them up, had selfishly retained them, thus cheating the public. Then glancing at the staff and visiting officers, remarked, "It is my impression that the General has such a story laid by. It is our duty to the reading public to insist that he relate it."

Everyone in the room except the General sided with the Chief Quartermaster. The story was loudly called for. After two or three puffs and a prolonged look at the ceiling, the old General said: "I am guilty, gentlemen; I do know such a story. If I can get the promise of my distinguished staff that it will behave itself in the future, do its work without annoying me, I will relate it."

"Gentlemen," said the Chief Paymaster, "Isn't the story going to be rather too rich for our blood? Doesn't it come too high? At that price it ought to be a mighty good story."

"It is a mighty good story, and I am going to tell it. Lock the door. Let no guilty man escape."

"It is a long jump from the Pasig River, in the Philippines, to the Rappahannock River near Fredericksburg, Virginia, but it must be made.

"I was a newly made sergeant when Burnside crossed the Rappahannock River and threw his legions against Lee.

Jackson and Longstreet and their magnificent tribes of fighters in December, 1862. If you have read history you know that we remained on that side of the river until the night of the 16th. How well I remember that it was as dark as any night Egypt ever had. Whispered orders came to us to fall in and march with the least possible noise. Just at daybreak the last of the Army of the Potomac crossed the river, escaped, providentially, I have always thought, and during the day went into camp in the forests back of Stafford Hills. I had been given a peck on the shoulder from a minie ball, though it had not sent me to the hospital. The next day after we went into camp the captain excused me from duty, as he did a corporal, a special friend of mine, who had received a slight flesh wound in the arm.

"Having nothing to do, we two noncommissioned officers took a walk. Half a mile from camp we came to a small clearing in the center of which stood a little dwelling. We were both hungry and decided to enter and ask the inmates to prepare a substantial meal. In this humble Virginia home was a most hospitable family consisting of an aged father and mother and two daughters, young ladies, Lottie and Martha. Certainly they would prepare a dinner for us, the best they could, though the best would not be very enticing, they feared.

"While the young ladies were preparing the repast, the father and mother talked with us about the recent battle. They spoke of a son who belonged to Perham's battery.

"We remember that battery," I said, "for it had a position on our left and gave us a raking fire the better part of two days, doing much execution."

"All four of our newly found friends were out and out Confederates, but, like all Virginians, hospitable. We talked on all of the subjects with which we were familiar, spending three or four hours with the interesting couple and their daughters. Both daughters were very good looking. Lottie had dark hair, brown eyes, beautiful complexion, a fine form, and had attended the best school in Fredericksburg several terms, and was well informed.

"My associate, the Corporal, insisted on our returning a few days later for another visit and another dinner. We did, and we returned again and again. I could see plainly enough that the Corporal and Lottie were falling in love in spite of the fact that she was a sharp-tongued little rebel and he as patriotic and country-loving a young Yankee as I ever met.

"While returning from one of our visits a few weeks later, the corporal imparted to me that he had proposed to Lottie. She had been frank to say that she loved him dearly, but believed that it was not best for them to become engaged at such a time. 'You are my enemy; you are fighting my country; you are fighting my brother, my only brother,' said the little black-haired Confederate. 'If, at the end of the war, we still feel as we do towards each other, I promise, gladly promise, to become your wife.'

"Nothing," said the Corporal, 'could induce her to change her mind.'

"Three years from that time (you will remember it was not far from Christmas), I met the Corporal in Chicago. Both of us had become officers in the regular army (lieutenants). I was spending my leave in that city and he was passing through to spend his leave in and about Fredericksburg, Virginia. By correspondence they had settled the question which he could not settle three years before.

"Congratulate me, Lieutenant, congratulate me. I am going down to marry Lottie, our sweet little Virginia friend. She is coming back with me."

"He kept his word. The next year I married. The Lieutenant, whom I will call Jim, and his Virginia wife, were always represented as about as happy a couple as ever met. Of course, I was always interested in her, though we did not meet for twenty years after we said good-bye, in June, 1863, when our command left the vicinity of Fredericksburg and took up its line of march to Gettysburg. Gentlemen, what history our little army has helped to make since that parting in June, forty years ago!

"Just before the battle of Chancellorsville, in May, 1863, our command had a fierce battle at Fitzhugh Crossing. We

charged across the Rappahannock in boats, pushed up the high bank and took the enemy's line of works and made most of his force prisoners. That night Jim and I were on picket. The lines were very close together. The Confederates made a dash at us in overwhelming numbers, capturing a good share of the line, including Jim. I managed to get word back to Lottie that her lover was a prisoner. The next day the little lady came to our lines and was conducted to the grizzly old colonel commanding the brigade, to whom she made known her plan to bring Jim back into the Union lines. 'I have a brother not far from where the Corporal was captured. If you will permit me to send this letter through your lines I am confident that he will see that the Corporal comes back to-night.'

"The General took the letter, read it, handed it back and told Lottie her request would be complied with.

"That night a letter was placed in charge of the officer commanding the picket with instructions to send the secret service man, who gave it to him, through the lines in search of Sergeant John Lott, of Perham's battery.

"I do not pretend to know just how they managed, but I do know that Corporal Jim was in camp for breakfast the next morning. That evening he was given permission to spend an hour at the home of his Virginia friends. He told me the next morning that Lottie spent most of the hour in chiding herself for recruiting the Yankee army by stealing a prisoner from the Confederates.

"Jim's first boy was named for me and my first boy was named for Jim. When the trouble in the Philippines came, Jim and myself were ordered out. As you know, I have a son in the regular army, a lieutenant. So has Jim, and their regiments came to the Philippines soon after their fathers came. Jim's family made all arrangements to follow him as soon as it would be safe for them to do so. They settled in a pleasant home in San Francisco and watched for the opportunity to come. They were there when my son's regiment reached the Presidio. A week later Jim's regiment arrived. Both had been at West Point together, and of course it was not long before they met and it was the

most natural thing in the world for Jim to invite my son to become a guest of his mother and sisters as often as he could be spared from his duties. It was also natural for him to accept. Oh, yes, of course, that boy of mine fell in love with one of Jim's daughters; her name was Lottie, too, and she has black hair and brown eyes and is altogether a very lovely girl. She is my daughter-in-law now."

At this point the old General fixed his eyes on the ceiling.

"Is that all the story, General?" asked the Chief Commissary.

"No, it is not all. While my boy was courting Jim's boy's sister, Jim's boy was writing letters to my flax-haired girl back in Illinois. Jim's boy became my son-in-law last year."

"You haven't told us who Jim is, General."

"That's so. You just watch the next list of brigadiers the President sends out and you will find Jim's name in it."

It was there.

So ended the old General's romances of two wars.

THE GENERAL SERVICE AND STAFF COLLEGE.

ADMINISTRATION.

ALL army officers of more than eight years' service are familiar with the history of the old Infantry and Cavalry School, which was instituted in 1881 and continued until the breaking out of the Spanish-American War in the spring of 1898, and all officers who have joined since the latter date are sufficiently familiar with its history and workings to make it unnecessary to go into the details of its past seventeen years' work.

When the unsettled conditions resulting from the Spanish-American War and the Philippine Insurrection began to disappear in 1901, Mr. Root, ably supported by those officers who were familiar with the work and results of the Infantry and Cavalry School and who were anxious to see it started again, set about the reorganization of our army educational system, the result being the Post School, the General Service and Staff College, and the War College. The functions of the War College were somewhat hazy and indefinite, but the General Service and Staff College supplanted the old Infantry and Cavalry School, and was intended, when G. O. 155 of 1901 was originally issued, to eventually be a school for the education of all branches of the service—a "General Service" School *de facto*—the course to be two years.

After one year of experimental work and the graduation of the class of 1903, those most interested in the school's welfare began to devise schemes for extending the preliminary one year's course to the originally intended two years.

The engineers already had their School of Application at Washington; likewise the medical corps; and the artillery had two schools, a preliminary one at Fortress Monroe and

its post-graduate one at Fort Totten. This made the "General Service and Staff College" a misnomer, for it was really only an "infantry and cavalry school" as of old. This led to a second reorganization of the whole army educational system by the General Staff, the result of which is G. O. 115, War Department, of 1904.

There are now at Fort Leavenworth (or will be as soon as the Signal School is inaugurated) three army schools: The Infantry and Cavalry School, at which officers of those two branches of the service study the duties of those two arms in war. The course is one year.

The Signal School, where junior officers of the Signal Corps and lieutenants of the line study practical and theoretical signal work for one year.

The Staff College, where a limited number of selected graduates from the Infantry and Cavalry School and from the Artillery and Engineer Corps study the duties of General Staff officers in time of war, and to investigate such military inventions, discoveries and developments as effect the efficiency of their arms of the service in war. The course is one year.

The commandant of the Staff College "shall be an officer not below the rank of colonel, especially selected for the duty, and detailed in orders from the War Department." He is also commandant of both the Infantry and Cavalry School and the Signal School.

The assistant commandant of the Staff College is likewise assistant commandant of the Infantry and Cavalry School, but the Signal School has an assistant commandant of its own, "who shall be an officer of the Signal Corps."

The instructor, or head, of a department in any one of the schools has charge of that department in either one or both of the others schools in which his subjects are taught, but each school has its corps of assistant instructors separate and distinct from those of the other schools.

All officers at these schools, whether as members of the college staff or as student officers, have no post duties whatever, the duties of post and college being separate and distinct, with the exception of the commandant and post com-

mander, who are required by regulations to consult with each other in all matters of post administration affecting the interests of the school.

As a matter of fact, the commandant of the schools has an interest in all post administration and garrison work in so far as it relates to the schools in any way, and is consulted by the post commander in all such matters. On the other hand, the post commander has control of all post administration, instruction, drills, etc. Official correspondence between the schools and the War Department passes direct from the commandant to the military secretary, and all matters pertaining to the schools and the courses of instruction therein are exclusively under the control of the War Department.

All matters pertaining to the internal administration of the schools, the allotment of hours to the various departments, the arrangement of the periods for practical work, etc., are regulated by the Academic Board of each school, which board consists of the assistant commandant, the secretary, and the instructors in charge of departments, all of whom have a vote except the secretary.

The duties of the assistant commandant are to preside at all meetings of the Academic Board, supervise the methods of instruction in the various departments, visit the section rooms and lecture room during lectures, observe the outdoor practical work, and, in general, keep in close touch with all of the school and college work, both theoretical and practical, and keep the commandant fully informed in reference thereto.

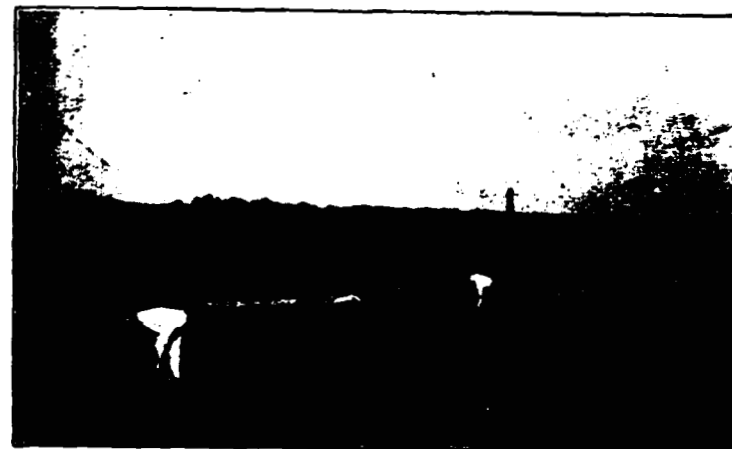
The commandant does not sit with the Academic Board during its deliberations, thus leaving himself free to approve or veto any measure passed by the board.

The duties of the secretary are practically those of an adjutant general, in addition to which he has the disbursement of the college allotment, and is responsible for all school property and for the library, which now contains about 14,000 volumes. He also has charge of the college printing office and the book bindery.

COURSE FOR 1903 TO 1904.

The course of 1903 opened September 14th with an address by the commandant to the entire class. Studies were commenced the next day in three departments: tactics, engineering and law. In the department of hygiene recitations did not commence until the second term.

The school year was divided into two terms; the first from September 15 to December 21, 1903; the second from January 4 to June 27, 1904. The two departments of tactics and



DIGGING TRENCHES.

engineering, to which most of the time was devoted, continued their work almost uninterruptedly throughout the year.

Ordinarily recitations were held in tactics from 9 to 10 A. M. for the first half, and from 10 to 11 A. M. for the second half of the class. The hour from 11 A. M. to noon was utilized for recitations in law for the two halves of the class alternating, or this hour was used for lectures for the entire class. Ordinarily recitations in engineering were held from 2 to 3 P. M. for the first half, and from 3 to 4 P. M. for the second half of the class. This arrangement gave each student officer two recitations in one day, and three on the next.

Practical work in the departments was usually divided into half days, but often an entire day was devoted to one problem. The half day consisted of the morning hours 8 A. M. to noon, or the afternoon hours 1 to 5 P. M. In case a problem required more time the students would remain out all day, notice being previously given, so that a lunch might be provided.

The class was divided into eight sections, each of about twelve students. This division was made alphabetically for the first term, and after January 1st according to standing at the end of the first term. The class consisted of ninety-one student officers, of whom twelve reported some time after the opening of the course.

DEPARTMENT OF TACTICS.

The course in this department was divided into five parts, of which security and information and hippology were finished during the first term, and organization and tactics, strategy, and field exercises occupied the second term.

Security and Information.—Instruction in this branch comprised lectures, advance and review recitations, section room problems, map problems, terrain walks, patrolling with troops, and preparation of problem. There were eleven advance and five review lessons in the authorized text book, "Wagner's Service of Security and Information." Each advance lesson comprised about twenty-four pages; each review lesson some fifty pages of the text. These recitations were conducted in the manner familiar to all. The following rules governed:

Recitations will begin by calling the roll of the section, each officer present, as his name is called, answering "Present," or "Here." This requirement will also apply to assemblages of the class, or portions of it, in the lecture or drafting rooms, or wherever necessary at outdoor practical work.

For the first ten minutes of the recitation hour, and no more, student officers will be permitted to ask questions about any portion of the lesson which is not understood.

Questions so asked must be explicit and addressed to definite points in the lesson of the day.

A student officer called up to recite will be given a topic or series of topics, either in writing or orally. These he will write on a blackboard, with synopsis, or outline of headings, with sufficient notes to fix the attention and serve as a guide during recitation.

In all work at the blackboard the name of the student officer will be placed in the upper right-hand corner of his board.



CONSTRUCTING FASCINE.

All work submitted on paper will be dated, and signed with name and rank in the lower right-hand corner.

For problems, all of the work involved, including computations and constructions, will be placed on the board or paper; results alone are not sufficient.

When problems of computations to be worked on paper are given, the student officer will sign his name and rank in the right lower corner and place his work on the assistant instructor's desk as soon as completed.

When prepared to recite at a blackboard, a student officer will take his seat until called upon by the assistant instructor to recite.

When called upon to recite, the student officer will hand in his slip, if he has received one, and will commence his recitation by announcing his subject as follows: "My subject is," etc., giving a terse statement of the subject which in his opinion embraces the topics assigned to him.

During the recitation he will stand in a soldierly position, habitually facing the instructor, glancing, when necessary, at the board, and indicating with the pointer the matter under discussion. When not in use for indicating, the pointer will be held in the position of "order arms" of the saber.

Any student officer who has prepared a board and has not been called upon to recite when the section is dismissed, will, before leaving the section room, write his subject at the top of the board.

Pronunciation, spelling and correct use of language and punctuations are considered in estimating the value of a recitation or an examination, and so also is the manner of delivery. Clear and concise statements indicate well formed and positive ideas, while indefinite and general statements indicate hazy ideas and will be valued accordingly.

The greatest difficulty encountered in the recitations was the size of the sections (twelve) and the limited time devoted to each recitation (one hour). This left only about four minutes for the work of each student officer, by no means enough to thoroughly instruct on the subject. In this limited time only a hearing of the text could be undertaken, and this is not a satisfactory method. There were four assistant instructors for this work, each one taking two sections daily. In future classes the size of the sections will be reduced by about one-half, so that more time can be devoted to each student and to the subject. Furthermore, since this branch is more or less thoroughly studied in the post school course, it is the intention to do away with formal recitations and replace them by quizzes, preceded by lectures that will treat of the subject more generally and broadly.

As an accompaniment to and for the purpose of rounding out the recitations, there were given out at the beginning of each recitation what were known as "section room problems."

These problems were drawn up by the instructor and so designed as to apply the principles laid down in the day's lesson. For the subject of patrolling, for example, the section room problems were taken from Captain Dickman's lecture on "Patrolling." This excellent lecture was published in No. 40 of the CAVALRY JOURNAL, and a perusal of the problems given there will afford an excellent idea as to the kind of section room problems utilized in the course.



CONSTRUCTING GABION.

Such problems were usually given to two students in each section, and whenever possible the answers submitted were looked over and criticised in the presence of the section before the time of dismissal. At first many of these problems were solved on maps directly; later on a larger scale map with a plate of glass superposed, and finally the large scale maps were placed in a frame under glass on the wall, and students required to make their dispositions directly thereon. A brush and India ink was used for this purpose and worked well. Later slightly ground glass plates were substituted for the plain ones, and on these it was easy to mark in the differently colored lead pencils. The solution thus could be seen by the entire section, and instruction was imparted to all.

The drawback in this method again is the lack of time. As there were only sixteen recitations, each student had but three such problems. When the latter method was adopted all got the benefit, however. There should be sufficient time for the solution and for subsequent discussion and criticism.

The practice in these section room problems was very useful when the map problems were taken up, which was the next step in the instruction.

For the solution of these problems the entire class was assembled at 8:30 A. M. A sample of such a problem is here reproduced:

PROBLEM NO. 1. SHEET NO. 1.

(INFANTRY.)

SECURITY AND INFORMATION.

EXERCISE IN PATROLLING ON THE MAP.

General Idea.

A large column of troops of Blues is advancing along the road—Colchester—Hinesburg—Fay's Corners—Swanton.

An inferior force of Browns is supposed to be on the general line—York Hill—Charlotte—Winston Woods.

Special Idea (Blue).

The advance guard consists of two battalions of infantry (800 men). The reserve of the advance guard (one battalion of infantry, 400 men) has arrived at the forks of the road 150 yards northeast of Section House No. 2 at the southwest entrance to the tunnel northeast of Colchester. The commander of the advance guard (marching with the reserve) orders you to take a patrol toward the right flank of the column for the purpose of establishing and keeping contact with the enemy.

Note: This sheet and a map to be give to student at beginning of exercise 8:40 A. M.

SHEET NO. 2.

The solution to the following questions must be handed in to the instructor at 9:40 A. M.

Question No. 1.

- (a) Write out the orders that the commander of the advance guard should give to this patrol.
- (b) How many men will you take, and why?
- (c) What inspection of the men composing the patrol do you make?
- (d) What route will you take?
- (e) What formation will you give to the patrol?
- (f) Draw on the map the position of the advance guard and of the patrol at fifteen minutes after leaving the forks of the road.

Note: This sheet to be given to the student at 8:50 A. M.

SHEET NO. 3.

Special Idea (Blue) Continued.

Your patrol has arrived at the bridge across Sucker Brook near Section House No. 4. No enemy has been seen, but inhabitants on the road say that small parties of Browns were in the locality earlier in the day.

The solution to the following questions must be handed in to the instructor at 10:00 A. M.

Question 2.

- (a) Write out the message you would send in concerning the information gained from the inhabitants (on message blank).
- (b) What route do you now select for your patrol?

Note: This sheet and a new map to be given to the student at 9:40 A. M.

SHEET NO. 4.

Special Idea (Blue) Continued.

Your patrol has advanced to the clump of trees south of and nearest to the town of Charlotte. About 1,500 yards to the east you have seen several small parties of the enemy

(Browns) and inhabitants report the enemy in force to the north.

The solution to the following questions must be handed in to the instructor at 10:30 A. M.:

Question 3.

(a) How would your patrol proceed now? What route would you choose? How is the town of Charlotte passed?

(b) The reserve being at Hinesburg, would you have a connecting file? If so, where would he march?

(c) Write the message you would send at this time (on a message blank).

Note: This sheet is to be handed to the student at 10 A. M.

SHEET No. 5.

Special Idea (Blue) Continued.

Your patrol is in the clump of trees just south of Booth's Mill. You have observed two hostile infantrymen in the clump of trees east from Section House No. 2 at contour 340 at edge of map. You also observe infantrymen (evidently two) in the southern edge of Winston Wood.

The solution of the following questions must be handed in to the instructor at 11 A. M.:

Question 4.

(a) What do you conclude from your observations?

(b) Write out the message you would send (on a message blank).

(c) How will you send the message?

(d) What route should be followed by the messenger to reach the reserve at the copper mines?

(e) Do your messengers return to you?

Note: This sheet to be handed to the student at 10:30 A. M.

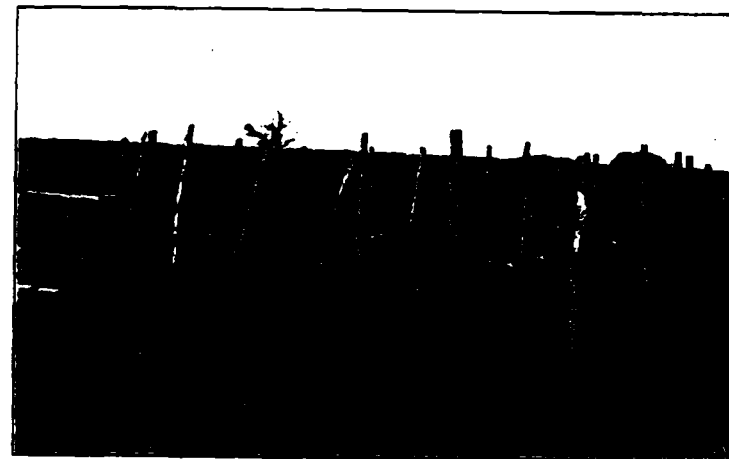
SHEET No. 6.

Special Idea (Blue) Continued.

Your patrol has reached the cut in the road east of Addison, and you receive word that your own column has halted

for the day. The entire advance guard (800 men) is to camp at Fay's Corners, and, independently of the main body, is to cover its front (to the north) and its right flank (to the east) by an outpost.

The solution of the following questions must be handed in to the instructor at 11:30 A. M.:



HIGH WIRE ENTANGLEMENT.

Question 5.

(a) What should your patrol do now?

(b) When will your patrol return to its company?

(c) Indicate on the map the position for the outpost under the assumption that the two battalions post their own, their rear being guarded by the main body.

Note: This sheet to be given to the student at 11:00 A. M.

The map used in this connection is the one reproduced in No. 40 of the CAVALRY JOURNAL.

The plan of dividing up the problem into sheets was intentional, and was done for the purpose of making the problem a continuous one, and yet limit the time devoted to any part. In practical tactics time is an important element, and it was sought to introduce this element into the map problems, which are necessarily largely theoretical.

As seen from the notes on the various sheets the solutions required had to be handed in at the end of a certain period. This had the further advantage of allowing the problem to be continuous just as the work of the patrol would be in actual practice. To issue all the sheets would have directed the solutions in one channel, that is, the one conceived by the author of the problem. It was sought by this plan to approximate closely to the actual conduct of the patrol in the terrain. There is another obvious advantage in this system of elements for problems, viz: the students, after handing in their answers, obtain a partial solution of the previous elements in the special idea of the next sheet, and this brings all the students back to the same starting point. For individual instruction this is not necessary or even desirable, but where so many work together and their solutions must be considered together, this is the only practical means. Another method out of the difficulty would be to give a series of short problems wholly independent of each other, but in this case the interest cannot be maintained.

This system of subdividing problems into elements according to time was used wherever practicable throughout the course. A test of the method is all that is necessary to recommend it, and the writer believes it is capable of much wider application, as for example, to maneuvers with troops.

The solutions to these problems were carefully considered by the instructor, and when all had been marked, the class was assembled for a discussion of the problem. Good solutions and erroneous ones were shown and illustrated on the maps. The principal errors were pointed out and the principles upon which the solutions rested again rehearsed. This course was a good one, and had the direct result of connecting the text and the principles therein enunciated with practice under certain assumed conditions.

The difficulties encountered in the course were due mainly to a lack of knowledge in map and contour reading, but the exercise gave splendid instruction in this valuable branch. Improvement in the course can be made by devoting time, which was unfortunately not available, to in-

dividual solutions, and explaining each student's errors to him in person.

The next step after the map problems was to take the students on the terrain and repeat the same or similar exercises, still however without troops. For these terrain walks as they were termed, twelve student officers were grouped under an instructor and a half day devoted to a walk of about four miles.

An example of one of these problems here follows. Similar ones can be made to suit the terrain.

PROBLEM NO. 4. SHEET NO. 1.

INFANTRY.

SECURITY AND INFORMATION.

EXERCISE IN PATROLLING IN THE TERRAIN WITHIN THE AREA.

General Idea.

A column of troops (Blues) is on the march from the north on the road through the post of Fort Leavenworth via the cemetery, Hancock Avenue, Garden Road, Atchison Cross.

Mounted patrols and detachments of the enemy (Brown) have been reported in the city of Leavenworth.

Special Idea (Blue).

The advance guard of the Blues consists of one battalion of infantry (four companies of 100 men each). The support of this advance guard consisting of one company of infantry has arrived at the junction of Pope and Hancock Avenues. You have been previously detached as an intermediate flank patrol. A large patrol is operating along the river road. You have arrived at North Merritt Hill and your orders are to advance along Grant Avenue to South Merritt Hill.

The solution to the following questions must be handed to the instructor fifteen minutes after receiving this sheet.

Question No. 1.

(a) How many men should you have in the patrol, and why?

(b) What will be the formation and position of your patrol while you are in observation on North Merritt Hill?

(c) How do you proceed to South Merritt Hill? (Indicating how the patrol will advance.)

This sheet to be given to the student on arrival of the party on North Merritt Hill.

SHEET NO. 2.

Special Idea (Blue) Continued.

You are on Grant Avenue at the outlet of Merritt Lake, and a countryman coming from the south is brought to you. He states that there are a number of Brown cavalymen in the city of Leavenworth, and he saw several parties of three or four mounted men near Metropolitan Avenue.

The solution to the following questions must be handed to the instructor fifteen minutes after receiving this sheet.

Question 2.

- (a) State what questions you would ask this man.
- (b) What would you do with him?
- (c) Write out the message you would send to your superior (on a message blank).

This sheet is to be given to the student at Merritt Lake on Grant Avenue.

SHEET NO. 3.

Special Idea (Blue) Continued.

You have arrived on South Merritt Hill with your patrol.

The solution to the following questions must be handed in to the instructor twenty minutes after receiving this sheet.

Question 3.

Give a simple description of the terrain to the south and southwest.

This sheet to be handed to the student on arriving on the southern point of South Merritt Hill.

SHEET NO. 4.

Special Idea (Blue) Continued

The patrol has arrived at a point on Grant Avenue half way between Pope Hill and the bridge over Corral Creek. Your point has reported to you that he saw four mounted men of the Browns going south near Grant Hill and you yourself see several mounted men Brown disappearing to the south to the right of that brick house.



CONSTRUCTING ABATIS.

The solution to the following questions must be handed in to the instructor twenty minutes after receiving this sheet.

Question 4.

- (a) What do you conclude from the information gained?
- (b) What will you do now?
- (c) How do you proceed?
- (d) Write out the report you would send to your superior (on a message blank).

This sheet to be handed to the student on arrival on Grant Avenue half way between Pope Hill and the bridge over Corral Creek.

PROBLEM NO. 4. SHEET NO. 5.

(INFANTRY.)

SECURITY AND INFORMATION.

EXERCISE IN PATROLLING IN THE TERRAIN, WITHOUT TROOPS.

Special Idea (Blue) Continued.

You have arrived at the bridge on Grant Avenue over Corral Creek.

The solution to the following questions must be handed in to the instructor twenty-five minutes after receiving this sheet.

Question 5.

Write a description of the bridges at this point.

This sheet to be handed to the student on arrival on Grant Avenue on the bridge over Corral Creek.

PROBLEM NO. 4. SHEET NO. 6.

(INFANTRY.)

SECURITY AND INFORMATION.

EXERCISE IN PATROLLING IN THE TERRAIN, WITHOUT TROOPS.

Special Idea (Blue) Continued.

Estimating the strength of marching columns, etc.

The solution to the following questions must be handed in to the instructor thirty minutes after receiving this sheet.

Note: In estimating strength make no allowance for opening or tailing out.

(A battery of light artillery has eighteen vehicles, guns and carriages.)

Question 6.

You observe a body of infantry in columns of fours on the road with the head on line with target range house and the end at the garden house at edge of wood near cemetery.

(a) How many men in the column?

You observe a body of cavalry in column of twos on the road with the head on line with target range house and the end just coming over crest of hill to right of railway cuts.

(b) How many troopers in the column?

You observe a body of troops marching along the garden road and mark the time it takes to pass that clump of trees under railway cut. Infantry in column of fours six minutes, followed by artillery in route march fourteen minutes, followed by cavalry in column of twos sixteen minutes, followed by infantry in column of fours eighteen minutes, followed by a wagon train nineteen minutes.

(c) How many infantry, cavalry, guns and wagons are there in the column?

(d) What organizations are they most likely to be?

(e) How long is the entire column?

This sheet to be handed to the student upon arriving at Grant Hill.

The terrain walks were of great benefit and were later extended so as to give more practice. Improvement on the method in use is possible if more time is available. If only two or three students go with each instructor, the solution may be given by the student verbally and errors pointed out at the time. This method takes much time, but will be the ideal one for such instruction.

When a student has solved a problem, he is not so much interested in the solution of others. What he wishes to know is "why his solution is not correct and good." By taking his solution and pointing out the manifest errors, more good will be accomplished than by announcing a model solution, no matter how carefully this model may have been worked out. In this instruction we must recognize the principle that tactical solutions depend upon circumstances. Of these circumstances the personality, or better the "personal equation," of the student is one of the most important. To hold up a model solution involves the disregard of this "personal equation." If this principle is recognized, it is seen that in tactical problems individual instruction is the only method that will bring forth the best result. This applies in a lesser degree to all instruction, but for tactical problems has an immense weight.

The next step in the course was "Patrolling with

Troops." A general idea was formulated upon which as a framework all the separate premises were formed.

The general idea was the same for all patrols, each taking a separate route, so that twelve patrols, each under an instructor as umpire, could be sent out each half day.

The following is the general idea used for these patrols.

PROBLEM NO. 11. SHEET NO. 1.

SECURITY AND INFORMATION.

EXERCISES IN PATROLLING ON THE TERRAIN WITH TROOPS.

General Idea.

A large column of Blues is advancing in Missouri from the east toward Fort Leavenworth, with the intention of occupying that place. The advance guard has reached the Rock Island bridge and encountered no opposition.

A force of Browns is known to be advancing from the south of the city of Leavenworth, from the direction of the Frenchman's, and from the direction of Kickapoo, but his exact location is unknown and no patrols have been seen.

Special Idea (Blue).

The support of the advance guard of your force has just crossed the bridge, and the commander of the advance guard, who is with the support, has sent out six patrols in various directions to reconnoiter the terrain, and, if possible, to establish contact with the enemy and keep it.

You are in charge of one of these patrols and have orders as follows:

You will establish contact with the enemy and keep it. What is known of the enemy is indicated above.

As the terrain, I will furnish you with this map (Ft. L.). The direction will be so as to cover the ground on the map enclosed in the red lines drawn thereon (your own sector).

Other patrols will be in the territory adjacent to yours, one on your left and one on your right, and will reconnoiter the territory up to the lines limiting your sector.

You will remain out until ordered in by the umpire.

All messages and reports will be sent to me at Sherman Hall or handed to the instructor if present.

This sheet to be handed to the student at assembly.

This exercise was given simply to serve as a model or suggestion for student officers in the instruction of their noncommissioned officers when they again joined their organization. If time permitted, more of these exercise could be added to advantage, but even the one undertaking will



GABION AND SAND BAG REVETMENT.

serve a useful purpose. To afford each of the ninety-one student officers an opportunity to command a patrol, devolved an abnormal amount of work on the instructors, and an increase in the number of exercises, was precluded on account of the lack of umpires.

Other practical work with larger forces was postponed until the second course, so as to give the students instruction in tactics. These problems included outposts, advance and rear guards and cavalry screen.

Soon after the practical exercises each student was required to submit a thesis on the course. It has usually been the rule to allow each student to select his own subject for this thesis, but a new method was inaugurated. One theme was chosen by the instructor for all students as follows:

THESIS.

Security and Information.

In accordance with Par. 25, Regulations and Program of Instruction of the General Service and Staff College, published in G. O. No. 90, A. G. O. 1903, a thesis of not less than 2,000 nor more than 5,000 words will be prepared by each student officer and handed in to the instructor of the Department of Tactics not later than noon, December 21, 1903.

BY OFFICERS OF INFANTRY.

Subject of Thesis.

Method best suited in the United States army for imparting practical instruction in Security and Information to the noncommissioned officers of a company of infantry, including a scheme for progressive exercises on the subject.

BY OFFICERS OF CAVALRY.

Subject of Thesis.

[Same as above, but for troop of cavalry.]

The work of the student class in these theses was exceptionally good. Two of the theses were published in the CAVALRY JOURNAL, the first by Lieutenant Massee in the April 1904 number; the second by Captain Craig in the July 1904 number.

A written examination on the subject completed the course. The results of this examination were remarkably satisfactory. A high standard was set for subsequent classes at the school.

Hippology.—This course embraced lectures, advance and review recitations, practical demonstrations and practical tests, riding lessons and a written examination. Recitations were conducted in the usual manner, except that each day three students from each section were sent to the riding hall where recitations were held, using the actual horse in the demonstrations. Then each student had some few recitations which were conducted by the senior assistant instructor and the veterinarian. The only improvement that sug-

gests itself in regard to these recitations is to hold them all in the practical manner indicated above. This cannot be done throughout the course, but much will be gained by having the subject before the student. A certain number of theoretical recitations are necessary, but they should be reduced to the minimum.

The lectures were so arranged as to keep in touch with the advance in the book. They covered the entire course and were of great benefit. A careful preparation of lectures will afford an opportunity of curtailing much of the theoretical work in the book, and allow cutting out certain chapters from recitations. It would not do to neglect these chapters entirely.

The practical demonstrations were given so as to keep pace with the program in the text. It is difficult always to arrange a course so as to have first a lecture, then a recitation and then a practical demonstration, with so large a class and so limited a number of instructors, but the sequence of instruction was adhered to as closely as possible.

There were two practical tests of the knowledge acquired. The first was determination of age by examination of teeth. Each student officer was required to record the age of three horses, and it was remarkable how closely the results approximated to the recorded ages of the horses. The second test was an examination for soundness and conformation. Each student officer had to report upon three horses, as to their serviceability for the service. The results were well worth the time spent upon this branch of the subject.

The riding lessons were pursued under some difficulties. The class was large, the time of the students was already crowded, and only a small riding hall was available, which had to be used by eleven organizations at the post. Several innovations were made in this course. Whitman saddles were procured, with the idea of teaching a better seat. Great attention was paid to this feature and to giving officers a presentable appearance on horseback. It is contemplated to establish a mounted service detachment separate from troops at the post, and to provide a better class of mounts. Besides these improvements, addition of another riding hall

to the equipment of the post will afford better opportunity for instruction in riding.

The written examination in hippology completed the first term, after which a vacation was granted to all student officers until January 4, 1904.

During the second term more time relatively was assigned to the Department of Tactics.

Organization and Tactics.—This course comprised lectures, recitations, section room and map problems and practical work.

The attempt was made to bring the problems and the recitations together, so that application went hand in hand with theory. To do this the course was thoroughly mapped out, and a schedule of recitations, lectures and problems for the entire term was prepared. There were twelve problems in all relating to the subjects in the book. The problems were in pairs and embraced the following: Organization; infantry in attack and defense; cavalry in attack and defense; artillery in attack and defense. The arms combined in attack and defense and convoys. In each series two problems were solved, the first a preliminary one which was given out as soon as the subject was finished in the text book. The solutions to this problem were carefully scrutinized, and then a discussion followed pointing out the errors and discrepancies. As soon as practicable after this discussion the record problem followed, the solutions to which were marked and used in grading the students in their standing. For these problems the West Point, Kentucky, maneuver map was usually used.

Great attention was paid to the writing of orders, and models of various kinds of orders were furnished, of which the following is a specimen for a march in advance of a force composed of all arms.

FIELD ORDERS, No.	PLACE	DATE	HOOR.
TROOPS.			
1. <i>Advance Guard</i> (C. O.)			1. Information as to the enemy, and our other forces.
Cavalry.			2. <i>Intentions of the Commanding Officer.</i> (In the most general terms.)
Infantry.			3. <i>(a) Order for the advance guard.</i> (Time of starting; place whence it will start; road by which it will march; reconnaissance to be made; communication to be maintained with parallel columns, etc.; special duties.)
Artillery.			<i>(b) Order for the main body.</i> (Distance to be preserved from the advance guard; or time and place of starting.)
Engineers.			<i>(c) Order for the flank guard.</i> (Similar to advance guard order, but with special mention, as a rule, of reconnaissance duty. Sometimes the point at which the flank guard is to be detached is stated.)
Hospital Corps (rarely).			<i>(d) Order for the outposts.</i> (Instructions as to how they are to join the column.)
2. Main body (in order of march)			4. <i>Order for the baggage.</i> (Party detailed to conduct it; distance from main body, or special arrangements.)
Cavalry.			5. Position of the Commanding Officer—at the beginning of the march, and sometimes subsequent positions.
Infantry.			Signature.
Artillery.			
Infantry.			
Engineers.			
Hospital Corps.			
3. <i>Right (left) Flank Guard</i> (C. O.)			
Troops named as in Advance Guard.			
Method of furnishing copies to troops.			

The preliminary and record problem were similar, but sufficiently distinct as to require new assumptions and other terrain.

The following is an example of one of the preliminary problems on the West Point map.

PROBLEM 5. ORGANIZATION AND TACTICS.

General Idea.

The Blue army is concentrating north of the Ohio River, with a view to operating south of that river. The cavalry screen has crossed to the southern side of that river, and is holding the bridges over it, pending the concentration of the army.

The Brown army is concentrating somewhere south of the Ohio, but its exact position is not known.

Otter Creek is not fordable at any point on account of recent heavy rains and the "spring rise" of the Ohio River.

Special Idea (Blue).

The First Brigade, First Cavalry Division, is camped at West Point. You command the First Squadron, Eighth Cavalry, in this brigade. At 3:00 P. M. April 3, 1904, you receive the following order:

FIELD ORDERS,
No. 28.

Troops.

1. First Squadron,
Maj. J. T. L.
2. Second Squadron,
Maj. T. P. H.
3. Third Squadron,
Maj. P. H. F.
(less Troop M.)

FIRST CAVALRY,
WEST POINT, KY., April 3, 1904, 4:00 P. M.

1. It is reported that a force of hostile cavalry, probably the enemy's cavalry screen, is advancing from the southwest. Small, mounted patrols were seen to-day thirty miles southwest of West Point.

2. This regiment will reconnoiter toward the southwest to-morrow, and will occupy the line of Otter Creek.

3. (a) The first squadron will march at 6:00 A. M. by the L. & N. Pike and Muldraugh-Garnettville Road. The squadron commander will have important side roads north of his main road, and between Cross Roads No. 33 and Otter Creek reconnoitered, and will keep up communication with the second squadron. He will have the two wooden bridges at Griffith and Fitch and the wooden railway bridge at Christ destroyed. He will have the main road reconnoitered about ten miles beyond Garnettville, and will take up a position to hold the two (2) bridges at Garnettville.

(b) The second squadron will march at 6:10 A. M. by the L. & N. Pike and Tiptop-Grahampton Road.

4. (a) Two days' rations and one day's grain will be carried in saddle-pockets.

(b) The ammunition wagons and supply train with five days' rations and six days' grain will move at 5:00 A. M. to Grimes' farm (Cross Roads No. 49), under escort of Troop M.

5. Messengers will find the regimental commander at Grimes' farm (Cross Roads No. 49).

By order of

COL. W. G. D.,

C. S. B.,

Adjutant.

(Dictated to squadron commanders.)

Note: In the reconnaissance no sign of the enemy is found east of Otter Creek. At about eight miles beyond Garnettville your patrol meets a stronger hostile cavalry patrol, and is driven back to Garnettville, losing two men

killed, the hostile patrol pursuing it to within a mile of Garnettville.

Required:

1. Statement of your plan of action.
2. Measures you take to hold the bridge.
3. Orders issued and reports sent back to the regimental commander.



CONTINUOUS HURDLE, SOD AND FASCINE REVETMENT.

4. A tracing with diagram of your dispositions for defense of the bridges at Garnettville (omit position of the outposts).

In these problems it was the aim of the department to keep the instruction within the scope of the student's probable duties. The maneuvering of army corps or divisions or even brigades was not attempted. Where larger forces were employed only the adjutant's duty was required of the student officer in the solution. It was presumed that any of these students might be called upon to put the orders of a superior officer into shape, and the instruction was directed principally with this in view.

Usually half a day was devoted to the solution of these problems, and a time limit set. In actual field operations there is a time limit, and a close one, and it is best to introduce all conditions possible provided the simulations are not strained and unnatural.

The map problems afford an excellent means of transition from the text to practical work. As in security and information the only improvement that suggests itself, is the giving more time to criticism of each individual's solution. The transition from the theory of the text book to actual field conditions is still further simplified by the introduction of the war game and terrain rides.

It was impracticable to devote more than two half days for each student officer to the war game, but if we remember that the object of the course is to point out the way for further self-instruction and for instruction of others, it will be seen that this time was probably sufficient. The idea was to conduct the war game with all its refinements, so that the student officers would be thoroughly acquainted with the entire procedure. In this way it will be possible for them to select that part of the complete game which is best suited for the purpose they have in hand.

After the war game the terrain rides were taken up and careful attention given to this branch. Leaving out maneuvers, this affords the quickest and best means of imparting practical instruction. Terrain rides can be instituted anywhere and without special preparation. They are extremely interesting. The two important elements of time and distance are actual, or can be made so. Outside of the actual contact of troops very little else is missing. This instruction is suitable for any kind of class from privates to general officers, the only requirement being that there must be a good instructor. The following problem is an example of those solved during the course:

PROBLEM NO. 17. SHEET NO. 1.

TERRAIN RIDE. CAVALRY SCREEN.

A Brown army with its right flank on the Missouri River, is operating from Kansas City towards a Blue army at Atchison. The object of the Brown army is to engage the Blues wherever found. The right of the advance of the Browns consists of the First Division, First Army Corps, and it has



BUILDING PALISADE.

specific orders to hold the right of the Brown line, to guard against a hostile advance along the right bank of the Missouri River. If the enemy is encountered in superior numbers, the division is to seize an advantageous position and hold it until the arrival of reinforcements.

This First Division went into camp at 2:30 P. M. yesterday at Lansing (three miles south of Soldiers' Home), with the intention of continuing its march via Leavenworth and the Atchison Pike the next day.

At 3 P. M. the First U. S. Cavalry reports at Lansing for duty with the division. The division commander having received information that the enemy may be encountered

between Leavenworth and Atchison, decides to use the entire First Cavalry as a screening force for the next day's march and issues orders to that effect.

Required.—1. Those paragraphs of the order of the division commander, which relate to the First Cavalry.

Required.—2. (Supposing that the order of the division commander was received at 3 P. M.) the orders of the commanding officer, First Cavalry, for to-day's march.

Time allowed for solution ——— minutes.

SHEET NO. 2.

The First Cavalry covering the front of the First Division has carried out the orders of the regimental commander and the march has progressed so that the reserve of the cavalry screen is at this point (corner of Metropolitan and Grant Avenues).

Required.—1. A brief statement showing the distribution of the regiment on this screening duty, the position of all parts of the screen.

2. Where is the head of the advance guard of the division?

3. What dispositions are made for the conveyance of intelligence between parts of the screen and to the division commander?

Time allowed for solution ——— minutes.

SHEET NO. 3.

The commander of the cavalry has ridden forward to this point (Atchison Pike near reservation line). The right support consisting of two troops (A and B) is at 3; the left support consisting of two troops (E and F) is at 8.

Required.—1. Give the position and formation of the contact troops and their patrols.

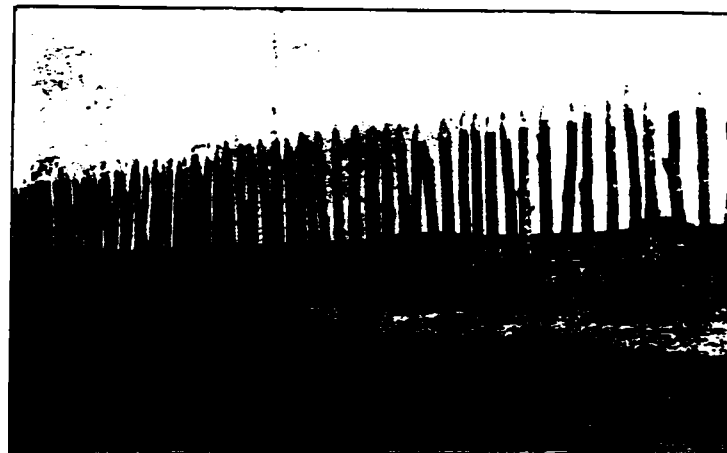
The cavalry screen commander receives messages from both the right and left support commanders, stating that what appear to be small hostile cavalry patrols have been observed advancing in our direction on all the roads, but that they are too far distant to admit of any more definite information.

Required.—What should the cavalry screen commander do?

Time allowed for solution ——— minutes.

SHEET NO. 4.

The cavalry screen commander has ridden forward to this point (F, on the Atchison Pike) and finds here one of the contact troops, G, of the left wing of the screen.



PALISADE.

From the information gathered from this troop, and from other sources, he learns that the Blues are advancing from the northwest, in numbers greatly superior to the Brown division, with the intention of forcing the right flank of the Brown army.

Required.—1. Outline the general plan of the commander of the cavalry screen.

2. The message sent by him to the division commander.

3. The orders issued by the cavalry screen commander.

Time allowed for solution ——— minutes.

After the conclusion of the theoretical course the entire time of the department was taken up by practical work, according to the following notice:

Practical work in the Department of Tactics will commence May 5th, and be continued to the end of the term, June 30th.

The monthly calendars, as published, show the allotment of time to the department, and sections will report at Sherman Hall on the date and hours specified therein. Details of sections or individuals to report at other places or at other hours will be posted on the Department of Tactics' bulletin board. The bulletin board must be inspected daily after 12 noon by each student officer, and each officer will be held responsible for a full knowledge of notices posted thereon.

Officers will be detailed as engineer or topographical officers in connection with field exercises, and when detailed for such duty will report to the instructor in engineering, equipped for either mounted or dismounted road-sketching, as provided for by the detail, and will be graded on the performance of the duty assigned them by the staff of the Engineer Department.

Knowledge required for the solution of the problems embraces everything taught in the department in the two courses of *Security and Information* and *Organization and Tactics*, and also a knowledge of the drill regulations of the student's arm of the service.

COURSE IN PRACTICAL WORK.

The course comprises a series of exercises illustrating the principles of the above subjects in combination as far as they have been taught in the department, without repeating any of the practical map problems had previously.

There will be three problems relating to each subject selected for practical illustration: (1) a map problem; (2) a problem (terrain ride) on the terrain, without troops; and (3) a problem (field exercise) on the terrain, with troops. The foregoing will be supplemented by exercises in the war-game on the map, which are not to be marked.

The exercises will be taken up in the following order:

- Problem 13. Field exercise. Practice march and march of concentration, with troops on the terrain.
- Problem 14. Terrain ride. Location and defense of outposts (all arms).
- Problem 15. Terrain ride. Occupation of position (all arms).
- Problem 16. Terrain ride. Operation of advance and rear guard (all arms).
- Problem 17. Terrain ride. Conduct of cavalry screen.
- Problem 18. Map problem. Practice march (all arms).
- Problem 19. Map problem. Outposts of all arms.
- Problem 20. Map problem. Attack and defense of position (all arms).
- Problem 21. Map problem. Operation of advance and rear guard (all arms).
- Problem 22. Map problem. Conduct of cavalry screen.
- Problem 23. Field exercise with troops, illustrating the occupation and defense of an outpost position.
- Problem 24. Field exercise with troops, illustrating the operations of advance and rear guards.
- Problem 25. Field exercise with troops, illustrating the conduct of a cavalry screen.
- Problem 26. Field exercise with troops, illustrating attack and defense of a convoy.
- Problem 27. Field exercise with troops, illustrating the attack and defense of a position.

Further time allotted to the Department of Tactics will be taken up by exercises in the war-game on the map and emergency terrain rides.

If it rains, or in case of interference with the schedule from any cause, the details posted for the day will lapse, to be repeated at the first available opportunity.

As a signal that the field exercise for any day has been suspended, red signal flags will be displayed on the flag staff at the college building and from the post headquarters building.

In order that all student officers may have equal tasks in the exercises and thus place them on an equitable basis for marking, the same problems have to be repeated several times. On that account student officers will refrain from dis-

cussion of the problems, and are forbidden to either convey to or seek from other student officers information derived from observation or experience in previous executions of problems, until the publication of the marks.

Marks will be assigned on these exercises, each one being divided into elements, weighted according to their relative importance and the time required for solution.

In the terrain rides, "personal equipment" will be one of the elements.

In each exercise with troops, the following elements only will as a general rule be graded, namely: "Promptness at rendezvous," "personal equipment," "formation of troops," "inspection of troops," "manner of giving instructions and directions," "conduct of marches," "manner of exercising command," "accuracy in estimating time required in execution of all essential features of problems or exercise," and "compliance with Field Exercise Rules."

As it is impossible to umpire and grade all the elements of field exercise in accordance with any fixed definite standard, and as it is also impracticable to assign the same function in each and every exercise to each student officer, or even to assign functions to each student officer of similar and equal importance in all the exercises, also because it is impracticable for one umpire to grade the work of each student officer, or for umpires to eliminate their own individual equation, no effort will be made, as a rule, to grade the tactical dispositions and performances of student officers in field exercises, other than to the limited extent described above. But umpires will be required to report whenever student officers permit or commit plain violations of *well known* and *important* tactical principles, and the officer responsible for such violations will be cut in grade by the instructor of the department in proportion to the importance of the principles violated.

Student officers detailed for practical work should report properly equipped, and provided with legal-cap paper, a supply of which may be had on application to the Secretary. Solution, reports, etc., must be on legal-cap paper, unless otherwise directed.

Besides the terrain ride it will suffice to give one example of the problems with troops and the following of the practice march and march of concentration is here added.

PROBLEM NO. 13. SHEET 1.

PARADE MARCH WITH TROOPS. INSTRUCTION FOR BATTALION COMMANDERS.

Six student officers (names furnished you herewith) ten sergeants, twelve corporals, and eighty-four privates, are ordered to report to you at the southeast corner of the West End Parade at — A. M.



GIS.

Assume command of this force and form it into a battalion of three equal companies, each of two platoons.

After forming the battalion, march it via the cavalry drill ground and the Atchison Pike to the Frenchman's (E).

At this point the platoons separate and each marches under command of an officer over its designated route to the rendezvous at the southwest corner of the old prison. The exact time when all the platoons are to concentrate at the rendezvous will be announced to the platoon commanders by you, and so fixed that the one having the longest march will

have thirty minutes rest at the initial point (the Frenchman's).

After the concentration at the prison a rest of ten minutes will be given; then form the battalion, march it to Pope Avenue in front of the infantry barracks and dismiss it.

The march will be made in accordance with Pars. 657 and 658 Infantry Drill Regulations, modified as the circumstances may require, each march to be considered as from an original start.

SHEET 2.

ROUTES FOR INFANTRY MARCHES AND INSTRUCTIONS FOR PLATOON COMMANDERS.

- | | |
|-----------------------------|--|
| 1st Platoon
1st Company. | From E (Frenchman's) to 5 (Taylor's) and then along Millwood Road via Penn Lake to southwest corner of old prison. |
| 2d Platoon
1st Company. | From E (Frenchman's) by shortest road to Sheridan's Drive, above railway cuts; along Sheridan's Drive via Hancock Hill and Penn Lake to southwest corner of old prison. |
| 1st Platoon
2d Company. | From E (Frenchman's) by shortest line to Sheridan's Drive, above railway cuts; along Sheridan's Drive to the Quarry near the Loop, then via McPherson and McClellan Avenues to southwest corner of old prison. |
| 2d Platoon
2d Company. | From E (Frenchman's) along Atchison Pike to Atchison Cross (C) then to B and via Hancock Avenue, Pope Avenue, and McClellan Avenue to the southwest corner of the old prison. |
| 1st Platoon
3d Company. | From E (Frenchman's) along Atchison Pike to Atchison Cross to New Penitentiary, thence north to National Cemetery and via Pope and McClellan Avenues to southwest corner of old prison. |
| 2d Platoon
3d Company. | From E (Frenchman's) along Atchison Pike to Atchison Cross, then via the New Penitentiary to Grant Avenue and along Grant Avenue via Grant Monument and Pope Hall to southwest corner of old prison. |

The marches will be conducted in accordance with Pars. 657 and 658. Infantry Drill Regulations, modified as the circumstances may require and considered as from an original start.

SHEET 3.

INSTRUCTION FOR TROOP COMMANDER.

Three student officers (names attached hereto), four sergeants, six corporals, and forty-two privates are ordered to report to you at the northeast corner of the West End Parade at — A. M.



TRESTLE BRIDGE WITH ROUND TIMBERS.

Assume command of this force and form it into a troop of three equal platoons.

After the formation march the troop via the cavalry drill ground and the Atchison Pike to Kennedy's G. At this point the platoons will separate and each march under its officer over the designated route to the rendezvous at the Frenchman's E. The exact time when all the platoons are to concentrate at the rendezvous is to be announced by you and so fixed that the one having the longest march will have thirty minutes rest at the initial point (Kennedy's).

After the concentration at the Frenchman's, a rest of fif-

teen minutes will be given, then form the troop and march it by the most direct route to the cavalry stables and dismiss it.

The march will be made in accordance with paragraphs 981 and 982, Cavalry Drill Regulations, modified as circumstances may require. Each march, except the final march in, to be considered as from an original start.

SHEET 4.

ROUTES FOR CAVALRY MARCHES AND INSTRUCTIONS FOR PLATOON COMMANDERS.

1st Platoon.—From Kennedy's (G) west to McGaw's (22), south to Heintzleman's (28), east to Salt Creek (14), north to Atchison Pike (F) and to the Frenchman's (E).

2d Platoon.—From Kennedy's (G) northwest and west to Lowmont (K), south to 24, east 20 and 18, east to 16, north to F, and along Atchison Pike to Frenchman's (E).

3d Platoon.—From Kennedy's (G) north to Hoberg's (25), west to 39 and north to 37, east to Spencer's (13), and through Kickapoo to the Frenchman's.

The marches will be executed in accordance with Paragraphs 981 and 982, Cavalry Drill Regulations, modified as circumstances may require, each march to be considered as from an original start.

PROBLEM NO. 13. SHEET 5.

PRACTICE MARCH WITH TROOPS. INSTRUCTIONS FOR THE OBSERVERS.

You are attached to this force as an observer, and expected to render a full report in writing covering your observations.

Accompany the column on its march and upon arrival at the initial point, accompany the ——— platoon ——— company to the rendezvous, and then the combined columns to the place of dismissal. Then proceed to Sherman Hall and upon completion of your report hand it to the umpire.

This report should embody in chronological order all of your observations, including the assembly to the dismissal of the troops, of the execution of the problem by all officers on the following points:

Assembly, formation, time of departure from place of assembly, the initial point, the concentration point; time of arrival at the two latter points, and at the place of dismissal, the time and duration of halts, the rate of march, and errors and irregularities in any of the above with a statement of the correct solution.



LOG RAFT FOR FLOATING BRIDGE.

INSTRUCTIONS FOR TOPOGRAPHICAL OFFICERS. INFANTRY.

You are attached to this force as topographical officer and are required to make a road sketch of the route of the ——— Platoon, ——— Company, Sheet 2, beginning at the old prison and moving in the reverse direction to that prescribed.

The road sketch and report will be made in accordance with instructions for similar work in the Department of Engineering, using any of the methods therein described. Whichever method is used, the sketch and report must be finished in the field.

You are expected to regulate your time of starting and rate of progress so as to arrive at the initial point (the Frenchman's) with finished report and sketch at about the same time as your battalion, and be prepared to guide a platoon back over the route to the rendezvous (old prison) to furnish all necessary information concerning the character of the road, distances, probable rate of marching, defiles, possible ambuscades, etc. The sketches and reports will be turned in to the umpire at the rendezvous.

The combined sketches of the several topographical officers should produce a fair map of the region covered. When this problem has been completed by the entire class the combined sketch of each group will be posted for inspection and comparison.

INSTRUCTIONS FOR TOPOGRAPHICAL OFFICERS. CAVALRY.

You are attached to this force as topographical officer, and are required to make a road sketch of Route No. — Sheet 8.

The road sketch and report will be made in accordance with instructions for similar work in the Department of Engineering, using any of the methods therein described. Whichever method is used, the sketch and report must be finished in the field.

The time of starting and the rate of progress should be so regulated as to permit the finished sketch and report to be turned in to the umpire at the rendezvous at the time of the arrival of the several platoons at that point (the Frenchman's).

The combined sketches of the several topographical officers should produce a fair map of the region covered. When this problem has been completed by the entire class the combined sketch of each group will be posted for inspection and comparison.

ROUTES FOR ROAD SKETCHES FOR TOPOGRAPHICAL OFFICERS. CAVALRY.

No. 1. From the Frenchman's (E) north to Kickapoo (13) and west to Neils (33).

No. 2. From the Frenchman's (E) west to Kennedy's (G), north to Hoberg's (25), west through (29) to Lowmont (K).



THE BARREL RACE.

No. 3. From Kennedy's (G), west through (1) to Lowmont (K), south to (24), east through (18) to (17), north to Atchison road at (F).

No. 4. From (18) west to (26), south to Heintzleman's (28), east to Zimmerman's (14), north to Atchison road at (F).

Note: If possible, rate your horses over the measured mile before starting out.

In these exercises a certain number of student officers were assigned as observers. These were attached to the various organizations that had independent work of some kind, and were required to submit a report on the execution of the exercise. These details served two purposes. It gave the students practice in making reports and prepared them for the duties of an umpire. It also gave employment

to a greater number of student officers, which was an important gain when we consider the size of the class and the scarcity of umpires. Each observer was provided with the same data and information given to the officer to whose command he was attached, and the observer had to make the same solution, write the same orders and messages. Instead of sending them he handed them in with his report. He was also required to point out any errors that he observed and tell what he himself would have done. In this manner his was an independent solution, and the exercise was quite as valuable to him as to the officer actually in command. Whenever possible topographical officers were sent with columns and patrols, and these officers were under direction of the Department of Engineering. By this method it was attempted to bring the two Departments of Engineering and Tactics into touch with each other, and to combine the practical work of both in each tactical problem.

The results of the thesis in Security and Information led the department to try the same method in the tactics course. The thesis was to be a final rounding out of the entire course, and the subject selected was one suited to their purpose. At all posts a series of practical exercises in which all troops are to participate is required. Since many of the student class will have to act as staff officers at these posts, it was deemed best to give them some practice in getting up such problems. The following therefore was required:

THESIS.

Organization and Tactics.

In accordance with Paragraph 25, Regulations and Program of Instruction of the General Service and Staff College, published in G. O. No. 1, A. G. O. 1904, a thesis will be prepared by each student officer and handed in to the instructor Department of Tactics not later than noon, June 10, 1904.

Subject of Thesis.

A series of four practical problems suitable for the progressive tactical instruction of a mixed garrison of the United States army, prepared under the following headings:

1. Map Problem.
2. Terrain Ride.
3. March of Concentration.
4. Exercise on the Terrain with Troops (all arms).

Note: For the purposes of this thesis use the Fort Leavenworth maps and assume a garrison of one battalion of infantry, two troops of cavalry, one battery (light) of field artillery, detachment of hospital corps, and the necessary transportation.



FLOATING BRIDGE, WITH PONTON, BARREL AND LOG RAFT.

In this issue of the CAVALRY JOURNAL three of the theses prepared under this order are published. The first by Captain R. T. Walton, the second by Lieutenant F. E. Buchan, and the third by Lieutenant R. S. Bamberger. To the department the results achieved were highly satisfactory.

The theoretical course in this department was not considered complete without an elementary course in strategy. Little time was left to devote to this branch, and on that account only a very simple schedule could be laid out. It embraced lectures, quizzes and a written examination.

The lectures were on the following subjects and campaigns:

1. General Principles of Strategy.
2. The Novara Campaign in Italy. 1849.
3. The Campaign of Ulm in Germany. 1805.
4. The Campaign of 1796 in Italy.
5. The Vicksburg Campaign in 1863.
6. The Campaign of Koenniggratz in 1866.
7. The Campaign of 1862 in Virginia.
8. The Atlanta Campaign in Georgia. 1863.
9. Massena's Retreat in Portugal. 1811.
10. The Campaign of Metz and Sedan in 1870.
11. The Campaign of Plevna in 1877.
12. The Passage of Rivers in the Theatre of War.

These lectures, the subjects of which were selected by Colonel A. L. Wagner, Adjutant General's Department, were intended to illustrate some of the principles of strategy. The course was an elementary one, and for lack of time had to be so. The method pursued in this elementary study was one that gave good results, and it is now the tendency to make the next year's course in other subjects taught at the College similar to the strategy course.

For the lectures, which were delivered by the instructors, the entire student class (ninety-one officers) were assembled in the lecture room. A printed pamphlet containing a synopsis of the campaign was issued to each student prior to the lecture. A reading of the pamphlet assured a certain familiarity with the campaign, and made the lecture more interesting. The lecture, which lasted about one hour, covered the entire campaign, laying especial stress on the principle or principles of strategy to be illustrated by it.

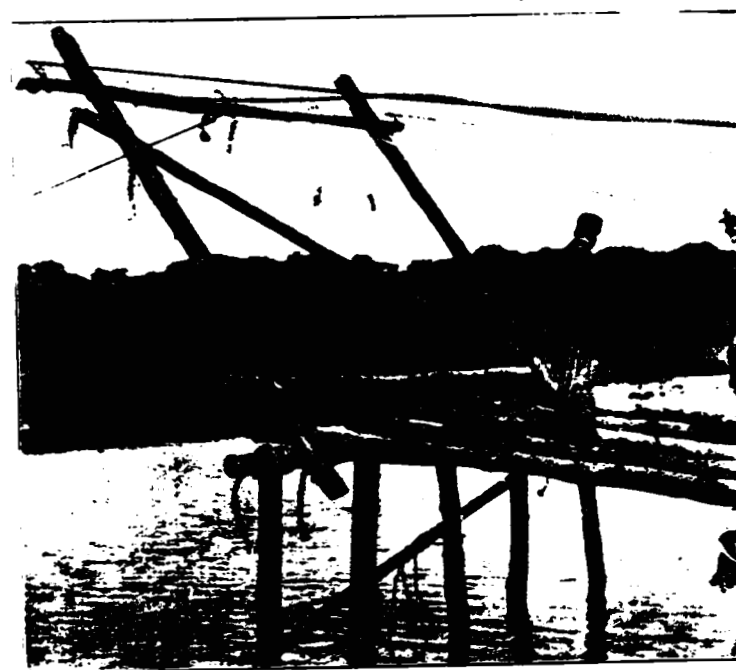
One of these pamphlets is reproduced in the CAVALRY JOURNAL of July 1904 and shows the general characteristics of them all.

After the lecture the different sections into which the student class is divided assembled for recitation on this campaign. Besides the printed pamphlet and the map, each student was given a set of questions on the campaign, answers to these being found in the pamphlet. During the recitations or quizzes these questions were propounded to the students and their answers corrected.

To illustrate these lists of questions the one on the Campaign of Plevna is here reproduced.

QUESTIONS ON THE CAMPAIGN OF PLEVNA, 1877-78.

1. What caused the war of which this campaign was a part?



REES' PILE BRIDGE. FIRST POSITION NEW BAY

2. What approximately was the strength of the opposing armies?
3. Describe the theatre of operations (exclusive of the Balkans).
4. Describe the Balkans in the theatre of operations.
5. Whence did Russia and Turkey respectively receive their supplies?
6. What was the Russian plan of campaign and what

would have been a better plan if the Turks had not possessed certain advantages?

7. What prevented an early successful ending of the war for the Russians?

8. Into what three periods does Greene divide the campaign (omit dates but give periods in weeks).

9. Why was Plevna such an important factor in the campaign?

10. What position was taken up by the Russians after concentrating and in anticipation of crossing the Danube?

11. How was the Danube crossed by the Russians?

12. What was the Russian plan of operations immediately after crossing the Danube.

13. What was now accomplished by the Russian left wing?

14. Explain in general terms Gourko's maneuvers resulting in the capture of Shipka Pass.

15. Whence came the army of Osman Pasha in its advance on Plevna, and where was it first met by the Russians and with what result?

16. Describe the second attack by the Russians on Plevna (July 30th).

17. What brought the Russian advance to a standstill?

18. What were the positions of the opposing armies about this time?

19. What did the Russians do next?

20. What should the Turks have done at this time; and what did they actually do?

21. With what idea did the Russians attack Lovtcha (September 3d) and extend their lines towards the Esker?

22. When did the investment of Plevna become effective and how was this accomplished?

23. What did Osman Pasha accomplish by holding Plevna, and what did this serve to illustrate?

At the end of the course a written examination was held to determine the relative proficiency of the students on this subject. Three questions were selected from each of the ten campaigns in the course. The standing of the class in this subject was very satisfactory and serves to illustrate the

average marks usually attained by the class. The marks range from seventy per cent. (one student) to ninety-eight per cent. (one student). Forty-two students made more than ninety per cent., and seventy students made more than eighty per cent. This is near the usual marks made throughout the course, and is a splendid showing for the second class of the General Service and Staff College.

Many changes, innovations and improvements will be made in the course for the next class at the school. Furthermore, a new and advanced class will commence their studies. The development of the school under its new start will be watched by all with great interest.

DEPARTMENT OF ENGINEERING.

By Captain E. T. COLE, Sixth Infantry.

Practical Work in Surveying.

Each officer did the instrumental work, calculations and plotting of the following surveys:

Traverse with transit, establishing elevations by vertical angles; measurements by stadia. Contoured map of area surveyed.

Traverse with surveyor's compass. Elevations by vertical angles; measurement by chaining. Contoured map of area surveyed.

Plane table survey. Frame work by intersections and boundaries by traversing; elevations with clinometer. Contoured map of area surveyed.

Profile survey with level. Plotting of profile.

Contour survey with level and plot thereof. Area divided into fifty foot squares by transit and ranging out lines.

Triangulation over extended area, including measurement of base line by most careful methods.

Outpost survey with sextant, using method of intersections in front of carefully measured base.

Military Topography.

(a) Determine length of pace.

(b) Construct working scales.

Road sketch on foot with note-book, compass, and clinometer.

Position sketch with drawing board, box compass, protractor and scale.

Road sketch on foot with sketching case.

Outpost sketch with improvised instruments.

Position sketch with drawing board, range finder, and clinometer.

Fill in details and contours on a section of an enlarged county map to make of it a military map.

Road sketch, mounted, with note book, compass and clinometer.

Road sketch, mounted, with sketching case.

Road sketch, mounted, with choice of instruments.

In all these problems the work to be done was definitely laid out except in the last where credit was given for the amount of work done in the allotted time.

Field Fortifications.

Construction of lying and kneeling trenches.

Construction of standing trench and palisade.

Tactical location of trenches and field works.

Construction of fascine and gabion.

Construction of wire entanglement, high and low.

Construction of abatis.

Construction of revetment of fascines and gabions.

Construction of revetments of sandbags and sod.

Construction of continuous hurdle revetment.

Construction of loopholes on parapet.

Trace and defilade a field work.

Construction of profile of a field work.

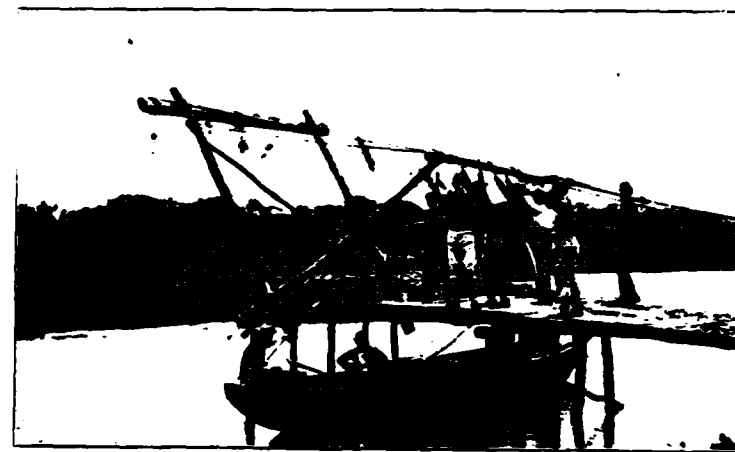
Field Engineering.

Making knots and splices. All of those set forth in manual.

Construction of shears and gin with tackles and slings for barrels and boxes. Construction of canvas ponton and barrel raft.

Bridge building on land and in water with Birago trestle and Rees frame trestle.

Trestle bridge of round timbers.



REES PILE BRIDGE. PLACING DERRICK FRAME.

Bridge with floating supports, using canvas ponton, barrel raft and log raft.

Ponton bridge with engineer reserve train equipage.

Pile bridge after design of Captain Rees. This bridge can be built with equal facility over dry runs, water, sand or marsh, piles being driven without pile driver or false work by slinging the advance bay from a movable trestle derrick and using this as working platform from which to place and drive piles to support its out-stream end.

Suspension bridge with wire cables 100 feet in clear.

In all above problems all the work was done by student officers. In bridge work, using rough timbers, all cutting,

squaring, shaping, etc., and in general all framing and carpenter work was done by the class. No soldier labor was used in any problem except for delivering supplies to the place where they were to be used. All bridges were tested by crossing heavy loads over them.

As an illustration of how these problems are prepared for the class the full directions for the construction of the pile bridge above mentioned, are here given:

Bridge with pile trestles.

Six sections. Four half days.

The trestles consist each of five vertical piles and are spaced twelve feet six inches c. to c. In each trestle the piles are spaced three feet two inches c. to c. The caps are flattened on top and bottom to a thickness of about six inches and are drift bolted or pinned to top of piles. All trestles are braced by two diagonals spiked to piles. The barks are fourteen feet long and are laid five in each bay at intervals of two feet eight inches c. to c. The outer ones are drift bolted or pinned to the caps and the three inner ones are lashed to hold them in place.

The flooring is made either of three-inch by thirteen foot-poles or of two-inch plank. It is held in place by side rails of poles laid over the outer barks and lashed thereto near the trestle bents and at middle of each bay, or of two-inch by four-inch scantling spiked to the flooring planks. The abutment sills are caps sunk in the ground and firmly staked front and rear. If a shore trestle is needed between the abutment sill and the water, it will consist of a mud-sill, five posts, a cap and two diagonal braces.

Each bay of the bridge is constructed as follows: Build a frame consisting of a cap, the two outer barks, a ledger and a diagonal. Carry it forward and engage the ends of the barks under the previous cap to which they are temporarily lashed. Revolve the frame to its place by hauling out a forestay and then lowering by the backstays, using a derrick frame to take the weight. Lay a temporary flooring of four planks or chess. Set the piles from the outer end of the suspended frame, drive them, and saw them off. Shift the frame to place the cap on the piles and drift bolt or pin

through cap into tops of piles. Lay three more barks and lash them. Floor half the new bay. Brace the trestle with two diagonals spiked to poles. Proceed with next bay in same manner.

PARTIES	DUTIES.	No. of Men.	REMARKS
1	Prepare caps	4	
2	Tackle and holdfasts	12	3 parties of 4 men each.
3	Abutment and siderails	4	
4	Prepare piles	4	
5	Derrick, bark and frames	12	
6	Frame builders	10	2 parties of 5 men each.
7	Piles and flooring	18	
8	Boat crew and braces	6	
Total		70	

1. Cap section. Four men. Prepare trestle caps.

Tools: One cross-cut saw, one axe, one adze, one cant-hook, two scratch awls, one chalk line, two augers (one-half inch), one measuring rod (fifteen feet) marked on face at center and at intervals of three feet two inches from center, and on edge at center and at intervals of two feet eight inches, one rule (two feet), one level, one hammer, nails (eight-penny), one square.

Lay cap on skids and chock. Saw to length of fifteen feet. Across ends near top and bottom draw horizontal lines to determine required thickness six inches or tack on short six-inch boards. Snap the chalk line horizontally to determine top cutting lines. Flatten down to these lines with axe and adze. Roll the cap over and flatten other side in same manner. The cap will now be of uniform thickness and flat on top and bottom. On center line of top bore one-half-inch holes vertically at center and at intervals of three feet two inches from center. Mark with chalk, on top, cross lines at two feet eight inch intervals from center for bark.

2. Tackle section. Twelve men, three parties, four each. Four will rig and man upstream backstay, four rig and man downstream backstay, and four rig and man forestay across the stream. Each party rigs its own tackle and sets holdfasts. The backstay holdfasts are set eight feet on either side of axis of bridge and thirty feet back from the abutment sill; each holdfast is a four-inch by five-foot stake

driven three feet in ground and tied back to second stake. Rig a strap of three-fourths-inch rope to hook tackle into. Reave double tackle of three-fourths-inch rope 300 feet long in six-inch blocks, and hook to holdfast and backstay. Backstay is 200 feet of one-inch rope double or 100 feet of one and one-half-inch rope with large eye at end. When a frame is in place, put bight or eye of backstay over end of cap and stand by to take strain when frame is heaved over; then when derrick is set, lower away to place. Stand by to raise and lower as required. For the forestay a similar holdfast is set across the stream, in axis of bridge, fifty feet from water. Rig tackle of 300 feet of three-fourths inch rope in double and single six-inch blocks and hook to strap (three-fourths-inch) on holdfast and to forestay, which is a one-inch line leading across stream to cap of frame. When frame is adjusted heave it over and stand by to haul it out in place when piles are bored. Each of these three parties will require one axe, one maul, one crowbar, and blocks and ropes as specified. The forestay party will lay the abutment sill on their side. (See abutment section.)

3. Abutment and side-rails. Four men.

Tools: One pick, two shovels, two mauls, one level, one square, lashing and racks sticks, range stakes.

Range out axis of bridge. Dig trench perpendicular to axis of bridge and extending eight feet each side thereof, eighteen inches wide, nine inches deep, bottom level. Lay abutment sill (a cap not bored) in trench; level and square. Stake with eight three-inch by four-foot stakes, four in front and four in rear of sill. Back-fill with earth and tamp hard.

When a bay of the bridge is completely floored lay and spike the side rails of two thicknesses of two inch by four-inch scantling breaking joints, placing them over the outer lines of balks.

4. Preparing piles. Four men.

Tools: One cross-cut saw, two axes, one adze, one tape, one cant hook, one drawing knife. Sharpen the small ends of piles to a conical point one foot long. Get depth of water for next bent from boat crew, and cut five piles for that bent to a length equal to the depth of water plus ten feet. The

piles should be four or five inches in diameter at the small ends.

5. Derrick section. Twelve men.

Tools: Two hand saws, two sledges, spikes six-inch, lashings, measuring rod or tape.

Build frame as follows: Two legs twelve feet six inches by four inches at top, laid parallel thirteen feet eight inches between centers. Spike and lash one-half-inch rope a



REES' PILE BRIDGE. SETTING PILES.

transom three and one-half inches by fourteen feet eight inches across the legs six inches from top. Spike and lash one-half-inch rope diagonals three-inch by sixteen foot from points near transom to points six feet below transom; lash one-half-inch rope diagonals at crossing; square lashings. Attach one-half-inch lashings twelve feet long to transom near each leg.

The foot of each leg must be finished off with jaws to embrace the cap of a trestle and revolve on it. Flatten the front and rear sides of the legs for four feet to good bearing surfaces. For each leg bevel to a flat surface two pieces five

feet long and five inches in diameter, making the bevel four feet long. Spike these pieces to the flattened faces of the leg, letting them project twelve inches beyond it. Cut away the inside of these projecting ends so that their clear opening will be nine inches.

Get the first balk frame from the first party of frame builders, the second from the second party, third from first party, and so alternate. When a frame is called for, lay hold facing the stream as follows: Five men behind cap, two men in front of cap lifting balks, three men behind ledger and two men at front ends of balks. Lift together and carry frame to its place on the bridge, lower the front end and rest the ledger on the balk of the previous bay. A frame received from the first party of frame builders lies on the downstream side of the balk of the previous bay; one from the second party lies on the upstream side. Raise the rear end and slide forward to engage the balk under the cap of the previous bay. Fasten by upward and outward turns of lashing around cap. The middle cap-carrier will disengage the forestay and fasten it to the new cap six inches from center by a round turn and two half hitches. The outer cap-carriers will disengage the backstays and loop them over ends of new cap. Then as the forestay is tightened and the backstay slacked off, lift the frame and help heave it over.

Carry the derrick frame forward, legs in advance and set jaws of legs over trestle cap. Lift the transom end to the backstays and lash with the one-half-inch lashings. The derrick frame thus becomes a rocker arm for lowering the balk frame to place. Lay five planks from cap to cap as a temporary flooring of the new bay.

Two of the party remain to watch the derrick and the rest go ashore and prepare three balks by cutting them to a length of fourteen feet. If they are to lie in a frame built by the first party of frame builders, carry them tops foremost; if for a frame of the second party, carry butts foremost. When balks are called for, six men of the party (two to each balk) carry them out, lay them in place and lash the

rear ends to balks and cap of previous bay, making square lashings with one-half-inch rope twenty-eight feet long.

As soon as the flooring has been laid to the new bay, lower the derrick frame and lay it flat on the bridge. Then carry forward a new balk frame and repeat the operations described above.

6. Frame builders. Ten men, two parties of five men each.

Tools for each party: One measuring rod fifteen feet long marked on face at center and at six feet three inch intervals each side of center and on edge at center and at four feet three inch intervals each side of center, four augers (one-half-inch), four sledges (one-half-inch), drift bolts (twelve inches long), spikes (six inches), tape, one cant hook, two crow bars, one maul, two hand saws, one square.

The first party (words in parenthesis apply to second party) lay two six-inch by fifteen-foot skids on ground parallel with stream, and twelve feet apart, bring the ends even, block them up to a level and stake them fast. Mark points on each skid five feet four inches each way from center line and cut shallow notches about three inches wide. On these skids build the frames as follows: Lay two balks butts (tops) toward the river, in notches on skids; cut to a length of fifteen feet, but do not discard a balk three or four inches short; mark points on each balk six feet three inches from its center. Lay a cap, marked side down, over marks near tops (butts) of balks, shift the cap till its outer marks are even with the upstream (downstream) side of the balks; bore vertically and centrally through cap and balk at crossings one-half-inch holes, and drive twelve-inch drift bolts. Bore holes vertically through balk at the other six feet three inch marks. Spike on a ledger three inches by thirteen feet across the balks at a distance of four feet three inches from centers of balks toward the butts (tops). Spike on a diagonal three and one-half inch by fifteen feet from a point on the downstream (upstream) balk near ledger to a point on the upstream (downstream) balk near cap. The ends of ledger and diagonal should be slightly flattened and two spikes used in each end. Be sure that the distance between

the upstream (downstream) sides of the two balks is exactly ten feet eight inches. If greater than this, trim off the upstream (downstream) balk; if less, trim off the downstream (upstream) balk at the end for a distance of three feet.

Attach five lashings (three-fourths-inch rope) twenty-two feet long with eye splice in end to cap at points three inches upstream from drift bolt holes. Pass each around the cap, reave end through eye, haul taut in place, coil and stop. Attach two lashings of one-inch rope twenty five feet long to the two balks just outside the drift bolt holes in the butts (tops) by throwing a clove hitch at the middle point of the lashing and slipping it over end of balk to proper place leaving two free ends. When a frame is finished lay it to one side without turning and build another.

7. Piles and flooring. Eighteen men.

This party is subdivided according to the work in hand as follows:

NO. OF MEN.	FOR PILE WORK.	FOR FLOORING.
5	Carriers	Carriers.
5	Mauls and augers	Two layers, three sawyers.
5	Saws and hammers	Spikers.

The piles are carried out two at a time, four men to a pile, except the last which is carried by four of the saw and hammer party. Each pair of carriers provides a carrying bar, three feet six inches long, with a short lashing of one-half-inch rope attached near the middle. Lay the bar across the top of the pile and pass the lashing under the pile and back to the bar where a few turns secures it.

When piles are called for carry forward two piles, the second and fourth, points foremost, and lay them across the cap over the second and fourth auger holes. Disengage the bars and launch the pile forward till it overbalances. The front carriers pass the lashing on the cap over the pile and down and out around the cap. The rear carriers let go, one front carrier holds the lashing and the other controls the pile to a vertical position. When plumb, slack the lashing suddenly and drop the pile to the bottom, then tighten the lashing and

draw the pile to its place against the cap. When adjusted lash both piles to the cap with square lashings.

While these two piles are being driven the carriers bring up the first and fifth piles and the saw and hammer party brings the middle pile. When the frame has been raised after driving the first two piles, these three are set in place and lashed in like manner as the first two, the saw and hammer party performing the duties of carriers for the middle pile. The carriers lend their weight on the frame to assist in sinking the piles.



REAR PILE BRIDGE. DRIVING PILES.

When piles are set and lashed the backstays are slackened and the maul men drive the piles, two to each pile when practicable. If the piles drive hard, increase the weight on the frame and at intervals give it a swaying motion.

When the piles are driven the maul men retire and provide themselves with one-half-inch augers, and the saw section takes their place. The frame, if not already so, is adjusted to a convenient height and the piles are marked and sawed. The first and fifth sawyers are provided with measuring rods marked or cut to the height of piles above water as tested on the preceding bent. The third (middle) sawyer has a straight edge of one-inch board fourteen feet long.

The second and fourth sawyers have hammers and nails. The straight edge is tacked on against the outside of the piles at a height determined by the two measuring rods, the nails being only half driven so that they can be readily withdrawn. Each sawyer saws his pile off level, resting the saw on the straight edge. Knock off the straight edge, carry the sawed off ends ashore and get drifts, bolts and sledge hammers.

The auger section returns and each bores a one half-inch hole in the axis of his pile six inches deep. After laying aside their tools they remain to assist in setting the cap and engaging the drift bolts in the piles.

The hammer section, each with drift bolt one-half inch by twelve inches, and sledge hammer, drive drift bolts through holes in cap till the points project one inch. Then the frame lashings are cast off and the frame is raised and hauled forward by the forestay till the cap is over the piles. As it is lowered in place the auger men guide the points of the drift bolts into the holes in the piles and the bolts are then driven home.

The rear end of the balk frame is then adjusted in position, augers Nos. 1 and 3 bore the cap, and hammers Nos. 1 and 5 drive bolts through balk and cap.

The pile section then retires till the balks of the new bay are laid and lashed, when they lay the flooring to the middle of the new bay.

The carriers take from the pile each one plank in right hand at the balance, front end raised and rear end trailing, and advance in single file, keeping to the right, to the head of the bridge, where they swing the plank to the left and hand it in a horizontal position to the floor layers, then retire quickly, keeping to the right, and bring another plank.

The floor layers stand, one on the first and second balks and one on the fourth and fifth balks, take the planks from the carriers and lay them in place, spacing them about one-fourth inch. They will be assisted by two of the sawyers, who stand on the ends of the plank last laid and hold a piece of wood or a spike as a separator for each new plank. They

also see that the ends of the planks are kept even on the proper line.

If the planks are uneven in length the upstream ends are kept even, and after spiking the downstream ends are sawed even by the sawyers.

When the planks are laid the spikers drive spikes as follows: Nos. 1, 3 and 5 drive spikes into the corresponding balks through the near edge of each plank. Nos. 2 and 4 drive spikes into the corresponding balks through the far edge of each plank. They take care not to displace the planks while spiking them. Nos. 1 and 5 should keep in advance of the others, who wait till 1 and 5 have driven their spikes in a plank before starting their own.

8. Boat crew and braces. Six men.

Material: One ponton with oars, boat hooks, painters, and lashings; braces three and one-half to four inches by fifteen feet, two hand axes, one sledge, spikes six inches, one sounding rod fifteen feet, marked to feet, one hand saw.

As soon as the position of one bent is determined, take soundings for the next bent, twelve feet six inches from the last, and give the sounding to the section preparing piles.

As soon as a bent is completed, spike on two diagonals, one inside and one outside.

Trim the piles and flatten the braces to a good bearing, and use two spikes in outer piles and one at interior piles. Take care that the tops of the diagonals do not interfere with the jaws of the derrick frame. It is better not to brace a bent until the derrick has been removed from its cap.

The shore trestles, one on each bank, are erected by the pile and floor section. They are similar to the pile bents, but are constructed from the shore and not from a suspended frame.

If a pile bent when constructed is found to be out of plumb or out in line the boat crew will, before attaching the diagonals, heave it plumb or in line by means of lines leading obliquely to the nearest shore. It should be sprung so as to correct twice the error. Then when the diagonals are fastened it will settle back to its proper place.

All who are not actually engaged in work on the bridge will remain on shore and have their tools and material ready for the next duty. The several working parties should keep together and move as a body without straggling. One member of each working party will be designated as its chief. He sees that his party is supplied with the necessary tools and material for each duty and that it moves to and from its work promptly. When a united effort or a simultaneous movement is required he gives the word.

If the instructions are accurately followed the work will proceed rapidly and in an orderly manner. If any one party disregards instructions there will result confusion and delay for all, and possibly danger for some.

THE DEPARTMENT OF LAW AT THE INFANTRY AND CAVALRY SCHOOL AND STAFF COLLEGE.

By Major D. H. BOUGHTON, Eleventh Cavalry, LL. B., Instructor.

It has been said that law is the pride of the human intellect and the collected wisdom of ages, combining the principles of original justice with the boundless varieties of human concerns.

The remark is often heard that we have too much law in the army. Generally no reason is given for this conclusion, but the presumption is that the proverbial "law's delay" is interfering in some way with the customary march of military affairs. Perhaps too much restriction is being thrown around the exercise of powers that from their nature are more or less unrestrained, more or less arbitrary, a not unnatural conclusion, for there are times when the military power must throw aside all the usual and customary restraints and be guided solely by the great law of "necessity." Ordinarily, however, any power, be it military or otherwise, is most effective when judicially controlled by legislative enactment or guided by precedent, the possibility of arbitrary or tyrannical action being removed as far as

possible. The very presence on our statute books of remedial measures is but the evidence of the previous existence of evils which said measures were intended to correct. So when we find in our army regulations that "Military authority will be exercised with firmness, kindness and justice," "Punishments must conform to law and follow offenses as promptly as circumstances will permit," and "Superiors are



SUSPENSION BRIDGE TOWER.

forbidden to injure those under their authority by tyrannical or capricious conduct, or by abusive language," we must conclude that a time has been when caprice and tyranny entered into the exercise of military power, and that the object of the prohibition is to guard against a possible recurrence of this condition. Otherwise the reason for its existence is wanting.

Broadly, the object of law is to protect rights and redress wrongs. The great mass of people of this country fear the military power. And not wholly without reason, for history is full of instances of its unjust excesses and usurpations. The military power from its very nature is liable to be arbitrary.

trary and prone to take matters into its own hands. Officers accustomed to command and to instant obedience are impatient of restraint or opposition and apt to disregard or override the rights of individuals. Especially is this true during emergencies when the military is called upon to aid in restoring order. In these cases a knowledge of the law and of the rights of individuals and of communities will often prevent those errors and excesses which go far towards rendering the army obnoxious to the people. Moreover the very study of law, while it makes known the reciprocal rights and duties of individuals, also inculcates a due regard for the rights of others and would be justified on this if on no other grounds. Every citizen, soldier or otherwise, and particularly those to whom powers are entrusted, should understand not only his duties to his government but what he owes to his fellow-man as well.

Sometimes, when it is said that we have too much law in the army, reference is had to the application of the "rules of evidence" to the procedure of courts-martial whereby the members are guided to their conclusions by established rules and not permitted to render arbitrary judgments. But when it is remembered that these same rules of evidence are the result of a thousand years of judicial experience the criticism ceases to have much weight. Moreover, is there any reason why a tribunal of military men should be permitted to deduce presumptions of fact by methods differing from those which the experience of the wisest jurists of centuries has shown to be the best?

Even our military law, brief as it is, is either imperfectly understood or carelessly administered. One has to but read the current reviews of court-martial cases to be surprised at the almost numberless errors, the ignorance of law, and the miscarriage of justice evidenced by the proceedings. It is unjust to our officers to assume that these errors result solely from carelessness. The regard for duty in our service is too high to warrant this assumption. They must then, be charged to an imperfect knowledge of the law, a condition readily susceptible of improvement by the application of the proper remedy.

The history of our country shows that the military has played no unimportant part in its political concerns. True, it seems to stand apart and to hold no certain place in the administration of governmental affairs. Nevertheless it is closely woven into the fabric of our constitutional and institutional history, and plays its part as well as the other elements that enter our system of government. Historically, of course, the military of to-day is an inheritance bequeathed us by former ages, but like every other institution coming to us from antiquity, it has gradually changed to meet the demands of a progressive civilization. From an enemy of human liberty it has come to be the upholder of personal freedom and the guaranty of individual rights: from an engine for forging the chains of slavery it has been transformed into an effective means for striking the shackles from a subject race. Armies have always been potent instruments in the hands of a nation's executive, and have universally reflected the nature of the government they were called upon to support. In early English history, for example, when the king combined all the functions of government in his own person, the military was an agent of tyranny, existing and acting under the sole will of an autocratic ruler. As such it could not be regarded by the great mass of people other than with a feeling of fear and hatred, a feeling that has colored all our military institutions of to-day and still finds expression in traditions that are opposed to a standing army. But the military has changed with the evolution of the science of government and the progress of civilization, and is to-day the bulwark of the civil power when all other safeguards have been swept away. This change, like those that always mark the progress of politics, has been slow and gradual, but at the same time so closely connected with the latter that to fully understand the attributes and office of the military, a knowledge of our political institutions and of their development is necessary.

The army as an integral part of the general scheme of human government must share in the progress common to all the walks of life, and laws in the interest of the individual soldier or civilian are but the outward evidence of the con-

tinued advancement of the human race. In a greater individuality alone is a greater progress possible. But this greater individuality must be consistent with the requirements of an organized society where the rights of all are paramount to those of the individual. Liberty and not license is a principle as applicable to the army as it is to any other profession or community of individuals. Education develops individuality, but by an observance of the law is liberty maintained.

Again, the duties that fall to the lot of army officers are so varied that the latter are often required to act upon legal questions that to the civilian seem wholly outside the military profession. Our international relations with their corresponding complications are increasing, and in our foreign possessions army officers are frequently detailed to positions involving a knowledge of administrative and legal affairs. In the Philippine Islands, for instance, during the last six years the service of officers has embraced practically all the positions involved in the administration of government. In addition to purely military matters they have been called upon to establish civil government, construct codes, govern provinces, administer justice, and in short carry on all the usual functions of government. The successful accomplishment of these things requires not only a high order of ability but an ample knowledge of the laws, customs and institutions of our country.

A consideration of the foregoing and of kindred matters has led the authorities to believe that the study of law in the army should be extended and placed on a broader basis. It is thought that a thorough knowledge of those branches usually taught, namely, military and international law, cannot be acquired without an understanding of the elementary principles lying at the foundation of the science itself. For this reason, notwithstanding the limited time, a study of "The Elements of Law" has been added to the course at this school. In addition and for obvious reasons, the study of criminal law and of the laws of evidence has been enlarged, and, recognizing the value of practical work, exercises in moot courts have been added. The study of text books on

military and international law has been omitted for the reason that these subjects are taught in the garrison schools. At the same time it is intended that the work of the moot courts and the preparation of these will add to the student's knowledge of these two subjects.

The course as outlined for the coming year is as follows:

INFANTRY AND CAVALRY SCHOOL.

1. Elements of Law, wherein the student will become familiar with legal phraseology, determine the province of



SUSPENSION BRIDGE.

military and martial law in the general scheme of jurisprudence, and acquire some knowledge of the law of persons and property.

2. Criminal Law, with special reference to military tribunals.
3. Evidence, the rules of which guide tribunals to just conclusions.
4. Moot Courts, exemplifying the procedure and practice of military tribunals (including military commissions and provost courts), the preparation of legal forms, etc.

STAFF COLLEGE.

1. Constitutional Law, emphasizing questions liable to come within the purview of staff officers of the army.

2. Martial Law and Military Government, the course concluding with a graduating thesis on some pertinent subject assigned by the Department of Law.

In regard to the method of instruction it has been thought advisable to adopt the quiz system in connection with assigned lessons from text books, lectures, and the consultation of leading cases. This is more in consonance with modern collegiate education. The present method of reciting requires the student to commit to memory page after page of the text book, which he does by temporarily photographing the same on his mind, with little distinction between the important and less important features. The result is that as soon as the subject is laid aside the whole picture gradually fades from his mind without even the lights and shadows remaining.

With the quiz system the instructor is able not only to determine the intelligence and knowledge of the student, but can bring out and emphasize the principles which the student should and can carry in his mind, and with the aid of which he can solve all similar questions presented for solution.

The assistant instructors for the coming year are Captain Charles Crawford, Twentieth Infantry; Captain H. O. Williams, Fifth Infantry, and Captain Herbert A. White, Eleventh Cavalry.

These officers are all students of the law, Captains Crawford and Williams having been instructors during the previous year, and Captain White being a graduate of the Columbian Law School of Washington, D. C., with the degree of LL. B.

DEPARTMENT OF MILITARY SANITATION AND HYGIENE.

By Lieutenant Colonel JOHN VAN R. HOFF, D. S. G., Instructor.

The course in Military Hygiene, "the care of troops," during the session of 1903-04, consisted in recitation from a text book "Notes on Military Hygiene for Line Officers"—Woodhull, and lectures elaborating and supplementing the book. Each section of the class devoted twenty hours to recitations in the section rooms, and the entire class attended seven lectures in the lecture room; the course ending with a written examination, to which six hours were devoted.

The subjects of the text book are selection of soldiers, military clothing, food, habitations, camps and marches, sewers and waste, water, preventable diseases, care of troops in the field, and sanitary inspection, covering in all 324 pages, an average of eleven pages to each lesson.

The subjects of the lectures were general observations, recruiting, physical training, hygiene of troop ships, special hygiene of tropic and arctic regions, water and preventable diseases.

The examination questions were as follows:

1. What is meant by Military Hygiene and Sanitation?
Importance to an army.
Responsibility for execution.
Statistics of non-effectiveness from illness and injury in armies.
2. What do regulations require in selecting soldiers?
Table of physical proportions.
Summary of general qualifications.
Enlistment of minors. Some results in different armies.
Considerations in recruitment for war.
3. State advantages and disadvantages in military clothing of cotton, linen, wool, color.
Discuss military footwear.
Waterproofing methods and advantages from hygienic and military standpoints.
4. How is food classified?
Characteristics and functions of the different classes.

Kind, amount and food classification of the articles of the several official rations.

Necessity for variety in food, with illustrations.

5. What should be considered in determining location of military habitations?

Permanent.

Temporary.

Preparation of site.

Dimensions of squad room.

Number of occupants.

How may habitable space in ordinary dwellings be quickly calculated?

In habitations, what causes affect the health of soldiers and what is the remedy?

6. What methods of disposal of waste are used in army posts?

Describe them.

7. What are the various sources of water supply for a command?

Amount required.

Character determined off-hand.

Dangers from bad waters.

Methods of purification.

Nitrification.

8. Name some of the preventable diseases which most affect armies.

State what you would do to control their spread in your command.

9. Define sepsis, infection, and state how they are controlled.

10. What orders relating to sanitation would you give your men, recently recruited and about entering upon a campaign?

DIRECTIONS.

1. Do not copy the question, but prefix its number to the answer.
2. Number each page and sign each answer with initials.
3. Write the following certificate below the answer to the last question and sign it officially.

"I hereby certify that during this examination I have neither given nor received assistance therein."

Beside the instructor, four medical officers are on duty as assistant instructors in this department (additional to their regular work at the post).

In the development of the course in Military Sanitation and Hygiene the primary object is to convey to the student officer a general idea of the scientific care of troops. It would be impracticable to here teach all that is known of this important subject, but the aim is to bring to the attention of our line officers the reasons for the things which daily experience teaches them are necessary to be done in order to preserve the health, and consequently the efficiency of soldiers.

We do not expect to make all line officers expert military sanitarians, for such implies antecedent knowledge of the fundamental facts of physics, chemistry, anatomy, physiology, bacteriology, mechanics, etc., which comparatively few of them possess, but we do believe that we can sufficiently interest them in the subject so that they will seek to thoroughly inform themselves in the theory and practice of recruiting, a knowledge of which is absolutely essential to an efficient army, and which knowledge we have no reason to believe is wide spread, alimentation, clothing, cleanliness and other important subjects outlined in the course.

With the introduction of military hygiene into the garrison schools where the elements of sanitation will hereafter be taught, the curriculum in the Infantry and Cavalry School will ultimately be placed on a university basis, and recitations eliminated. The course should then consist of lectures, practical exercises, demonstrations, the observation and description of sanitary appliances and collateral reading, to conclude with a comprehensive examination.

PRACTICAL PROBLEMS FOR ORDINARY GARRISONS.

THE following sets of problems were prepared by the officers named in pursuance to notice of the Department of Tactics at the General Service and Staff College:

THESIS: ORGANIZATION AND TACTICS.

In accordance with Paragraph 25, Regulations and Program of Instruction of the General Service and Staff College, published in G. O. No. 1, A. G. O. 1904, a thesis will be prepared by each student officer and handed in to the instructor, Department of Tactics, not later than noon, June 10, 1904.

Subject of thesis: A series of four practical problems suitable for the progressive tactical instruction of a mixed garrison of the U. S. army, prepared under the following headings:

1. Map Problem.
2. Terrain Ride.
3. March of Concentration.
4. Exercise on the Terrain with Troops (all arms).

Note: For purposes of this thesis use the Fort Leavenworth maps, and assume a garrison of one battalion of infantry, two troops of cavalry, one battery (light) of field artillery, detachment of the hospital corps, and the necessary transportation.

FIRST SET.

By CAPTAIN R. FOSTER WALTON, SIXTH U. S. INFANTRY.

No. 1. Map Problem.

Circular that would be issued prior to solving Problem No. 1:

Circular } FORT LEAVENWORTH, KANSAS, June —, 1904.
No. 1. }

The officers of the post school will be assembled at Pope Hall at 1:30 P. M., June —, 1904, to solve a "tactical exercise on the map in rear guard and advance guard."

PRACTICAL PROBLEMS.

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Officers will be required to have complete knowledge of the principles involved, as laid down in Wagner's "Security and Information."

Each officer will bring to the section room, pencils, one-fourth quire legal cap paper, dividers and eraser.

The instructors of the post school will assist the senior instructor in executing the details of the exercise.

The senior instructor will give a short lecture on the exercise at a later date. In this lecture he will give the solution that the majority of instructors decide is the best solution, after considering all the papers.

By order of Colonel Duncan: W. L. SIMPSON,
Captain and Adjutant Sixth Infantry, Adjutant.

FORT LEAVENWORTH, KANSAS, June —, 1904.

PROBLEM NO. 1.

"THREE ARMS COMBINED" TROOPS IMAGINARY.
TACTICAL EXERCISES ON THE MAP IN REAR GUARD HOLDING AN ADVANCE GUARD.

General Idea.

A force (Brown) covered by a rear guard is retreating from Atchison via Frenchman's to Fort Leavenworth, over the Atchison Pike. It is followed by a force (Blue).

Special Idea (Brown).

The advance guard (Blue) overtakes the rear guard (Brown) while the reserve of the rear guard is on road at the Frenchman's.

The rear guard is ordered to delay the pursuing advance guard as long as possible, in order to enable Brown's main column to take up a position on Government Hill.

FORCES ON EACH SIDE.

<i>Brown—Rear Guard.</i>	<i>Blue—Advance Guard.</i>
Infantry, one battalion, 400 men.	Infantry, two battalions, 800 men.
Cavalry, two troops, 200 men.	Cavalry, two troops, 200 men.
Artillery, one battery, six guns.	Artillery, one battery, six guns.
Detachment Hospital Corps, four officers, three noncommissioned officers and eleven privates.	Detachment Hospital Corps, four officers, four noncommissioned officers, and fourteen privates.
Four wagons, light baggage, one ambulance.	Eight wagons, light baggage, three ambulances.

Required:

(a) The disposition of the rear guard when the reserve is on the road at the Frenchman's, drawn to scale where practicable.

(b) What dispositions will you make to carry out your orders to delay the pursuing advance guard.

(c) Assume what you would consider the best position to occupy and draw on the map the dispositions you would make to defend the position chosen.

No. 2. Terrain Ride.

Post Circular that would be issued prior to Exercise No. 2.

Circular, FORT LEAVENWORTH, KANSAS. June —, 1904.
No. 2.

The officers of the post school will report to the senior instructor of the post school, at headquarters building tomorrow at 1:30 P. M. Tactical exercise to be executed: "Terrain Ride," "Outposts."

The officers will report to Major Murray, Fourth Cavalry, who will assign them mounts for the purpose.

The equipment of officers will be regular field equipment. Each officer will carry in addition to equipment, pencils, one-fourth quire legal cap paper and dividers.

Officers will be required to have complete knowledge of the principles involved, as laid down in Wagner's "Security and Information."

The instructors of the post school will assist the senior instructor in executing the details of the exercise.

By order of Colonel Duncan:

W. L. SIMPSON,

Captain and Adjutant Sixth Infantry, Adjutant.

FORT LEAVENWORTH, KANSAS. June —, 1904.

PROBLEM NO. 2.

TERRAIN RIDE. OUTPOSTS. TROOPS IMAGINARY.

General Idea.

A Blue force is reported approaching Fort Leavenworth from the north and a Brown force from the south.

Special Idea (Brown).

The Brown advance guard is passing through Leavenworth. The point on reaching the south end of Grant Avenue signals: "Enemy in sight." The advance guard commander rides forward and discovers that the enemy has a line of outposts extending from South Merritt Hill on the west to Farragut Avenue on the east.

The detachment commander orders the advance guard commander to establish a line of outposts with his advance guard on the military reservation, facing the enemy, to protect the main body which will bivouac in Leavenworth.

The main body consists of two regiments of infantry, one squadron of cavalry, one battery of field artillery, and the necessary hospital equipment and baggage train of this force.

The advance guard consists of one battalion of infantry, two troops of cavalry, one battery of field artillery, necessary light baggage and hospital troops for this force.

Required:

(a) Write the order that the advance guard commander would issue for formation of the outposts.

(b) Show by diagram on maps where you would place the outposts for the day position.

(c) Study map in connection with the ground and be prepared to show the instructor just where you would place each sentinel or vedette, picket support or supports, and cossack posts; what patrols you would have; where the reserve would be posted, and what you would do in case of an attack; composition of all parts of outposts.

The instructor will allow two hours for this part of problem, when he will go along lines of observation and question you on the above elements.

NO. 2. SHEET NO. 2.

TROOPS IMAGINARY. TERRAIN RIDE. OUTPOSTS.

The commander of the main force decides to hold this position for the night. One of your patrols has captured a Blue patrol of two men.

Required:

- (a) Your dispositions for a night position for the outpost line, in detail as required for the day position (Sheet 1).
- (b) Write the message you would send to the commander of the main body after questioning prisoners.
- (c) What would you do with the prisoners.

Note: Time allowed, one hour. The instructor will pass along the line of observation and question you in regard to the same elements as were given on the day position.

All written solutions will be turned over to the senior instructor of the post school after the completion of the exercise; sheets and maps to be turned in at the same time.

No. 3. Practice March.

Post circular that would be issued prior to solving problem No. 3:

Circular,) FORT LEAVENWORTH, KANSAS, June —, 1904.
No. 3.)

The following named officers of the post school will report to the senior instructor of the post school at 7:45 A. M. to-morrow for a march of concentration.

The regular field equipment and service uniform will be required. Each officer will be provided with note book and pencil. The cavalry and artillery officers will be mounted.

First Battalion Sixth Infantry, Troops E and F Fourth Cavalry, and Twenty-ninth Battery Field Artillery, will be reported to the senior instructor of the post school at 8:00 A. M. to-morrow. The troops will wear the service uniform and equipment for light marching order. Each man will carry a cooked lunch and a canteen of boiled water or coffee.

The assistant instructors will act as umpires, as directed by senior instructor. They will make such reports and perform such duties as he may require.

By order of Colonel Duncan, W. L. SIMPSON,
Captain and Adjutant Sixth Infantry, Adjutant.

FORT LEAVENWORTH, KANSAS, June —, 1904.

PROBLEM NO. 3. SHEET NO. 1.

TACTICAL EXERCISE WITH TROOPS. MARCH OF CONCENTRATION. ALL ARMS.

Instructions for the Detachment Commander.

You have the First Battalion Sixth Infantry, E and F Troops, Fourth Cavalry, and the Twenty-ninth Battery, Field Artillery; nine officers of infantry, five officers of cavalry, and three officers of artillery.

Required:

- (a) Assume command of this force and assign two officers to each company, two officers to each troop, and three officers to the battery of artillery.

The extra officer of infantry and cavalry will be assigned to their respective arms as battalion and squadron adjutants.

- (b) After forming the detachment march it via the cavalry drill ground, Atchison Pike to Kennedy's.

- (c) At this point the platoons separate and each marches under command of an officer over its designated route to the rendezvous at the northeast corner of West End Parade.

- (d) The exact time all platoons are to concentrate at the rendezvous will be announced to the platoon commanders by you, and so fixed that the one having the longest route will have thirty minutes rest at Kennedy's.

- (e) After concentration at the West End Parade, a rest of ten minutes will be allowed, after which the troops will be formed and marched to their respective company, troop or battery quarters by the first sergeants and dismissed.

- (f) Different hours of concentration on West End Parade will be assigned to different arms of the service.

- (g) Render a report and require your adjutant to render a report, showing hour of assembly, hour of departure, hour of arrival at Kennedy's, and hour designated for the concentration of troops. The march will be made in accordance with the Infantry and Cavalry Drill Regulations.

- (h) You will turn over the command to platoon commanders at Kennedy's and return by shortest route to northeast corner of West End Parade, where troops will be dismissed.

(i) The baggage and hospital detachment will be conducted back to the rendezvous by yourself, accompanied by your adjutant and sergeant major.

(k) Distance and time required by each to march over each route should be calculated before starting, and calculations or time handed umpire before starting, so that the calculation may be compared with each actual march made.

March of Concentration—with Troops. Sheet No. 2.

Routes for infantry marches and instructions for platoon commanders.

First Platoon, Co. A.—From Kennedy's 27-7-41-43 Hancock Avenue to northeast corner West End Parade.

Second Platoon, Co. A.—From Kennedy's 27-7-5-E-D-43 Hancock Avenue to northeast corner West End Parade.

First Platoon, Co. B.—From Kennedy's 25-21-17-7-3-1 Penn Lake to northeast corner West End Parade.

Second Platoon, Co. B.—From Kennedy's 25-17-7-3-1 over Sheridan's Drive to Hancock Avenue. Hancock Avenue to northeast corner West End Parade.

First Platoon, Co. C.—From Kennedy's F-E-D Hancock Avenue to northeast corner West End Parade.

Second Platoon, Co. C.—From Kennedy's F-16-14-8-2-C Garden Road, Hancock Avenue to northeast corner West End Parade.

First Platoon, Co. D.—From Kennedy's F-16-14-8-2-M Grant Avenue, Pope Avenue to northeast corner West End Parade.

Second Platoon, Co. D.—From Kennedy's F-16-14-8-2-M Grant Avenue, McPherson Avenue to northeast corner West End Parade.

Marches will be conducted in accordance with paragraphs 657 and 658 Drill Regulations, modified as circumstances may require, and consider start from Kennedy's an original start.

Render a report embodying in chronological order all that happens on march from assembly on West End Parade to dismissal of troops at the same point.

Include in report, rate of march, halts, time of departure from Kennedy's, and time of arrival at West End Parade. Turn in your report to the senior instructor of Post School. Your platoon is enclosed in brackets of red ink.

The senior officer will take command of the company until arrival at Kennedy's.

March of Concentration—with Troops. Sheet No. 3.

Routes for cavalry marches.

Instructions for Commanders of Cavalry.

The senior officer of cavalry will form the troops in a squadron of two troops and command the cavalry until arrival at Kennedy's. Each troop will be formed into two platoons.

Routes for cavalry.

First Platoon, E Troop.—From Kennedy's H-8-J-29-39-25-21-17-7-41-1 Penn Lake, McPherson Avenue to northeast corner West End Parade.

Second Platoon, E Troop.—From Kennedy's H-I-J-29-31-15-7-41-1 Penn Lake, McPherson Avenue to northeast corner West End Parade.

First Platoon, F Troop.—From Kennedy's H-I-J-K-35-33-31-37-39-25-G-E-D Hancock Avenue to northeast corner West End Parade.

Second Platoon, F Troop.—From Kennedy's H-I-J-29-25-27-7-5-E-43 Hancock Avenue to northeast corner West End Parade.

Marches will be conducted in accordance with paragraphs 981-982 Cavalry Drill Regulations, modified as circumstances may require, and consider start from Kennedy's an original start.

Render a report embodying in chronological order all that happens on the march from assembly on West End Parade to dismissal of troops at same point.

Include in report, rate of march, halts, time of departure from Kennedy's, and time of arrival at West End Parade.

Turn in your report to the senior instructor of the Post School.

Your platoon is enclosed in brackets of red ink.

The senior officer of the troop will take command of the troop until arrival at Kennedy's. The junior lieutenant will act as adjutant and make the same report as required of the senior officer of cavalry and will accompany his platoon back to place of rendezvous.

March of Concentration—with Troops. Sheet No. 4.

Routes for artillery marches and instructions for officers of artillery.

The battery will be divided into three platoons by the senior artillery officer.

Routes for artillery:

First Platoon, Twenty-ninth Battery.—From Kennedy's H-I-22-24-20-15-16-F-E-43 Hancock Avenue to northeast corner West End Parade.

Second Platoon, Twenty-ninth Battery.—From Kennedy's H-I-22-26-18-16-14-8-2-C Hancock Avenue to northeast corner West End Parade.

Third Platoon, Twenty-ninth Battery.—From Kennedy's H-I-22-28-14-8-2-C Hancock Avenue to northeast corner West End Parade.

Marches will be conducted as required by paragraph 1054 Artillery Drill Regulations, modified so as to have same rate as is usually taken by cavalry in so far as circumstances will permit; consider start at Kennedy's an original start

Render a report embodying in chronological order all that happens on the march from assembly on West End Parade to dismissal of troops at same point.

Include in report, rate of march, halts, time of departure from Kennedy's and time of arrival at Kennedy's, and time of arrival at West End Parade.

Turn in your report to the senior instructor of the post school.

Your platoon is enclosed in brackets of red ink.

The senior officer of artillery will take command of battery until arrival at Kennedy's.

NO. 4. EXERCISE WITH TROOPS.

Post Circular that would be issued prior to Exercise No. 4:
Circular, FORT LEAVENWORTH, KANSAS, June —, 1904.
No. 4.

Tactical exercise to be executed by the following named troops and officers of the post school:

EXERCISE.

"Attack and defense of a position."

Troops, First Battalion Sixth United States Infantry.

Troops E and F Fourth United States Cavalry.

Twenty-ninth Battery Field Artillery.

Officers will be assigned to the various commands by the senior instructor of the post school.

The officers of post school will report to the senior instructor of the post school, who will give them detailed instructions as to what will be required of them.

The above named troops will comply with any orders received that may be given by school officers, in compliance with this circular.

By order of Colonel Duncan.

W. L. SIMPSON.

Captain and Adjutant Sixth Infantry, Adjutant.

FORT LEAVENWORTH, KANSAS, June —, 1904.

Captain Poore, Sixth Infantry, will carry out the following problem:

PROBLEM NO. 4.

TACTICAL EXERCISE WITH TROOPS. ATTACK AND DEFENSE OF A POSITION.

General Idea.

A Brown force is guarding the Leavenworth Water Works. A Blue force is advancing from the north to capture and destroy the Leavenworth Water Works.

Special Idea (Blue).

The Blue force consists of A and B Companies, Sixth Infantry, A Troop Fourth Cavalry, four guns Twenty-eighth Battery Field Artillery, and such detachment hospital corps as may be necessary. No baggage wagons will be needed.

Required:

(a) You will have your troops formed on the West End Parade at 9:00 A. M. to-morrow.

(b) You will attack the Brown force defending the Leavenworth Water Works.

(c) Your troops will wear blue shirts, service trousers, and will have the regular field equipment for light marching order. Each man will be provided with 100 rounds blank ammunition, and each gun with twenty rounds of blank ammunition.

(d) The rules for field exercises in minor tactics will be observed.

(e) You will look over the ground and write out the order you intend to issue for the attack. Hand in the order to the senior umpire.

(f) All officers will be assembled after the exercise for a discussion of it by the senior umpire.

Problems will not be discussed with opponents before solution.

FORT LEAVENWORTH, KANSAS, June —, 1904.

Captain Bolles, Sixth Infantry, will carry out the following problem:

TACTICAL EXERCISE WITH TROOPS. ATTACK AND DEFENSE OF A POSITION.

General Idea.

A Brown force is guarding the Leavenworth Water Works. A Blue force is advancing from the north to capture and destroy the Leavenworth Water Works.

Special Idea (Brown).

The Brown force consists of C and D companies of Sixth Infantry, two guns Twenty-ninth Battery Field Artillery, Troop B Fourth Cavalry, and such detachment hospital corps as may be necessary. No baggage wagons will be needed.

This is the only source of water supply for the City of Leavenworth, and you have orders to hold it at all hazards.

Required:

(a) You are to make such dispositions as you deem best to hold this position, including trenches needed, if you think any desirable.

(b) When attacked you will make the same dispositions during the action as you would make in actual warfare.

(c) The rules for field exercises in minor tactics will be observed.

(d) Troops will wear service uniform, and the regular field equipment for light marching order. Each man will be provided with 100 rounds of blank ammunition, and each gun with twenty rounds of blank ammunition.

(e) You will be in position by 8:00 A. M. June 12, 1904.

(f) You will look over the ground and write out the order for the occupation of the position. Hand in a copy of order to the senior instructor of the post school.

(g) All officers will be assembled at — P. M. June 12, in order that the senior umpire may render a short lecture on the exercise executed.

Problems will not be discussed with opponents before solution.

SECOND SET.

By Lieutenant F. E. BOLLES, Third U. S. Cavalry.

*No. 1. Map Problem.***SECURITY AND INFORMATION.**

ADVANCE GUARD AND OUTPOSTS ON THE MAIN LINE ARMS.

General Idea.

A Blue army in Missouri is operating against a Brown army which is advancing from the vicinity of Lawrence, Kansas.

The first corps of the Blue army has reached Platte City, Missouri, when the Blue commander decides to cross the Missouri River by the bridges at Leavenworth and Fort Leavenworth and attack the Brown army in Kansas. He accordingly directs the commander of the first corps to detach the first and second brigades of the first division of his

corps to seize and hold the bridges across the Missouri at Leavenworth and Fort Leavenworth, respectively.

Special Idea (Blue).

The advance guard of the second brigade, first division, first corps, consists of Troops A and B, Third Cavalry, Third Battalion Twenty-fourth Infantry, and the Tenth Battery Field Artillery.

At 9 A. M. the head of the reserve has reached the west end of the bridge at Fort Leavenworth. From information gained from the inhabitants, it is learned that a strong force of Browns camped last night at Tonganoxie, fifteen miles southwest of Leavenworth. At 8:30 A. M. Brown cavalry patrols were seen near the Frenchman's and in the vicinity of Metropolitan Avenue and Twentieth Street. This information is transmitted to the brigade commander, and at 9:15 A. M. the advance guard commander receives an order to post his advance guard as an outpost covering the approaches of the bridge, pending the crossing of the brigade.

Required:

1. Indicate on the map the location, strength and composition of all parts of the advance guard at 9 A. M.
2. The order of the advance guard commander establishing the outpost.
3. Indicate on the map the location, strength and composition of all parts of the outpost.

NO. 2. SHEET NO. 1.

TERRAIN RIDE. REAR GUARD AND POSITION.

General Idea.

A Blue force consisting of a brigade of infantry, a squadron of cavalry, and a battery of field artillery were defeated by a superior force of Browns yesterday at Easton, fifteen miles northwest of Leavenworth, and is now retreating into Missouri via Fort Leavenworth and the Rock Island wagon bridge.

The Browns are known to be in pursuit.

Special Idea (Blue).

The rear guard of the retreating force consists of Troops A and D Third Cavalry, Third Battalion Twenty-fourth Infantry, and the Tenth Battery Field Artillery.

At 10 A. M. the head of the main body has reached Grant Monument, Fort Leavenworth, Kansas.

Required:

After an observation of the terrain, indicate on the map the location, composition and strength of the various parts of the rear guard.

Time for solution, one hour.

NO. 2. SHEET NO. 2.

TERRAIN RIDE. REAR GUARD AND POSITION.

Special Idea (Blue).

The main body of the Blues has reached the Rock Island bridge and is ready to begin crossing, when it is discovered that the damage to the bridge, which was supposed to have been slight, is serious enough to require repairs before it will be safe to cross it. It is estimated that a minimum of six hours will be required to complete the necessary repairs. The Blue commander decides to undertake the work, and directs the commander of the rear guard to occupy a position and check the pursuit of the Browns until the retreat of the Blues can be resumed.

At 10:15 A. M. a telephone message is received to the effect that a small patrol of Browns has just been seen at Lowmont, ten miles northwest of Leavenworth.

Required:

A tracing showing the position occupied and the disposition of the troops of the rear guard.

Time for solution, one hour.

NO. 2. SHEET NO. 3.

TERRAIN RIDE. REAR GUARD AND POSITION.

Special Idea (Blue).

At 10:45 A. M. a second telephone message is received from Lowemont, stating that a force of Browns, consisting of cavalry, infantry and artillery, is approaching that place from the west.

Required:

1. The steps the commander of the Blue rear guard would take to strengthen his position.
2. Show by a tracing the location and extent of such works of defense as would be suitable and capable of completion in the time available.

NO. 3.

PRACTICE MARCH. MARCH OF CONCENTRATION.

General Idea.

A Blue army, which has been operating along the line of the Missouri River from Atchison to Kansas City, is now concentrating at Kansas City.

Special Idea (Blue).

A detached force, consisting of Troops A and D, Third Cavalry, Third Battalion Twenty-fourth Infantry, Tenth Battery of Field Artillery, detachment of Hospital Corps, and a train of ten army wagons, which has been proceeding by marching to rejoin its command at Kansas City, went into camp on the Atchison Pike, one and one-half miles west of the Frenchman's, at 4 P. M.

At 6 P. M. the commanding officer of this force receives instructions to the effect that the Missouri Pacific Railway has been repaired and that transportation for his entire force to Kansas City will be at the station at Fort Leavenworth at 8 A. M. the following day.

It is important that the train be not delayed longer than is absolutely necessary to load.

The commanding officer decides to march his command by the following route, viz:

The cavalry via the Frenchman's, Taylor's, Millwood Road, Prison Cemetery, McPherson Avenue and Riverside to the Missouri Pacific depot.

The infantry (less one platoon) via the Frenchman's, Salt Creek Village, and thence east to Hancock Avenue, Pope Avenue, Grant Avenue, and Kearney Avenue to the Missouri Pacific station.

The artillery, via the Atchison Pike, Atchison Cross Road to Grant Avenue via New Penitentiary, north on Grant Avenue to Meade Avenue, thence to Missouri Pacific station via Sherman Hall.

The wagon train, with one platoon of infantry as escort, via the route described for the infantry.

Required:

1. A schedule showing the hours for the necessary service calls for the several detachments of the command from first call for reveille to "forward, march."
2. The time of departure, and the marching time for each detachment.
3. Assuming that the necessary facilities for loading are at hand, at what hour could the troop train leave Fort Leavenworth?
4. The number and kinds of cars necessary to transport this force.

NO. 4.

EXERCISE ON TERRAIN WITH TROOPS. ALL ARMS. ATTACK AND DEFENSE OF A POSITION.

General Idea.

A Blue reconnoitering force consisting of a brigade of infantry and a battery of field artillery was defeated yesterday at Tonganoxie, Kansas, fifteen miles southwest of Leavenworth, and is now rapidly retreating into Missouri, by way of Fort Leavenworth and the Rock Island wagon bridge to rejoin its corps at Platte City.

The Browns are pursuing vigorously.

Special Idea (Blue).

The commander of the Blue brigade, upon his advance, detached a force consisting of the Third Battalion Twenty-Fourth Infantry and two guns of the Tenth Battery of Field Artillery to guard the Rock Island wagon bridge and protect his line of retreat.

At 8:20 A. M. the lookout on Cemetery Hill signals that a Brown cavalry patrol is seen approaching from the south on the Atchison Pike in the vicinity of Metropolitan Avenue.

Special Idea (Brown).

The commander of the Browns has detached a force consisting of Troops A and D Third Cavalry and four guns of the Tenth Battery Field Artillery with orders to get in rear of the retreating Blue force and destroy the Rock Island wagon bridge and cut off the retreat of the Blues in this direction.

At 8:25 A. M. the point of the Brown force has reached the Atchison cross-roads and discovers what appears to be a Blue sentinel on South Merritt Hill.

THIRD SET.

By Lieutenant RAYMOND S. BAMBERGER, Seventh U. S. Cavalry.

No. 1. Map Problem.

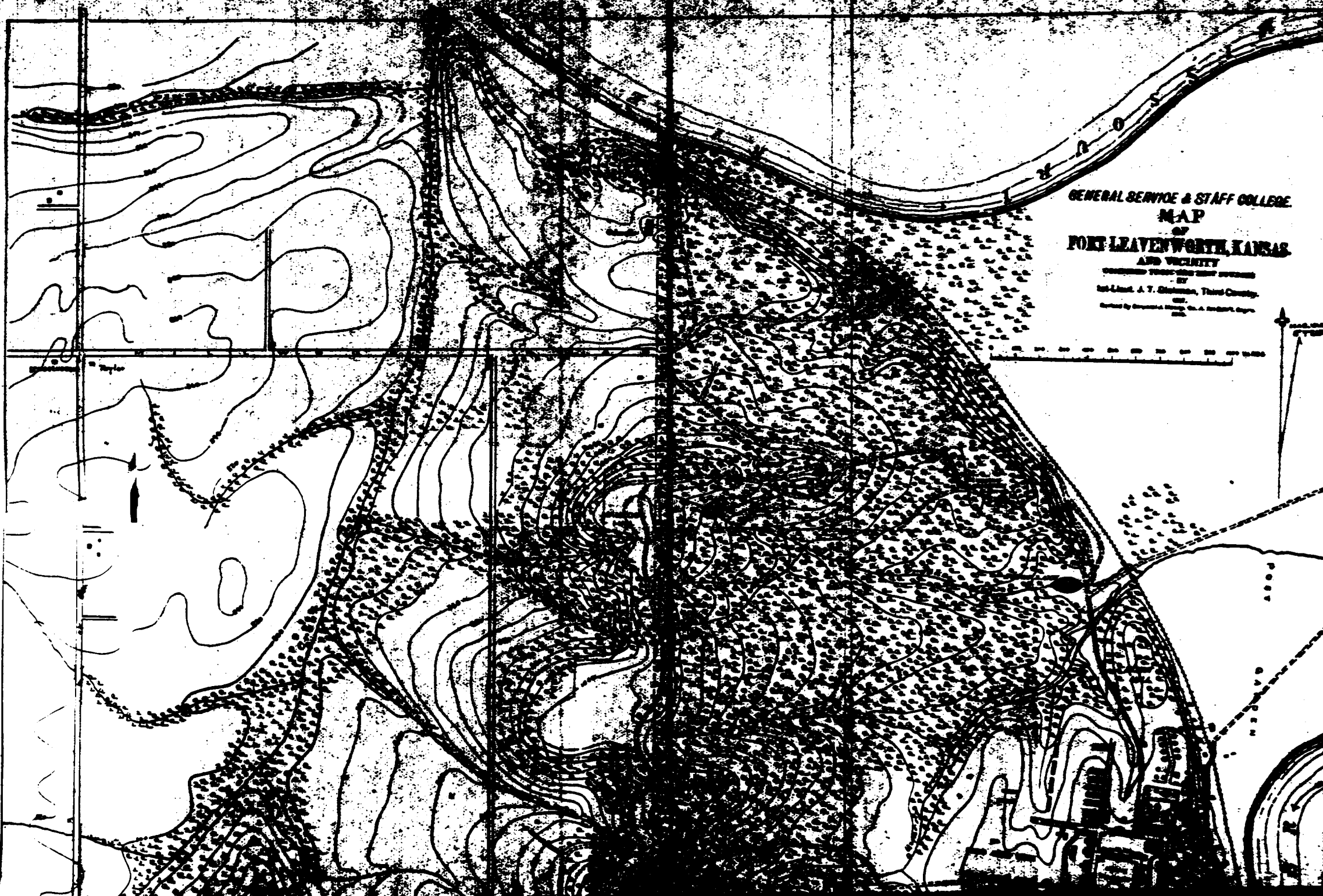
FORT LEAVENWORTH, KANSAS. June 10, 1904.

PROBLEM NO. 1. SHEET NO. 1.

MAP EXERCISE. ADVANCE GUARD.

General Idea.

A Brown force is operating in Missouri, east of Fort Leavenworth. A Blue force is operating near Lowemont, eight miles west of Fort Leavenworth. The Brown commander sends a brigade of infantry, a regiment of cavalry and a battery of field artillery to move via the Atchison Pike in order to cover the crossing of the Brown army over the Rock Island wagon bridge.



GENERAL SERVICE & STAFF COLLEGE
MAP
OF
FORT LEAVENWORTH, KANSAS
AND VICINITY
COMPILED FROM THE BEST SOURCES
BY
1st Lt. A. T. STEVENSON, Third Cavalry
and
Revised by General A. T. STEVENSON, 1st Cavalry, 1908







Special Idea.

The detachment commander receives his orders to move out at 6:00 A. M. June 11, 1904. These orders are received at 6:00 P. M. June 10, 1904. His advance guard consists of Companies A, B, C and D, First Infantry, Troops A and B, First Cavalry, and the First Battery Field Artillery. The advance guard moves via Pope Avenue, Hancock Avenue, Cross Roads northwest of target range, Salt Creek, Atchison Pike.

Required:

(a) The orders of the detachment commander for the march.

(b) A drawing on the map showing accurately to scale, the position, composition and strength of each part of the advance guard when the reserve has reached the corner of Pope and Grant Avenues.

No. 2. Terrain Ride.

FORT LEAVENWORTH, KANSAS, June 10, 1904.

PROBLEM NO. 2. SHEET NO. 1.

TERRAIN RIDE. REAR GUARD.

General Idea.

A Blue force is retreating through Leavenworth via the Atchison Pike. A superior Brown force is pursuing vigorously.

Special Idea.

You are in command of the Blue rear guard, consisting of Companies A, B, C, and D, First Infantry, Troops A and B, First Cavalry, and the First Battery Field Artillery, with orders to delay the pursuit as long as you can.

Required:

A diagram, to scale, on the map, showing position, strength and composition of the various parts of your rear guard, when the reserve has arrived at Atchison cross-roads.

PROBLEM NO. 2. SHEET NO. 2.

TERRAIN RIDE. REAR GUARD.

You decide to take up a position on Atchison and Government Hills.

Required:

- (a) Your orders for assuming this position.
- (b) A diagram (tracing) showing the position assumed, together with your disposition. Mark on the tracing three permanent points so tracing may be oriented.
- (c) How will you withdraw your troops? You have forced the Browns to deploy and now wish to withdraw.

No. 3. Practice March.

FORT LEAVENWORTH, KANSAS, June 10, 1904.

PROBLEM NO. 3. SHEET NO. 1.

MARCH OF CONCENTRATION.

General Idea.

A Brown army is operating twenty miles northwest of Fort Leavenworth. A Blue army is holding the line from the Missouri River, through Hancock Hill and to the west. A battery of artillery and two companies of infantry are stationed at Hancock Hill. A troop of cavalry is at Plum Creek Bridge, 1000 yards north of Taylor's. Fresh troops have arrived at the corner of Grant and Metropolitan Avenues.

Special Idea.

The commanding general decides to relieve part of the line. He orders two companies of infantry to march via Grant and Kearney Avenues, west to quarry on Sheridan's Drive, north to Hancock Hill and there deliver orders to the infantry stationed there to move out in one hour via Point Lookout, Prison Cemetery, Penn Lake, Old Prison, McPherson, Scott, and Pope Avenues to Grant Avenue to intersection with Metropolitan Avenue. The officer commanding the relieving force will instruct the artillery to move out from Hancock Hill, via the same route as taken by the infantry, but at such a time as to reach the rendezvous

(Grant and Metropolitan Avenues), at the same time as the infantry. The cavalry will move via Grant, Pope, McClellan and McPherson Avenues, to the Old Prison, Penn Lake, Prison Cemetery, Millwood Road, Taylor's, Plum Creek Bridge, and will relieve the cavalry at that place. One hour after this, the relieved cavalry will start back and will march via Taylor's, the Frenchman's, Atchison Pike to the Atchison cross-roads, south to Metropolitan Avenue, east to Grant Avenue.

The commanding general will so time the departure of the relieving troops that all will arrive at the rendezvous, at intersection of Grant and Metropolitan Avenues at 4:00 o'clock P. M. the same date.

Required.

- (a) Time of departure of infantry from rendezvous.
- (b) Time of departure of cavalry from rendezvous.
- (c) Time of departure of artillery from Hancock Hill.

Note: Each arm will use its ordinary marching rate.

No. 4. Exercise With Troops.

FORT LEAVENWORTH, KANSAS, June 10, 1904.

PROBLEM NO. 4. SHEET NO. 1.

ATTACK AND DEFENSE OF CONVOY, WITH TROOPS.
(Preliminary Order.)

General Orders,

FORT LEAVENWORTH, KAN.

No. 1.

June 9, 1904.

1. In all field exercises no men will be left behind except the sick, prisoners and necessary guard and the following:

In each company, noncommissioned officer in charge of quarters and one cook. In each troop or battery, noncommissioned officer in charge of quarters, one cook and the stable sergeant.

2. The provisions of the "Rules for Field Exercises in Minor Tactics" will be strictly complied with.

3. Companies A, B, C and D. First Infantry and one platoon First Battery Field Artillery will report to the chief umpire, Lieutenant Colonel A. B. C., to-morrow morning in light marching order at 9:15 A. M., northeast corner West End Parade. Uniform: Brown.

Troops A and B First Cavalry, and two platoons First Battery Field Artillery will report at same place at 8:30 A. M. The cavalry will be armed with revolver and carbine. Uniform: blue.

4. Each soldier will have ten rounds blank ammunition.

5. The quartermaster will cause twelve escort wagons to report at the northeast corner of the West End Parade at 9:15 A. M. to-morrow.

By order of Colonel A. B. C.

(Signed)

M. V.,

First Lieutenant Artillery Corps,
Acting Adjutant.

General Idea.

A Brown force is operating about twenty miles south of Leavenworth against a Blue force further south. The Browns draw supplies from Fort Leavenworth. The Blues are threatening the Brown trains with small raiding parties.

Special Idea (Brown).

For the officer commanding the Brown forces, twelve escort wagons, four companies of infantry and one platoon of artillery will report to you. The twelve wagons represent a train of eighty wagons, which you will so arrange as to represent sections of proper length and at regulation section distance. You will proceed toward Leavenworth with your train, which contains ammunition for the Browns. The escort is as above indicated. You will leave at 9:30 A. M. You are in command of the convoy, and you will designate the officers in charge of the escort and of the train respectively.

Special Idea (Blue).

For the officer commanding Blue forces, two troops of cavalry, representing four provisional troops, and two platoons of artillery, will report to you. You will proceed to Salt Creek and remain there until 9:30 A. M., when you will proceed westward, going on road north of Atchison Hill and toward the Target Range, and then towards Grant Avenue.

All officers will submit a concise report of their operations before 8:30 A. M., June 11, 1904.

FORT DES MOINES. IOWA.

By HENRY SHINDLER.



THE occupation of Fort Des Moines, Iowa, by a squadron of cavalry gives the mounted arm of our service a station that should make the happiness of the officer and trooper quite complete. Work on buildings for a second squadron has reached a stage that will permit their occupancy late in the fall, while another appropriation is ready for the construction of buildings for a third squadron. Their completion is expected by fall of 1905, and the cost to the government for this post will have been \$2,000,000.

Fort Des Moines is four miles due south of the business center of Iowa's capital, Des Moines. The site upon which the post is built could not have been chosen with better judgment to meet all the requirements of a first class cavalry station. This the new post is in every sense. Located upon a high plateau, the surrounding view furnishes a magnificent landscape. There is not a richer agricultural section in all Iowa.

Des Moines is in the very hub of the State's great railway system, and the post is reached by a splendidly operated electric line, furnishing excellent service for both passengers and freight. The distance between Fort Leavenworth and this new cavalry garrison is less than 200 miles, and reached in a most direct line by the Chicago Great Western Railway, covering the distance in less than six hours.

Fort Des Moines is the only military post within the limits of Iowa. There have, however, been two Forts Des

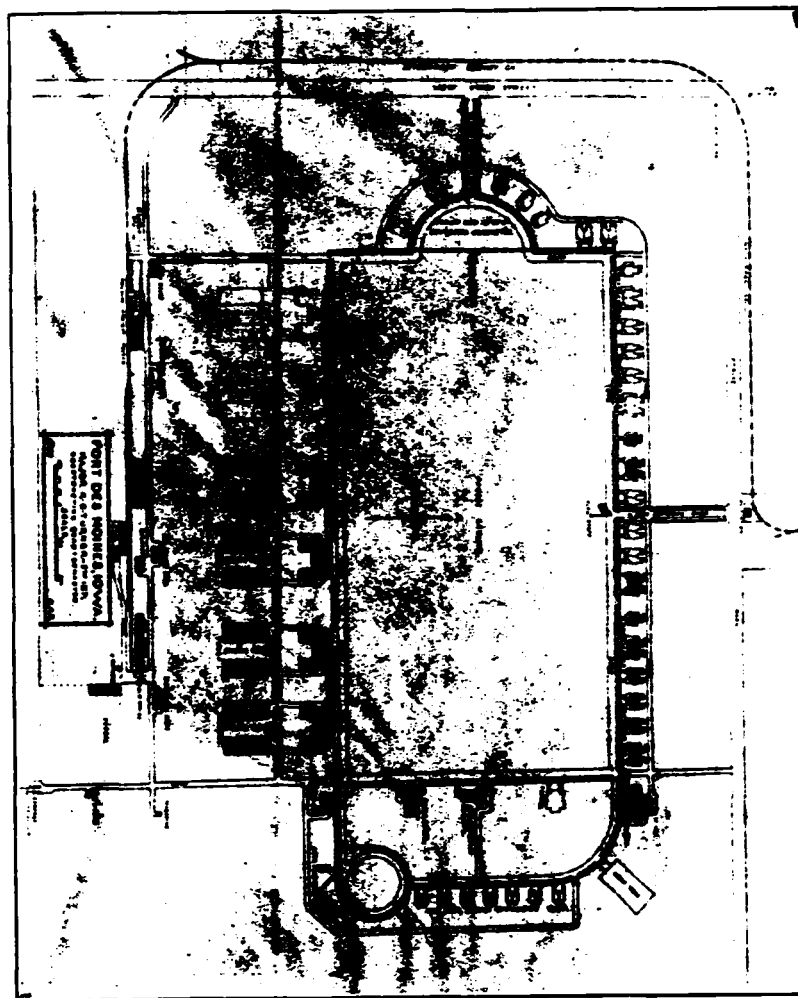
Moines in past years. The first was established by Lieutenant Stephen W. Kearney, in 1834, and was situated in Lee County, but continued only three years. The second Fort Des Moines was established by Captain James Allen,* First Dragoons, in 1842, and was situated at the junction of the Des Moines and Raccoon Rivers, now in the business and railroad center of Des Moines.

Captain Allen was sent by the War Department to select a site for a post, being stationed at that time at Fort Sandford, near the present city of Ottumwa. In his report why a post should be built upon the site he selected he assigns the following reasons:

"The soil is rich. Wood, stone, grass and building material close at hand. It is equal distance from the Mississippi to the Missouri. It will also be about the head of keel boat navigation on the Des Moines. I think it much better than any other point because it will be hard to get supplies further up, and no point or post that may be established on this river need be kept up more than three years, or until the Indians shall leave.

"I would build but common log cabins or huts for both men and officers, giving them good floors, windows, doors, stables, very common but close and roomy, pickets, block houses, corrals, and such like. The buildings to be placed in relation to comfort, convenience and good taste, and of defense, so far as the same may comply with the first rule.

* Captain James Allen, the commandant of the fort from its first occupation to within a few weeks of its abandonment, was a native of Ohio, born in 1806, and at the age of nineteen appointed to the Military Academy from the State of Indiana. He was graduated July 1, 1829, and appointed as 2d lieutenant in the Fifth Infantry; joined his regiment at Fort Brady, where he served until the 5th of March, 1833, when he was transferred to the new dragoon regiment as second lieutenant. From this time until his death his services on the frontier were continuous and of the highest value to the government. Joining his regiment at Fort Dearborn, he remained on staff duty until his promotion as first lieutenant May 31, 1835, when he was assigned to certain engineer duties in connection with the reconnaissance of the Indian country. He served during the next decade at Forts Leavenworth, Gibson, Atkinson and Sandford, from whence he marched to the establishment of Des Moines. On the abandonment of that work, he was appointed lieutenant colonel and commander of the Mormon Battalion of Missouri Volunteers for the Mexican War, and was en route to New Mexico with his command, when he suddenly died near Fort Leavenworth, August 23, 1846, at the early age of forty, and was laid to rest in its cemetery.



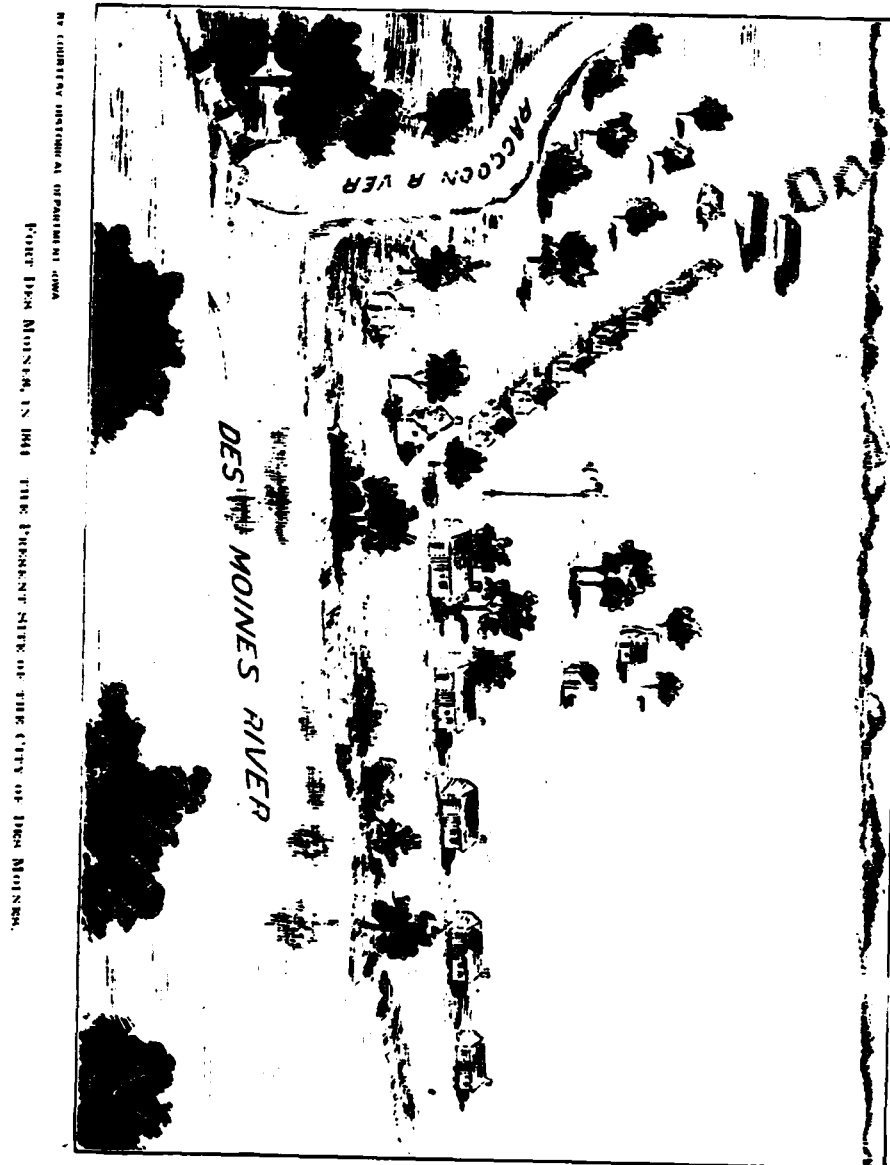
Ten mechanics, five laborers and four yoke of oxen ought to be furnished by the quartermaster's department, all to be ready to go up and begin early in the spring. Pine lumber for the necessary parts of the buildings ought to be sent up in keel boats in the spring rise of the river. Provisions, corn, etc., ought to be sent up at the same time."

Noting the character of the buildings which Captain Allen recommended for the Fort Des Moines of 1842, the younger generation of officers can form a good idea as to the few conveniences enjoyed by their brother officers in the earlier history of our army, compared to those now provided by a generous government.

The post was, however, not destined to remain many years upon the map of Iowa, except in memory, for in 1846 it was abandoned under the following orders:

"First Lieutenant Grier,* commanding Allen's company. First Dragoons, will as early as practicable, take up his line of march from Fort Des Moines for Fort Leavenworth escorting all the Fox Indians, who have not left the Territory of Iowa, in accordance with their treaty stipulations of October, 1842, to their permanent homes, as designated by the President of the United States.

*William N. Grier entered the U. S. Military Academy in 1831, graduating in 1835. He served in the regular army thirty years. Until the Civil War his service was for the most part on the frontier, though he was assistant instructor of infantry and cavalry tactics at West Point in 1840 and 1841, and a participant in the Mexican War. He was at several points in Iowa from 1843 to 1846, mainly at Fort Des Moines No. 2. He fought the Apaches in 1849 and was once wounded. He served in New Mexico from 1849 to 1856, when he marched to California, whence he was soon ordered north to Oregon. He went to Fort Walla Walla in 1857, where he remained until 1861, during which time he participated in many skirmishes and battles with the Spokane and hostile Indians. At the commencement of the Civil War he was promoted to major of the Second Regular Cavalry and was acting assistant inspector-general of the Army of the Potomac, 1861-62. He took part in many battles, and was wounded at Williamsburg May 5, 1865. He was stationed at Davenport, Iowa, as superintendent of volunteer recruiting service for this State, from March 1863 to June 12, 1865. He was brevetted brigadier-general in the regular army and promoted to colonel of the Third Cavalry. He served with his regiment at Fort Union, N. M., from July 12, 1865 to May 1870. His last command was at Camp Halleck, Nevada, December 15, 1870, at which date this gallant officer was retired from active service. He died at Napa City, California, July 8, 1885.



"Lieutenant Grier will leave at Fort Des Moines one steady noncommissioned officer and two privates, for the purpose of taking care of all of the public buildings, quartermaster's and subsistence stores, ordnance and ordnance stores, and all other public property, until instructions are received from the War Department for their final disposition.

"Allen's company of dragoons will, after having executed the above duty, form a part of the permanent garrison of Fort Leavenworth."

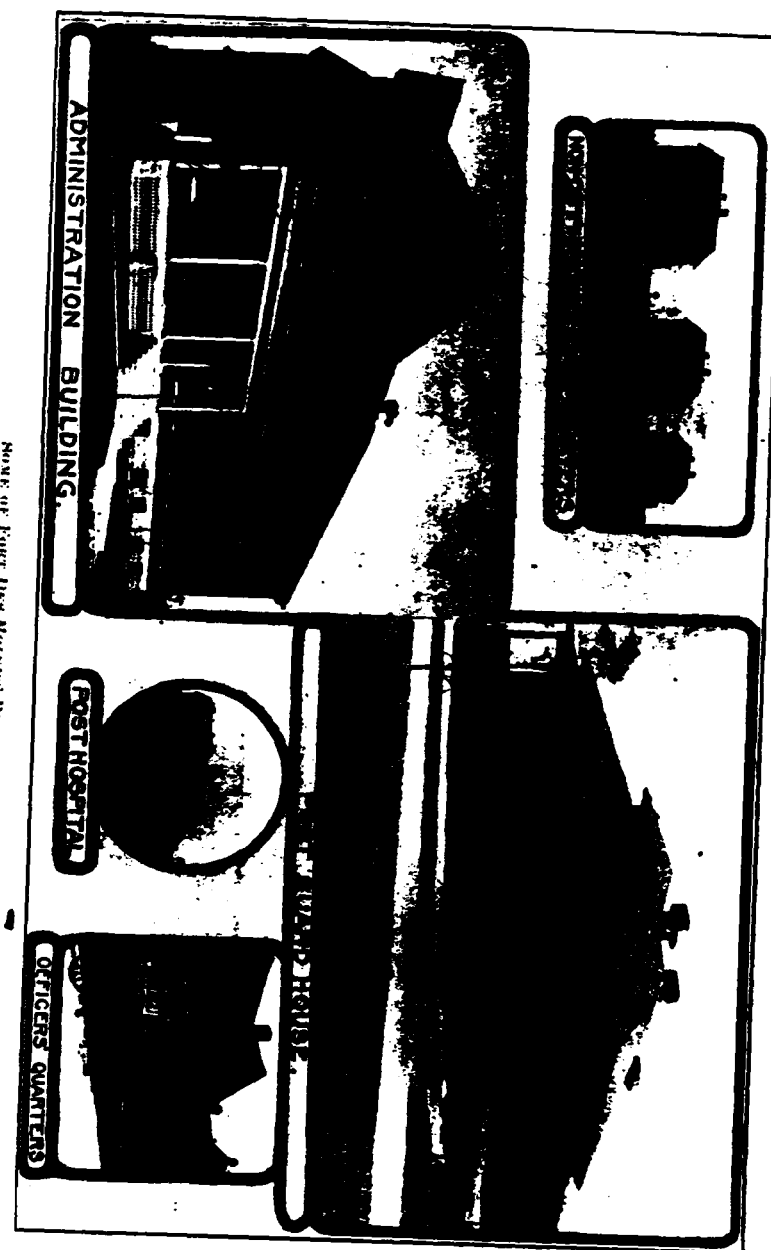


BY COURTESY HISTORICAL DEPARTMENT IOWA.

THE QUARTERS OF LIEUTENANT WM. N. GRIER. FIRST HOUSE ERECTED IN FORT DES MOINES, IA. IN 1842.

Ten years ago the present chairman of the House Military Committee, Hon. J. A. T. Hull, of Des Moines, entered Congress. He sought a place on the military committee, and succeeded. It had long been his hope that some day he

NAME OF FORT DES MOINES' BUILDINGS.



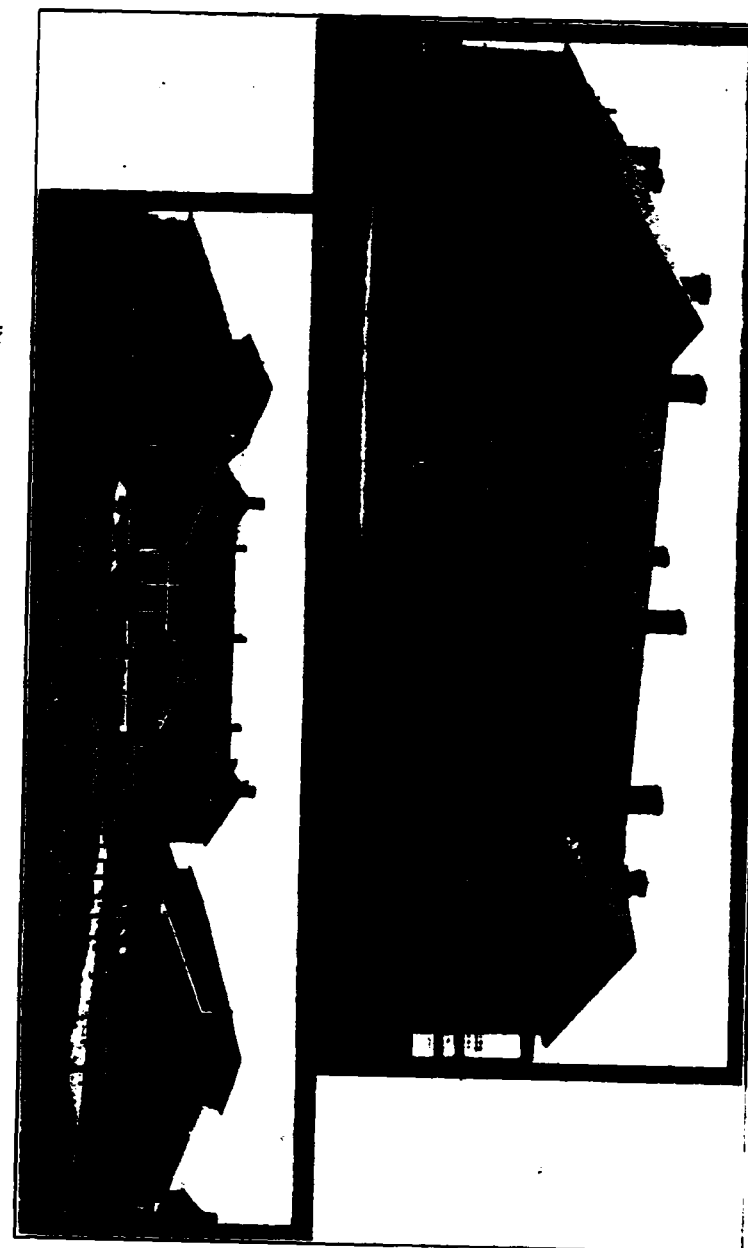
would be able to secure a military post for his State, and its location upon a site near the capital of the State. He took hold of this work with the zeal and enthusiasm which has ever characterized his entire congressional career. As chairman of the committee he had prestige and power to give the enterprise just the help and direction it needed.

The first bill was introduced in the Fifty-fourth Congress, but without success. It was again introduced by him in the Fifty-fifth Congress, when failure was again written upon the measure at the close of the session. In the Fifty-sixth Congress, however, the bill was enacted into law and the post near Des Moines became a certainty. The site was presented by the citizens of Des Moines, who contributed \$35,000 for the purpose.

While Mr. Hull's efforts were ably seconded by the best people of his State, there was nevertheless, a strong element in Des Moines opposed to the building of a military post near that city. This opposition was due, it is alleged, to fear that the soldiers would be sent there for the purpose of interfering in an unwarranted manner in business affairs. It was very difficult to convince many of Mr. Hull's constituents that the United States soldier was not subject to local civil authorities, and could only be called upon to preserve the peace when all the State authorities were powerless and when the Governor of the State made formal requisition on the President of the United States for aid, or when interstate commerce was interfered with in an unwarrantable manner. Mr. Hull pointed out to his people that when either of these conditions should exist, no matter whether the troops were located there or not, they would, if called upon, be sent from wherever they were stationed; so that the location would make no difference with this view of the case.

On November 13, 1903, the post was dedicated with appropriate military and civic ceremonies. The Governor of the State, Major General John C. Bates, United States Army, Hon. J. A. T. Hull, and many other distinguished Iowans, lent their presence to the occasion, making the event a memorable one in the history of the State.

BARRACKS FOR TWO TROOPS. REAR COVERED BY TROOP STABLES.



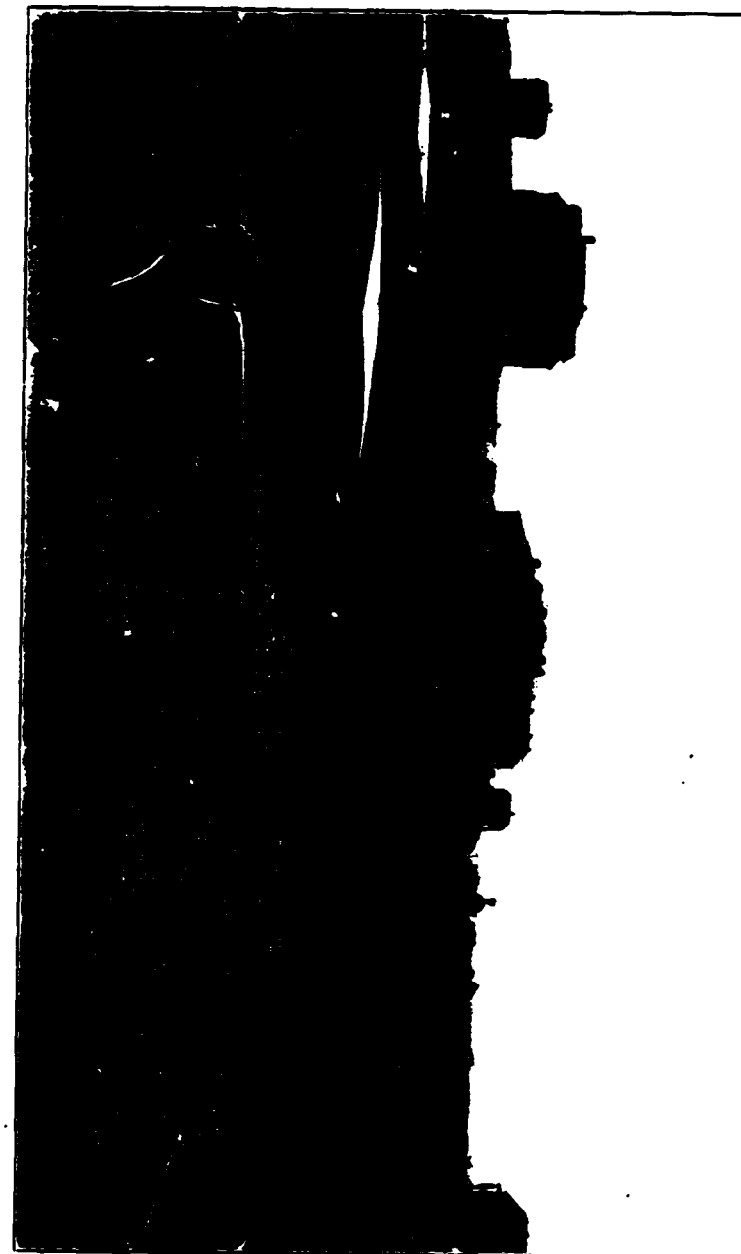
The post reservation is within the city limits of Des Moines, an extension made necessary after the post's location, in order to permit the Des Moines City Water Company to extend its mains to the post, which has been done.

The Des Moines reservation comprises 400 acres. An additional 525 acres of land have been secured for a rifle range, three miles to the south of the post. The State of Iowa, for the purpose of providing sufficient ground for the annual encampment of its National Guard, has purchased 160 acres of land adjoining the United States reserve immediately to the north, and authorized the War Department to use this State land for its military operations whenever desirable. This enhances the value of the Fort Des Moines reservation, and gives its cavalry all the territory needed for ordinary movements.

All of the buildings, officers' quarters, barracks and administration building are about the main parade. The reader can form an estimate of its size from the statement that the commanding officer's quarters are just one-half mile due west from the administration building, while the distance across, from the barracks to the officers' line, is nearly a quarter of a mile. The main entrance to the post is from the north and west. The entrance from the north is midway from the troop officers' quarters, forming the north line of the parade. The west entrance admits into the main post between the quarters of field officers, grouped in a semi-circle. East of the parade is the administration building with guard house and post exchange to the left, and chapel still to be erected to right. In rear of this row of buildings are the quarters of the noncommissioned staff officers. The hospital is at the southeast, back of all quarters, and very prettily situated. The riding hall, not yet constructed, will be on the northeast corner of the post. A set of bachelors' quarters is about being finished. This building forms the east end of the officers' row and is a very substantial as well as commodious building. Another such building is to be constructed on the west end of the row.

In the arrangement of the barracks and stables for the twelve troops, Fort Des Moines has undoubtedly much the

DEDICATION CEREMONY AT FORT DES MOINES, NOVEMBER, 1892. HON. J. A. T. HILL, GOV. OF IOWA, AND MAJOR GENERAL JOHN G. BATES, U. S. ARMY, THE PRINCIPAL SPEAKERS.



best of it when convenience is considered. Each barrack building provides accommodations for two troops. The stables are built by pairs. That is, each stable is directly to the rear of its troop, a distance not to exceed 200 feet, while between these stables is the guard room building providing comfortable accommodations for the stable guard of each troop.

All the supply houses and shops of the post are in the rear of the troop stables. All stores for the post as well as material are unloaded directly from the cars. These are transferred to the electric line at Des Moines and hauled to the post. This is an excellent feature. It reduces the cost of hauling, besides a saving of time, to a minimum. The shops of the post are also along this line and conveniently located.

The construction of the post was assigned to Major Ruben B. Turner, Eighth Infantry, who was quite recently relieved of this charge by Captain Letcher Hardeman, Quartermaster Eleventh Cavalry.

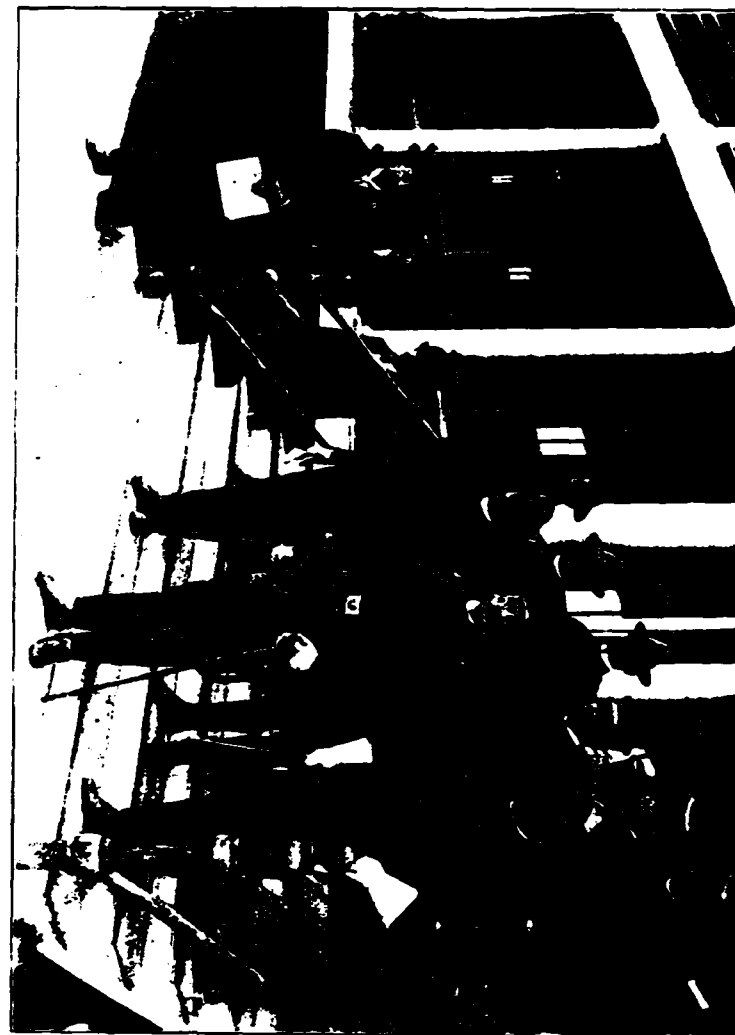
Fort Des Moines' present garrison consists of the headquarters, field, staff and band and the second squadron of the Eleventh Cavalry. Another squadron will be ordered there as soon as the buildings now under construction are completed. This is expected to take place late in the fall.

Since his arrival at the post last spring, Colonel Thomas has done much with the limited means at his command to beautify the post. Hundreds of fine shade trees have been set out and are growing. The parade has been sown to blue grass and all the lawns have been sodded. The post at the time the writer made a visit to it in August, presented a very pretty appearance.

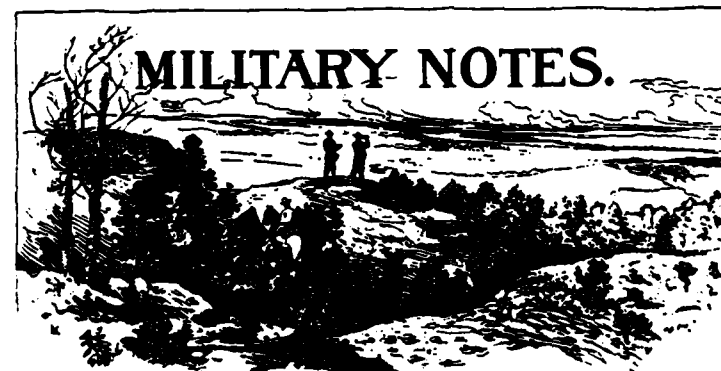
The following is a list of buildings for the two squadrons:

- One commanding officer's quarters.
- Two field officers' quarters.
- Four double sets of captains' quarters.
- Three double sets of lieutenants' quarters.
- One bachelor officers' quarters (ten officers).
- Four double sets of noncommissioned officers' quarters.

GROUP OF DES MOINES OFFICERS, WITH LIEUTENANT GENERAL THOMAS IN CENTER.
Upon the completion of a recent inspection by the lieutenant-general of the Army, he permitted himself to be photographed with the Eleventh Cavalry officers serving at the post. Colonel E. D. THOMAS, commanding the post, stands to his left.



One hospital steward's quarters.
 One hospital.
 Four double sets of cavalry barracks.
 One band barracks.
 Eight cavalry stables, ninety horses each.
 Four double sets of stable guardhouses.
 Two blacksmith shops.
 One quartermaster's stable, thirty animals.
 One hay shed.
 One coal shed.
 One granary.
 One quartermaster and commissary storehouse.
 One bakery.
 One magazine.
 One oil house.
 Administration building.
 One guardhouse.



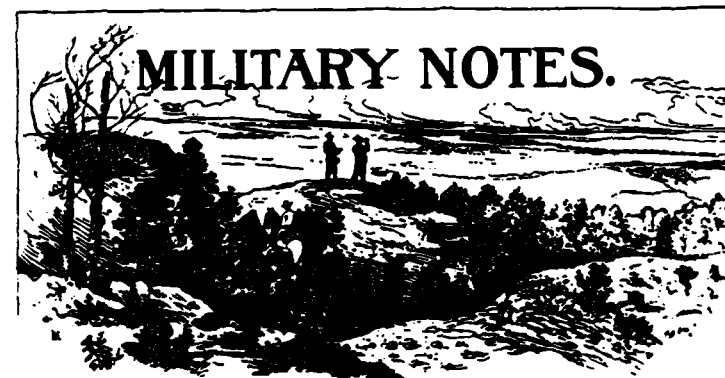
USE OF CARBINE SIGHTS.

BY COLONEL H. H. PATTISON, U. S. ARMY.

THE following method of teaching recruits the theory and use of the sights of the carbine is given in order that it may help some officers to convey to their men a practical knowledge of sighting before they begin actual firing. It is not intended to take the place of the drills and instructions prescribed in the Firing Regulations for Small Arms, but as an addition to them.

It has always been difficult to fix in the minds of men the difference between "fine," "half" and "full" sights, and it has been especially hard to give them a correct understanding of the half sight. To show these more clearly I had my troop blacksmith take a piece of iron water pipe, about six feet long and about two inches in diameter, and fasten near one end a piece of iron about one and one-half inches long for a front sight. About eighteen inches from the other end, and on the same side of the pipe, was fixed by a screw an L-shaped piece of iron, with a wide and deep notch in the upright part. To carry out the likeness a rough stock was fastened to the barrel. The magnification of the sights and

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their parts makes it much easier to show the different kinds of sights, and by laying a coin on top of the rear sight the "half sight" is shown more clearly than is possible with the smaller parts of the regular sights.

To show the effects of moving the rear sight to the right, left, up and down, and the effects of different sights, the barrel is fastened by a rope or clamp near the muzzle to an immovable object, the stock being supported by a pair of hinged legs, one of which is bound to the stock. With the rear sight set straight and the front sight vertical, the gun is aimed at a fixed bull's eye, the legs being moved until an accurate sight is obtained. A movable bull's eye is then moved into line with two pairs of cross-hairs so fixed in the bore that their intersections are at the center. The two bull's-eyes show where the lines of sight and fire strike the target, and can be made to coincide by an adjustment of the relative heights of the sights and the distance to the target. The rear sight is then moved to one side, the gun sighted as before at the fixed bull's-eye, and the movable bull's-eye then moved into the line of fire. The movable bull's-eye will be found to have followed the movement of the rear sight, and the men can see graphically the result of changes. In the same way can be shown the effects of raising or lowering the rear sight, of canting the piece, and of sighting along the side of the notch of the rear sight.

In conducting the sighting drills prescribed in the Firing Regulations for Small Arms, it has always led to confusion in the minds of the men if they were told the exact errors they made, because the results with the gun placed on a sandbag and aimed at a movable bull's-eye are exactly the reverse of those in actual firing: so in these exercises they are simply told that they have not taken a uniform amount of front sight or that they have not sighted through the middle of the notch according to their errors, and the large gun is used to show the effect of the different mistakes.

In case the large gun cannot be constructed, the same results may be obtained by removing the bolt from the carbine and fastening it near the muzzle to an immovable object, supporting the butt with a pair of hinged cross-legs, the

essential point being that the gun be moved about the muzzle as a center and not about the butt when changed from one sight to another.

NECESSITY FOR A POCKET RANGE FINDER.

BY MAJOR W. C. BROWN, FIRST CAVALRY.

I N literally camping for the past six months with the United States Magazine Rifle, Model 1903, at the experimental range near Fort Clark, Texas, firing many thousands of rounds of ammunition from a firing stand with a muzzle rest to secure exterior ballistic data of the new arm, the writer has become impressed with the fact that while in the adoption of this rifle, fire can be made effective at considerably greater ranges than heretofore, and this efficiency will doubtless be increased by the use of a telescopic sight by sharpshooters and expert riflemen, we shall fail to profit by its superiority unless means are found for readily estimating ranges.

It is thought that we lose many of the advantages of an accurate long range rifle from the inability of officers and enlisted men, even those best qualified in this direction, uniformly to estimate distances correctly. The accuracy of the United States Magazine Rifle, Model 1903, is far ahead of our capabilities in judging distances. A man who will make remarkably close estimates under favorable conditions of weather, may fail, and in doing so mislead all those who depend upon him, when conditions are unfavorable.

If a small portable range finder were supplied to each company it would enable officers and noncommissioned officers to secure correct estimates of the range in all sorts of weather, and within very narrow limits.

The experiences of our army before Santiago in 1898 afford ample illustrations of the desirability of having pocket range finders in the hands of company officers, not only in

determining distances from our own positions to the enemy's trenches, but also for the use of officers on reconnaissance duty.

Where a range finder is most needed, is in estimating distances between 1,000 and 2,000 yards. Our firing regulations, pages 61 to 65, provide for instruction in this exercise up to 1,000 yards; moreover the flat trajectory of the new rifle renders very great accuracy in the estimation of distances at the shorter ranges less necessary than heretofore. Even if estimating distances up to include 2,000 yards, constituted a part of the regular course of instruction, there is little hope of our officers and men becoming sufficiently proficient in this exercise in distances over 1,000 yards to keep pace with the accuracy of the rifle, which holds the cluster of bullets reasonably close together even to 2,000 yards. The dangerous space at the longer ranges diminishes so rapidly as the range increases, that the latter must be known within very narrow limits, such as are only attained by means of a range finder, to place the cluster of bullets where it will be most effective.

Between 1,000 and 2,000 yards the maximum continuous danger space with the new rifle is, for infantry, as follows:

Yards.	Maximum continuous danger space.
1,000	55.1 yards
1,100	45.5 yards
1,200	38.5 yards
1,300	33.0 yards
1,400	28.7 yards
1,500	25.1 yards
1,600	22.2 yards
1,700	19.5 yards
1,800	17.3 yards
1,900	15.4 yards
2,000	13.5 yards

The maximum continuous danger space for cavalry is about fifty per cent. greater.

In order that the range finder may perform its work satisfactorily the error in yards of the distances estimated should not be greater than the maximum continuous danger space for infantry in the range under consideration. An error of from five to two per cent. is therefore allowable from 1,000 to 1,400 yards; from 1,500 yards to one mile, one per cent.; 1,800

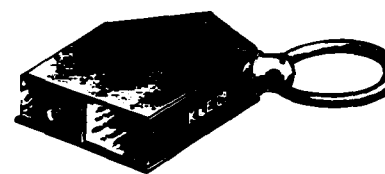
and 1,900 yards, three-fourths of one per cent.; and at 2,000 yards five-eighths of one per cent.

In the above discussion we have, as a matter of course, taken no consideration of errors due to changes in light, mirage and temperature, which greatly enhance the difficulty of putting the cluster of bullets where it will cover the target. Against this, it may be said that if but a small proportion of the bullets fired reach the target, the fire may fairly be regarded as effective.

Between 1,000 and 2,000 yards the continuous danger space for infantry ranges from 55.1 yards to 13.5 yards. For cavalry it ranges from 78.9 yards to 19.6 yards.

Even those who are quite expert in this exercise cannot be expected, with the eye alone, to estimate distances uniformly in all sorts of weather within the limits above described, or even to approximate it. Some sort of a pocket range finder becomes a necessity if we are to utilize as far as possible the advantages of the new arm.

With a view to ascertaining what could be done to supply this want we have been experimenting with a Penta-Prism



range finder. The shape of this is as indicated by the cut: it is about one half inch in thickness, weighs less than two ounces, and can readily be carried in a watch

fob. It is very simple both in construction, and in its use, being a five-sided prism enclosed in a bronze case, only two faces exposed, strong, and with proper handling should last indefinitely, there being no parts liable to get out of order or adjustment.

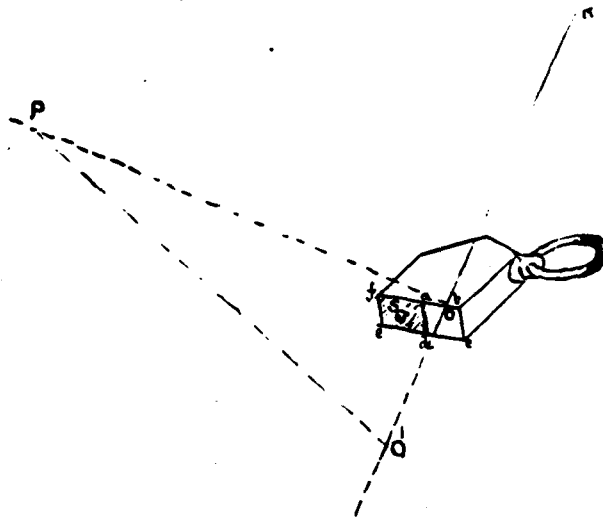
Its use is easily learned by fairly intelligent enlisted men in from fifteen to thirty minutes.

At the experimental range half a dozen of our noncommissioned officers were able to estimate distances at the first or second trial with an average error of only about three per cent., and this, too, under conditions which were not particularly favorable. Three of the estimates of the distances, ranging from 1,400 to 1,500 yards, were made with errors of three,

eight and one-third and thirteen yards; two distances aggregating four miles were estimated with an error of but three per cent.

It is believed that with a little practice those men in a company who have an aptitude for such work will get distances with an error of less than two per cent.

To determine a range with the Penta-Prism range finder the observer, holding the instrument horizontally a few inches in front of the eye and facing at right angles to the



line to the object P, whose distance is wanted, endeavors by moving about to see by reflection in the prism the object P, and by direct vision immediately above or below it some sharply defined and distant object R. All this looking into the right face a, b, c, d, the slide S is now moved so as to cover a, b, c, d, and permit the observer to look into the face a, d, e, f. The point on the ground immediately underneath O at the taking of the first observation is marked by an assistant holding a staff in a vertical position. The assistant may be dispensed with by simply driving the staff in the ground in a vertical position at this point.

The observer now steps backward to what he roughly

estimates to be one-fiftieth of the distance OP, keeping on the line OR, prolonged. The slide S, having been moved to the right to cover the face a, b, c, d, an observation similar to the first is now made through the face a, d, e, f, the observer posting himself accurately on the line OR, prolonged and finding by moving forward or backward along this line a point where P (by reflection) and R by direct vision immediately over or under the instrument are again apparently in a vertical line. The distance OO is now measured and multiplied by fifty, giving the distance OP. Any tape line or other measure may be used in measuring the base line, but for military purposes it is a convenience to have a tape divided into yards and hundredths of a yard. The observer then, to multiply the length of his base line by fifty, simply drops the decimal point and divides by two, getting a result expressed in yards.

The writer is aware that there are other possibly better range finders than that above described, but he has not been so fortunate as to find them. With the adoption and issue of the new rifle the time seems opportune for finding out which is the best and most practical portable range finder and having a limited number in the hands of troops for trial and report.

ORGANIZATION FOR MILITARY TELEGRAPHING IN THE FIELD.

By LOUIS ZERLIN.

TRANSLATED FROM THE "ARMÉE ET MARINE" FEBRUARY 14, 1904, BY N. Y. Z.

THE extremely important rôle that telegraph lines and railroads will play in the next war is not taken into consideration by many people. It might be, therefore, interesting to examine the recent organization of the telegraph service in the army.

A summary review of the general history of the subject, not considering visual signaling, by means of which a message may be transmitted from one end of France to the other in less than one-half hour, is as follows:

The first application of telegraphing in the field was made use of during the Crimean War, a telegraph line being built from Bucharest to Varna. Afterwards a submarine cable was laid under the Black Sea, across Austria and connecting the headquarters of operations with the headquarters of the army in France.

During the Kabylie expedition in 1857 the general headquarters of the expedition was kept in constant communication with the base of operations by means of a wire strung on trees or buried. The same method was pursued in 1859 when for the first time the corps of the army was able to communicate with the home headquarters of the army, although the service was not entirely without interruption.

Up to this date the service was performed under the direction of civilians. It was not until the War of Secession (1861-5) that a strictly military signal corps was first organized.

Prussia, during the wars of Denmark and Austria, followed the same example, organized and put into effect a signal corps as a branch of the army.

Following these wars all the great powers organized a special permanent military signal corps, nearly all of them placing the new corps under the jurisdiction of the engineers.

France, however, in 1870 organized one complete company, but placed it under civilian administration. After the War of 1870 France organized a Signal Corps, but the personnel was furnished by the administration of posts and telegraphs, furnishing a telegraph service for the army (first and second line and parks) and the service for the territories. The law of July 24, 1900, organized this service upon an entirely new basis. It created a battalion of telegraph operators consisting of six companies. Mont Valerien. The duties for this service were finally regulated by the Provisional Instruction of August 4, 1902, and the decree of January 3, 1903, and was made a part of the organization of the army, its object being that the head of the army may be placed in communication with (1) army headquarters, (2) the wings of the army, (3) security service, (4) the rear of the army, and (5) the corps commander.

The chief of staff issues the necessary instructions for the government and duties of the telegraph system of the army, the supreme authority and supervision of this service being vested in him.

The telegraph service of the army embraces a first line installed and operated in each army corps by a company of telegraph operators; a second line installed and operated by the technical sections. The limit between these two sections is fixed by the commanding officer of the army. The first line establishes and maintains, as far in advance as possible and in the direction of the line of advance, one or more telegraph stations designated as "centers of information," in order that all the information collected by the cavalry scouts, or by other means, can be forwarded by telegraph. This line should connect with the various places designated by the commanding officer for the best interests of each day. The principal of these places being the station of the general headquarters of the army, the center of this line. The superintendent of this line is a field officer of engineers whose station is near at hand to the chief of staff. He makes the necessary details for the selection and installing of the line from the companies of telegraph operators, dividing them into six sections, each accompanied by their supply

trains, and also for the engineers' telegraph detachment. To-day this detachment is the main source of supply for this service.

The section that can be economically divided into two working parties is used as the main erecting party. They are equipped with a small supply of tools and material for the use of repairs of already existing lines which may have been destroyed by the enemy, or for the construction of new lines. These repairs and new work are to be made by means of a field cable, a properly insulated wire.

The main supply train for these companies carries, in addition to other material, more than 200 kilometers of wire.

The superintendent details for each section the necessary number of wagons.

Each section has six especially constructed wagons as follows:

1st. A telegraph wagon, a telegraph office on wheels, equipped with the necessary apparatus for the simultaneous transmittal and receipt of messages from four different directions.

3d. Two work wagons, containing all the material necessary for installation and repairs.

3d. Two light wagons, constructed for the rapid conveyance of men and material necessary for the installation of an office. These five wagons are sufficient for the transportation of the personnel of a section and permit rapid movements for important trips. A study is now being made for substituting traction engines in the place of horses.

4th. The last is a reel wagon of two wheels which allows the work to be carried on in narrow roads or across country.

In addition to the above each section is supplied with four army bicycles, which carry a telephone, a hook pole, a field pole and 500 meters of light wire. These machines are particularly convenient for testing lines.

The companies, being organized as above stated, are in a condition to operate with great rapidity. Three kilometers per hour may be built by stringing the lines on trees or by other temporary means. If necessary the construction can

be carried on with sufficient rapidity to keep up with the march of the column by simply laying the wire on the ground, and, if necessary, raising it only over road crossings or other obstacles. The speed may be further increased by starting the line at two different points, or from several different sections.

In order that the material may be economized, each day as early as possible, upon the arrival at the end of the day's march, communications are established between the general headquarters or certain points of the army's line with all army corps' headquarters or centers of information. The old stations are then disconnected and the instruments and material are turned over to be used on the second line. By this method communication is cut off and put in service again each marching day. In certain cases, for example, upon the approach of the enemy, it is necessary that the means of communication be uninterrupted. Each army corps of the first line carries with it a section which operates, for example, between the advance guard and the head of the column, laying the wire without interruption during the march, and establishing from place to place temporary stations.

The details of the technical sections of the second line are responsible for the making of connections between the main headquarters and the base of supplies, and attend to all lines in the rear and in the territory.

The technical sections follow immediately the army, relieving, in all the stations, the personnel of the first line. If so desired, the temporary lines are taken up and sent to the front and are replaced by permanent lines.

In addition to the above organization, each cavalry brigade has a light wagon, containing material and four telegraphers for each regiment. They are used in repairing lines and laying the short sections necessary for communication with the centers of information established by the army.

If the distances are too great or the neighborhood not safe, the cavalry places itself in communication with headquarters by various means, such as automobile bicycles, horses, signaling, or even carrier pigeons.

METHOD OF EMBARKING OR ENTRAINING HORSES.

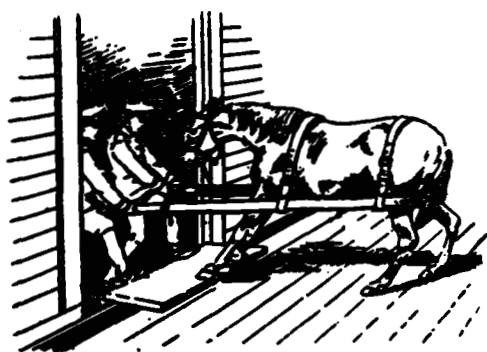
TRANSLATED BY COLONEL A. H. B. PHILLPOTTS, R. H. A.

[From "*Journal Royal Service Institution*."]

DESCRPTION of a method suggested by Captain Bakevitch of the Russian army for embarking or entraining horses that are difficult to get into the ship or train:

The apparatus consists of a strong breeching made of webbing, which passes around the animal's quarters and is supported by two

straps passing, one over the withers and one over the croup. The ends of the breeching are continued to the front so that two or four men can haul onto them and so force the horse into the box or through the



opening in the ship's side. There are two rings on the front part of the breeching to which the head rope or reins can be fixed to keep the horse's head down.

The apparatus here described seems to be an improvement on the ordinary rope, as it cannot slip down, does not cut the horse, and by its use the horse can be guided into the box, etc.

The attached sketch describes the gear.

COPY OF A LETTER FROM THE RUSSIAN GENERAL SKOBELEFF TO HIS FRIEND, GENERAL STROUKOFF, WRITTEN AT THE CLOSE OF THE RUSSO-TURKISH WAR.

TRANSLATED FROM THE FRENCH.

BY CAPTAIN C. D. RHODES, GENERAL STAFF.

THE following interesting letter from General Skobelev to his friend, General Stroukoff, has recently come to light in Russia, and has been forwarded to the General Staff by the United States military attaché at St. Petersburg. It was written at the close of the Russo-Turkish War from the Russian bivouac near Karamanli, and is of interest on account of the writer's decided opinions as to the shortcomings of the Russian cavalry, and the true role of cavalry in wars of the future.

General Michel Skobelev, one of Russia's greatest generals and a most remarkable man of his time, was born in 1844. His military career was almost entirely self-made, a difficult undertaking in a country where birth counts for so much. He served with distinction in the expedition against Khiva in 1874, and against Khokand in 1875, and was conspicuous for personal gallantry as well as for military ability of a high order. He was refused a command at the outbreak of the Russo-Turkish War, but entered upon the campaign as a volunteer, and crossed the Danube carrying a rifle on his shoulder. But his genius could not long remain hidden, and he quickly rose to high rank. As a general officer before Plevna he did brilliant work, and has been compared to Napoleon in being able to rouse his soldiers to the highest degree of enthusiasm. At the taking of Adrianople, he was for pushing on to Constantinople, and submitted plans for a further campaign; but his advice was not followed by the Russian government, much to his disappointment and regret.

After the Russo-Turkish War, Skobelev was made commander in chief of the Geok-Tepe expedition, and conquered the Tekke-Turkomans in 1881.

He died at Moscow on the 7th of July, 1882.

TRANSLATOR.

"My Dear Alexander Petrovitch:

"I thank you a thousand times for your good letter, coming straight from the heart. It has not astonished me, but has deeply pleased me, coming from one who, since the last war, I have been accustomed to consider as my devoted friend; from Parapane to Tchataldje and in that brilliant military future of which I personally, for the good of our poor cavalry, was at one time blind.

"I have said 'our poor cavalry' with a feeling of profound respect and love for the material of our regular cavalry. It is you who have awakened in me this sentiment by proving to me with the never to be forgotten regiments of the First Cavalry Division what can be accomplished with Russian regular cavalry. But everything requires a leader, and it is indeed a fact that I have seen few leaders during this last war. Believe me, my dear Alexander Petrovitch, that the question of the immediate creation of good leaders for cavalry fighting is more urgent for the Russian army than any other. What would have become of us in Turkey the past summer if the cavalry of Sultan Mahmud were resuscitated? In a war with Austria, or even with England, the lack of knowledge of the employment of cavalry might truly cause the loss of the campaign. In our day more than in the time of Zeidlitz and of Murat, the rôle of the cavalry is entirely that of *offensive élan*. It is precisely for this end that the carbine has been furnished, and not that the cavalry may modestly fight dismounted within sight of its infantry, as has happened only too often.

"In keeping itself as much as possible in touch with the main body of the enemy, good cavalry indefatigably seeks opportunity for turning one of the active flanks of the hostile

army, or even of the rear guard, and for giving it a decisive check, at the same time permitting it the least possible knowledge of its own plans. Nowhere is experience so valuable as in the cavalry.

"At the beginning of the present century they called the cavalry *the arm of surprises and flanking movements*. What is to be said of it now? As a matter of fact our cavalry ought to be prepared to play a very important rôle in a European war, if such takes place. It should by its qualities forcibly influence the strategical and tactical decisions of the commander in chief. I may even say that it should influence the *logique of the entire campaign*.

"The generals who will be called upon to direct the movements of the cavalry, ought, in addition to having an intimate knowledge of military science in its entirety, to have *the military eye*, and the faculty of drawing conclusions in any situation and under any condition. They should be endowed with limitless activity, and more especially should possess the character, the gift of instant decision as to the assumption of responsibility. These are exceptional qualities and—shall I say it—are neither the qualities of the riding hall nor of the reviewing stand. That is why the army should cherish those who answer to the ideal that I have just described: those who have performed legendary exploits in the heart of a rigorous winter, a hundred ~~times~~ distant from their infantry, during those famous days when there hung in the balance the honor of the standards entrusted to them, the lives of hundreds of heroes, and finally the irrevocable risk of losing or maintaining their own military reputations. Envy alone can obscure the reputations of such men.

"Receive my sincere congratulations on the occasion of the gift which the Emperor has bestowed upon you—a sword set with diamonds. It will be for you an agreeable souvenir and as for me, I see in it a proof that His Majesty understands and appreciates you. Give me news of yourself in detail, and of many things in general. I have already turned over the command of my corps to General Verevkine; everything is in order. You know that I love the service.

and that I do not permit myself to have pretensions. I execute orders, that is all.

"I clasp you cordially by the hand.

"Your devoted,

MICHEL SKOBELEFF.

"Bivouac near Karamanli. Ss. V. 1878."

THE UNITED STATES CAVALRY HORSE.

BY WILLIAM P. HILL, VETERINARIAN TWELFTH CAVALRY.

I THINK all cavalry officers will agree with me when I say, "The American horse furnished to the United States cavalry is underbred and in no way a typical cavalry horse, and not to be compared to the German and English mounts."

The price paid is far too small to obtain anything like a fine animal; \$120 the average amount, buys exactly the horse we now get; he is perhaps sound in wind and limb, but style and good conformation he seldom has. How often you can walk down the picket line of a troop and pick out perhaps a dozen that would look better hitched to a wagon: heavy-boned, big headed, sharp hipped, coarse bred plugs. This is not a reflection on the buyer, but on the small price the buyer is limited to.

The horse required for really efficient cavalry service cannot be bought under \$200. He brings this price at five years old readily in the open market. We cannot expect to buy good cavalry horses in States where perhaps there is not a single fine saddle stallion. The trotting horse has come so much to the fore lately that his get for saddle purposes is useless, and where crossed on an ordinary farm mare, we get a straight necked, sloping hipped, nondescript. This mixture of blood produces all kinds of different traits in the colts. Some with bad feet, misshapen, brittle or too soft, bad

temper, bolters, or the reverse animals that are slouchy and dull—sway back, too high at the withers and all the ill results of haphazard breeding.

My idea of a cavalry horse is what in fox hunting circles is called the "weight carrying hunter." He has plenty of size combined with thoroughbred blood. He is up to heavy weights with strong hind quarters, yet full of nerve and energy, carrying a heavy weight across country, mostly at a gallop, for hours.

This animal, of course, would be hard to get for our cavalry unless we had government farms for the purpose, but if the government would buy about fifty large thoroughbred stallions and place them through the different horse breeding States and take options on the colts until fit for cavalry breaking, this would surely be a big step in the improvement of our cavalry horse, and in course of time have a very visible effect on the general and individual appearance of our horses.

THE NEW BRITISH CAVALRY SABER.

TRANSLATED FROM "LA FRANCE MILITAIRE."

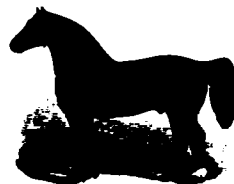
BY CAPTAIN C. D. RHODES, GENERAL STAFF, UNITED STATES ARMY.

THE technical cavalry commission presided over by Sir John French, has just adopted after a long series of comparative studies a new saber, absolutely straight, intended to replace the curved saber, almost universally used up to the present time by all cavalry troops.

This radical change has been recognized as imperative by the British military authorities, in the light of the experiences of the war in the Transvaal; and in addition, is in keeping with the important modifications brought about during recent years in infantry tactics.

The new arm, much lighter than that which is still in use on the other side of the Channel, weighs only 945 grammes. Its length, not including the point, is exactly eighty seven and one-half centimeters. The blade, which measures almost two centimeters in width, terminates in a very long sharp point (375 millimeters).

Three regiments of cavalry have recently been provided with this saber, and will make some trials of it on the maneuver grounds of Aldershot and Curragh.



THE BRITISH CAVALRY AND THE LESSONS OF 1899 TO 1902.

By "A COLONIAL"

[From the *United Service Magazine*, July, 1904.]

HAVING served in Irregular Corps throughout the late war, brigaded on several occasions with regular cavalry, I did not fail to notice, like many others, their shortcomings, especially in the early stages, whilst, of course, admiring their many good qualities. Their weak points may be roughly enumerated as follows:

1. Indifferent knowledge of scouting.
2. Studied dislike to acting on foot with the rifle.
3. Lack of being able to utilize ground for taking cover, or concealing their movements.
4. Bad quality of their mounts.
5. Excessive weight carried by the horse.
6. Bad shooting.
7. Want of individuality, thus preventing men from making use of their own heads.

Many of these weaknesses were soon rectified, and some regiments, commanded by large-minded men, learnt by bitter experience to be nearly as good as their enemy.

Few cavalry officers, I feel sure, will disagree with me over these points, so I hope, therefore, to give as briefly as possible my personal observations during the past nine months as to what steps are being taken to improve matters. Last summer, some fourteen months after peace, I rode down

from Johannesburg to have a look at the cavalry concentrated at Klip River Camp for drills. My arrival was a bit early for them, so saw men and horses in the lines. From a spectator's point of view, things looked very pretty, with whitewashed stones marking the roads and the boundaries of regimental camps; but from a campaigner's point of view from the small space allotted to regiments, and the way horses and men were crowded together, it appeared as if there was still a doubt whether the country was ours. I heard later it had been laid out by an infantry officer. On learning that the cavalry were shortly starting out for work, I off-saddled for a small feed. Soon the regiments, all of which had taken part in the war, filed past me on their way to a plain east of the railway and west of the Zuikerboosch Rand.

I overtook them later, and found them crowded together in what was called "preparatory formation." I watched a small squadron gallop to the front, and hoped to see how the scouting was carried out, but they never opened! I afterwards found it was the General and his staff.

Soon the mass began to trot, and after going about one and a half miles, I saw three lines of flags coming towards them. The Royal Horse Artillery came into action, and then there was a wonderful advance at a gallop, ending in a charge over ant-heaps and ant-bear holes into the flagged people. I remarked to a non-commissioned officer near that this flagged enemy did not attempt to maneuver to outflank the cavalry, and he replied, "Of course not, the General commands them also," and woe betide them if they don't carry out his orders to the letter of the law.

I rode away in disgust; I had seen enough; but knowing their General had not distinguished himself as a cavalry leader in the war, but as a town commandant, I was not surprised; all generals of distinction having gone home to occupy fat billets.

I saw later in the papers that the local Boers had been entertained at luncheon, and that they had expressed their pleasure at all they had seen. No wonder! for how they must have grinned from behind their kopjes at the easier task which the future seemed to have in store for them.

This spring I came to England, partly on business and partly on pleasure bound. Soon after my arrival in London I met several cavalry officers whom I had met during the war, and I was surprised to learn from them "that if a squadron leader wished to get on now, spit and polish, knee-to-knee close drill, and a studious avoidance of useful dismounted work, was the way to do it. On the other hand, if he studied individuality, Boer tactics, mounted or dismounted, concealed outposts, common-sense ideas in combination with sufficient close cavalry drill, he was at once classed as a — mounted infantryman, and thus a marked man."

I further gathered that the cavalry was divided into two schools, the one, those who totally disregarded the lessons of the war and were anxious to return as quickly as possible to what obtained in '99; the other were what might be termed progressive, viz: those who wish to see the cavalry the handy man of the army, a good shot, a good scout, a good horseman, capable of beating a mounted infantryman on a horse, and yet being able to act on his feet equally as well, but fully recognizing that in addition to these things, cavalry must be able to gallop and drill in close formation, and charge home with a sword when opportunity offers.

I decided to pay an early visit to Aldershot, the seat of all learning, where most of the generals who escaped the heavy sword of Stellenbosch, either by luck or by the premature ending of the war, are congregated, to see for myself how the cavalry were being trained under their eagle eyes.

One fine morning I hired a local horse and rode out to what they call the Long Valley. Possibly it is a long valley as far as Aldershot is concerned, but not in accordance with South African views of one. I found it about half a mile long by half a mile wide. There is a good deal of useful ground southeast towards the town, but that apparently was kept for military police to ride about on, at least, judging by the fierce way they ordered me off. Well, on this drill ground proper I found cavalry, infantry, artillery, yeomanry officers, and men driving in boats on wagons, in fact the whole place was scattered over by people moving in every direction like a lot of ants. If I had taken up a position anywhere, I could not

have swung a cat without hitting a foot soldier, a horse or a gun. However, here I was in the midst of the cavalry, doing their short squadron training under the squadron leaders, supervised, no doubt, by many cocked hats. I saw one or two but I don't know who they were. I recognized at once my friend, the same old troop horse, made in England, that we saw so much of during the war, viz.: the heavy, big-footed, bad-shouldered, common brute, who died, at the thought of a long trek, and the long-backed, weedy misfit which the dealers sold at such handsome profits! Not the little short-legged horse the officers used to swear by for work in the war.

The men were still seated on the same old saddle, right away from their horses, instead of on the Colonial saddle we hoped we had converted them to (I believe the officers still use them). Slung to the saddle was the same old heavy sword with bright steel scabbard, which we saw bent and rusty in war. Some troops were tent-pegging and playing what looked like mounted hockey on their clumsy beasts, endeavoring, I presume, to make them as handy as polo ponies and as clever as hunters, as is now being quoted. I pity the man's neck who hunts or plays polo on one.

Some troops were trotting about doing close drill, and occasionally dismounting from their horses on the tops of the hills and falling in in front of them with their rifles, whilst others dismounted under cover, then walked up on to the skyline and leisurely lay down; but when the order to mount was given, they all stood up and ran back to their horses. All ideas of taking cover or concealing their movements seemed to be forgotten. I may remark that these men wore pipe-clayed rifle slings to make them more conspicuous. I ventured to remark to a nice-looking lad near me, as to whether they had not received the new short rifle I heard was being introduced. Fancy my astonishment when he replied: "Don't talk about rifles; we have not shot a course since peace."

I saw also other troops galloping about with swords drawn, charging space. The little scouting I saw consisted of men riding on the skylines, looking like Nelson on his monument.

As every one went home about 11 A. M., I returned to London a wiser and sadder man.

Having seen in the papers that his Majesty the King was visiting Aldershot to watch the field training of the Army Corps, and having heard with amazement that the cavalry were rehearsing their rôle, I decided to pay a second visit on that day to see what was considered up to date. I went out to the Long Valley, and was soon attracted towards several cavalry regiments and artillery, formed up in line behind a hill at the south end of the ground. Then suddenly, I presume, when his Majesty arrived, out went one regiment, due north, not preceded by scouts, and without flankers, down into the flat where some flags were advancing, and then charged and disappeared behind a hill west. Then, under the roar of the artillery in action, the rest of the regiments advanced in the same direction in a beautiful line, also without scouts, flankers, supports or reserves, much less rear guard, and leaving the guns without an escort. Fancy what an ignoramus any Colonial would have been considered had he forgotten one of these items in war. Well, this line swept forward, first at a trot, then a gallop, and finally charged the same flags at the same spot. When they had pulled up their horses, which took some time, they retired from both flanks, joined by the first regiment that went forth, back to behind the same hill I found them at, where they faced about and dressed on markers in one long line. I wondered what was going to happen—possibly a march past: but no, they were about to make another charge in line, the whole lot this time.

This system of dressing on markers before a charge is strange. I remember reading, as a boy, that it was done by the heavy cavalry at Balaklava. One of these regiments may have been there, and the old tradition is possibly adhered to by all out of compliment. Well, this long line moved forward and charged the flags at the same place as the preceding charges. I afterwards learnt that the King was seated in a tent overlooking this spot.

Cavalry charges, I always thought, were made like stone walls, knee to knee, and that this was so hard to do that the

cavalry was always practicing it; but those I saw had a depth of 150 yards, wide intervals between men, and some of them may still be galloping, as far as I could see.

Had this display taken place at the Agricultural Hall, or at the Crystal Palace, one could have understood it; but having seen in the papers, both before and after, that his Majesty and the new Inspector of the Forces were witnessing the field training of the Army Corps, and that this was part of a tactical field day, I could not help thinking, "C'est magnifique mais ce n'est pas la guerre."

The cavalry then disappeared, I believe, to continue the field day; but when next I saw them, the battle being at its height, and the infantry attack being pushed home, they were lining the plain for the King's motor to pass through.

I dare say I have now opened your eyes as wide as mine as to how the cavalry have profited by the lessons of the war; and, in conclusion, may I, as a poor humble Colonial, with the best interests of old England at heart, offer them a little advice, which is: learn to scout, shoot, take cover, and conceal yourselves, and to fight in your own enclosed country before you assemble on Long Valleys or other plains to practice tomfoolery, if you don't want to spend another 200 millions to learn a second time your faults.

REPLY TO "A COLONIAL."

By "ONE OF THE OLD SCHOOL."

[From the *United Service Magazine*, August, 1904.]

I HAVE been a good deal amused by the article in your magazine, July number, entitled "The British Cavalry and the Lessons of 1899 to 1902," where "A Colonial" tries to teach his grandmother. If you can spare the space I should like to offer a few criticisms.

1. With regard to the seven weak points enumerated, every one knows that, as far as the Boer campaign is con-

cerned, they existed; our cavalry has never been and is not now being trained to fight farmers, natives, or such like, but to meet continental armies, should ever our politicians bungle us into a war with them. With our strength, money and resources, we can always, at the last moment, adapt ourselves to anything, and learn our lessons as we did in South Africa, and on many other occasions. Our army of recent years has been "made in Germany," and is yearly kept up-to-date by able officers who attend German maneuvers. The latest reform is that excellent hat, erroneously called the "Brodrick hat," which was, I believe, the outcome of the visit of the Secretary of State for War, Commander-in-Chief, etc., after peace was declared.

2. "A Colonial" criticises the cavalry maneuvers at Klip River, conducted by a dashing cavalry officer, whom he sneers at as having commanded a town during the late war. Many cavalry generals and C. O.'s commanded towns and block-house lines, in order, I believe, to vary their experiences of war, to improve their training, and, lastly, to give the younger men a chance of leading columns and regiments. I feel quite sure that the gallant officer in question would have led charges in Natal with great *elan* had it not been for the dongas, kopjes and Boers.

3. The next allegation that our cavalry is divided into two schools, viz.: the progressives, as "A Colonial" styles them, *versus* those who adhere to the old traditions.

Thank goodness these new ideas are confined to squadron leaders and subalterns. Our cavalry generals and some C. O.'s still believe in the cavalry charge: they have no fear of the rifle, and I feel confident that they, especially the gallant G. O. C. Cavalry Brigade, Aldershot, would charge unbroken infantry with a *sang froid* as great as that which was, I hear, displayed by the latter officer when he encountered blank ammunition at close range in the recent cavalry reconnaissance.

4. "A Colonial" sneers at the short squadron training. He apparently does not know that in our army we begin at the top and work downwards in our training. The G. O. C. instructs the C. O., and the C. O. the squadron, and so on. We don't start at the bottom, as our squadron leaders lack expe-

rience, and, besides, the generals and C.O.'s would have nothing to do but inspect. We do not possess highly trained officers like the Germans.

5. "A Colonial" calls the troop horse "big-footed, heavy," etc. I feel sure most senior officers like a big horse, so long as he is fat. What idiots we should look on ceremonial parades in full dress, mounted on the small horses he suggests! Again, the big-headed horses are invaluable in a charge, as their heads act as battering-rams against the smaller ones of the better bred class.

6. *The Saddle.*—The present pattern is used almost universally in continental armies; and I should like to know how we could have carried all the kit we did in South Africa without it. The front arch must necessarily be high to give the bad riders, of whom we have many, something to hold on to when a horse travels at speed; and, secondly, it must have a high cantle to enable men to mount easily and carry a lot of kit.

7. *The Sword.*—"A Colonial" laughs at the glittering scabbard. Of course he does not know that we colored them khaki when we went to South Africa. In peace it must glitter, and we must have noticeable things like pipe-clayed bandoliers, etc., or else it would take opposing cavalry a long time to find us. In like manner, artillery uses black powder to mark the position, or else no one would know where they were.

8. *Taking Cover and Concealing Movements.*—Of course we train our people to have contempt for cover and bullets; how else could we persuade them in war to face the rifle at a gallop? Why, they would all want to go to ground behind rocks and kopjes!

9. The cavalry display before the King appears to have displeased "A Colonial," who forgets that ours is a voluntary army and generally plays at soldiering, and that unless we have these shows we cannot get recruits. Who knows how many would-be fathers, or young lads, witnessed those charges?

10. Lastly, "A Colonial" shows complete ignorance when he criticises cavalry maneuvering without scouts, flankers

or rear guard. Our cavalry never have such things when in brigade or large bodies—with the object, I always learnt, of inducing the enemy or opposing force to come boldly up and surprise them. Every cavalry officer of standing knows that from General Luck downwards, all inspecting officers chiefly examine C.O.'s and squadron leaders in what they would do if suddenly attacked; and troops three-quarter right or left-about wheel was invented for the purpose. Another favorite question is: "If coming through a defile in sections and suddenly attacked, how would you form to repel it?"*

Again, reconnaissance schemes are only carried out to practice officers in writing reports, and to see how quickly they can be transmitted to the G.O.C. No one cares how the scouting is done, nor has a chance of seeing.

To conclude, I would give "A Colonial" a little advice, viz.: take care when the next war comes, you have an imperial officer as your colonel, and don't officer your corps with all your relations, but select men of experience—for example, myself.

* There is but one other British examination question with which I am acquainted that can compare with the absurdity of this. My example is as follows: "Why do troops now advance to the attack in extended order instead of in quarter-columns?" A militia subaltern, in reply to this question, wrote: "Because if they were to advance in quarter-column it is probable that they would all be killed." It is a pity that this wise young officer was not also called upon to answer the question quoted by "One of the Old School," he would probably have written: "It would depend upon whether the shortest way to more favorable ground was to the front or to the rear"—E. S. M.

THE CAVALRY OF THE FUTURE.

TRANSLATED FROM THE "REVUE DE CAVALERIE."

BY CAPTAIN J. W. HEARD, THIRD CAVALRY, FOR THE SECOND DIVISION
GENERAL STAFF UNITED STATES ARMY.

UNDER this pretentious title do not expect a description of a steel horse, swift as electricity, moving on thousands of unbreakable legs, and mounted by an ironbarbed automaton accurately spitting forth thousands of projectiles; neither expect a monstrous ballet, danced in echelon by a collection of phenomenal horsemen, and a divulging of the secret of victory discovered by a new geometrical formation.

The cavalry of to-morrow, I believe, will very much resemble that of to day and of yesterday. The horse, its distinctive feature, will probably have more blood, and will not be so heavily loaded. The man who rides him will be less of a military machine than at present; that is, he will be less molded into one shape, more thoughtful, more individual, more difficult to command, if it be desired to align him in a troop. He will know the value of his gun and how to use it; he will have a dart which will enable him, like a wasp, to free himself from difficulties near by, and finally he will be bound to his comrades by the sentiment of the command.

This is a very nebular psychological case which I will try to explain. Without pretending to read the soul or the human instinct like a book it can, I believe, be positively stated that the secret of future victory lies in the community of thought and in the moral tie which binds every individual energy and action towards the same aim. It is a new spirit with which we must become acquainted. The present arms are of such effect and precision that they produce, when well handled, unthought of results. But for this, they must be in hands of men of perfect individuality, cool and brave, as indicated by the word, a correct translation of the Latin word *Vir*—a man.

It is not by preparing figureheads or by killing the individuality, by exercises in confusing gatherings on the drill ground, that we can prepare horsemen to play their rôle in war, spending their energy and risking life for the common end.

This study will be divided into three parts:

Organization and armament of the cavalry.

Its instruction.

Its employment.

All of these are military problems. The use that we can make of a soldier depends upon his moral and physical qualities, upon his arms, and above all whether he knows how to use them, upon his equipment and his food supply; or to sum up, in the moment of action upon his capacity of "can and will."

The regiment is the organization unit of cavalry. The cavalry brigades, divisions and corps, if we are afflicted with enlarged ideas, can be established at the moment of use. They exist with difficulty when assembled for any considerable length of time, and their employment in mass is rare.

The destruction of the French cavalry in 1812 was caused quite as much by its premature organization into corps at the beginning of the campaign and the consequent difficulty of its subsistence, as by everything it suffered during the war.

I shall stir up many contradictions. There are too many officers in a regiment of cavalry. A commandant, a second in command, five captains, three officers and an adjutant for each squadron, an instructor, a captain treasurer-major, an officer of equipment, an assistant to the treasurer, and a standard bearer, with the proper number of sergeants and corporals are ample. Then the officers' positions will not interfere with each other, and sinecures will not exist. The necessity of having squadron chiefs, and of discovering important rôles in the demi-regiment, has been well proclaimed, but that does not prevent the chief of squadron, different from the infantry chief of battalion, from being a useless gear, who only cumpers the regiment. When circumstances call the demi-regiment into existence, the senior captain can

take command in absence of the colonel or of his second. The captain-treasurer can easily fill the position of the treasurer-major in addition to his own duty. He has an adjutant and plenty of clerks. The colonel is absolutely in charge of the administration of the regiment. The intendant supervises the accountability and prevents infringements of regulations.

It is claimed that more officers are needed to make reconnaissances. The maneuvers prove that there never are enough, and the example set by them must not be followed. If in war time we should employ officers in this fashion, France could never produce a sufficient number. An officer should not be given a mission in which his platoon or his entire squadron does not participate. He may be temporarily detached with a few men, but never permanently.

The fifth squadron must be complete, the feeder and the resource of the others, which make up from it, their effectives in time of war. The organizations remaining in the fifth squadron after the mobilization of the regiment, can serve for the first reserve formations.

How to complete these formations? The General Staff pertaining to the cavalry, which must be formed so that vacancies will not exist in the reduced regiments, will, with the officers of the reserve, be sufficient. The reserve regiments are mobilized by squadrons, of which only a certain number go with the infantry divisions. This will give the time and the elements necessary for their successive organization. To sum up, it would seem to be sufficient to place the regiment on a peace footing, with its war strength of officers, at least equal to regiments in the corps.

But what about progress? There is a custom in the French army which confuses command and rank: why not give the rank, when the position has been well filled, and we can be sure of not prolonging the military life of a man incapable or played out. What disgrace would there be for a general to command a regiment? He would wear himself out less than in his sinecure position during peace. Why cannot a good captain act as a chef d'escadron, and the treasurer as a higher officer?

There is certainly material and even moral reorganization in these ideas; the number of stripes, derived from well rendered service, does not forcibly imply the right nor the capacity of high command.

ARMAMENT OF THE CAVALRY.

The Horse.—He is good; continually improve him, for the breed quickly deteriorates if not properly kept up: develop, train, inspire him and lighten his burden as much as possible. Seek medium sizes, leaving the giants for trade. Continue to mount regiments uniformly, like the cuirassiers, dragoons and chasseurs at present, in order that we may utilize the resources of our national production and get together horses of the same gait and temperament. But the armament, accoutrement and employment must be made uniform, in principle at least, for coats of different colors may be permitted in order to develop emulation and preserve esprit de corps, which has its worth.

The Soldier.—He is generally good. We should choose him tall enough, but light and slender, even of a delicate appearance, sufficiently well informed, and above all, physically and intellectually quick. The enlistment is well made: we have only to keep him in the path.

The Rifle.—What can we ask better than the point blank at 800 metres, which the "D" bullet gives? The practical limit for firing a gun is the limit of clear sight. The number of cartridges carried is not enough. The horseman will often use his rifle a long ways away from the ammunition sections in front or on the flank of a deployed army, away from the artillery group and the cartridge caissons, which drag along. He must be able to use his carbine to its full effect, *i. e.* to shoot well and fast if the occasion demands.

The Revolver.—In spite of all deductions concerning its employment during the War of Secession at short range, in the mêlée, it will never be worth the saber point, except to insure suicide. Keep it for officers and N. C. O.'s. It is a baton of magical command. Those who use it should be excellent shots, and should command on the line by their presence and

example. As soon as there is fighting on foot, a carbine will be found.

The Saber.—The man is not yet made to charge shaken troops with the horse as his sole weapon. He must have something in his hand. Perhaps in several generations more this instinct will be changed, and the charge made, revolver in fist. To-day it is still only a theory, psychologically inapplicable. But the length and point being sufficient, we may diminish the weight of the saber. The saber-exercise, everywhere now taught, is only time lost. The classical *mêlée* is only possible on a field where two bodies of cavalry are isolated, and further, where no part of either has the idea of fighting on foot or firing into the confusion, in order to disentangle it in any sense, and even then the horse brings the solution. All this does not mean that when you have plenty of time, as is the case with officers, reënlisted men, and certain soldiers of three or four years' service, it is not beneficial to drill in the saber exercises on foot and on horse-back. Every sport is useful to develop the soldier, his confidence in himself, his hardihood, his bearing; but with our reduced time of service, for the majority we must stick to what is necessary and not waste time upon exercises, the whole result and utility of which are only approximate in war.

The Lance.—In your office, with your feet on the andirons, its qualities cannot be doubted. It is the ideal arm for the merry-go-round; it is charming with its streamers, on parade. In the time of Marshal Saxe it was beyond discussion the queen of arms. Marmot cites an example at the battle of Dresden, where it alone was able to break a square of infantry, whose powder was wet, and whose bayonets kept sabers away. To-day, its weight, despite all that can be said, causes inconvenience to horsemen, in going everywhere, in dismounting, in holding and leading horses by hand; are these defects compensated for by its undisputed superiority over the saber in a charge or pursuit of a disordered troop, the only case where a charge can be usefully attempted against cavalry as well as infantry? This is the whole problem.

The Cuirass.—It is no longer absolutely bullet-proof. Let the security it affords be replaced by mobility and a utilization of the terrain. In the celebrated classical formula MV^2 the mass is only of the first power, and swiftness is at the square. The element "surprise" has not been put into this formula; it is, however, the source of true superiority, and mobility and lightness only can give it.

The Casque.—It is revived from the Greeks. The Medusa's head which surmounts it was made to terrify the infidels. It is a smotherer of the brain, which it oppresses. We may avoid saber blows by attacking with the point, by parrying or by dodging. The individual combat of the *mêlée* is a beautiful sight on the drill ground or in the hippodrome. On the field of battle I doubt if soldiers have stomach enough, and I will even say mind enough, to adapt themselves to this sport. If there is a platoon or a squadron left united and commanded, its chief could with a few bullets thrown into the pile, soon end the *mêlée* and settle the fight and pursuit.

There is then weight in the armament which can be dispensed with. In the clothing, equipment and saddling there is more still. Cavalrymen should be clothed in woollens of not too bright a color, with water-proof cloaks. The too numerous buttons, braids, trimmings and flaps should be diminished. There should be no more time lost in adjusting and putting men in tight clothes which restrict their movements for fear of bursting. Why put weights on men's feet who have to run across country, jump on a horse and be active? With large blouses, big pockets, water-proof linen or woollen leggings on the leg, high shoes, spurs and a felt hat, Louis XIV. style, is how I see the cavalry of the future.

The saddling and packing should be lighter. The saddle is heavy; it would be an advantage to return to girths trimmed with felt and leather with two blankets under the saddle; to replace iron trimmings with aluminium; to cut off all packing not indispensable, the brushes which are only used in cantonments and when there is plenty of time. Necessary material for cleaning and polishing can be found everywhere. Grooming in war is not done the same as groom-

ing in garrison. The curry-comb and a small brush and a wisp of hay or straw are enough. The packing should be flexible enough to put in to it in case of necessity, provisions for two or three days. It is a matter of study before hand, for at the last minute we might not have the necessary inspiration.

All these points are only in the rough, but I believe that it is along these lines that the cavalryman of the future must study and seek the solution. Lightness and ease must prevail over the desire for display. Photographers and artists will lose, yet when the eye becomes accustomed thereto, it will perceive elements of taste and elegance. The spirit of instruction should accompany recruiting necessities and the social methods of the hour. We must not imagine that the decrease in the term of service forbids the idea of making cavalrymen. It can be done in one year if we care to get clear of old formulas, and seek solely to make men capable of using and caring for their arms, horse, rifle and saber, and if we resign ourselves to abandon everything that is merely habit or useless show.

Throw open the regulations to the principles of the different steps. This libretto makes me think we ought to have some celebrated dancing master in order to learn "carry the left forward, toe slightly turned out, ground it." Our parents rewarded our nurses with a gold Louis when we learned to take our first step. This gold piece was thrown out of the windows, for when twenty-one years old we have to begin all over again.

How much time is lost, how much ambition is withered by a too rigid execution of the most trivial rules! The ballets danced by pretty women in pink tights, among electrically lighted flowers are better looking than those danced in the barrack yard, or on the drill ground by badly shaved, badly combed and badly dressed men. There will be work in accustoming ourselves, during indefinitely prolonged periods of peace, in shaping men for war, and yet not lose their time from parades, in developing to the utmost each individuality, permitting it to exist in the assemblage, and in destroying force of habit in the architectural regularity of

troop formations. We can never develop individual instruction too much. We must seek how to make practical horsemen, caring for, mounting and leading docile and well trained horses, knowing how to use their weapons according to circumstances. Avoid making acrobats, circus riders and automatons. In addition to the officers, our sergeants and corporals must absorb these ideas. The examinations which the board makes them undergo periodically are summed up in a certain amount of contortions which they execute and a series of technical words, often ludicrous, which they are taught, parrot like, without understanding. These tedious words seem necessary to sanctify their promotion. Character, simple good sense and personality are the last things considered. Afterwards, we are much astonished that those who have received their grade are incapable of commanding or instructing, and that it is necessary to reduce them when they would have perhaps made excellent soldiers. They know so well their theory and the most complicated words of hippology (without knowing how to apply them) that we are convinced of their intelligence and ability.

The employment of cavalry and its instruction are not the same thing. It is certain, however, that the spirit of instruction influences the usefulness of the arm.

The same cavalry, mediocre under one chief, can almost immediately become very good under another. In addition to natural qualities, it is indispensable that a chief should have the habit and spirit of command. Does the present duty of cavalry generals put them in the necessary condition? They cannot be in it unless kept at the head of a regiment. Experimental practice is continually getting scarcer. Everyone studies to excess the things which can again be studied: but they fail to render a sufficient account of the fact that in the employment of cavalry true tactics do not exist, or at least only momentarily. The past should be studied, but to lose time in regretting it and trying to return to it is contrary to the human intellect, which is pushing always to a change for the better, or what at the present moment we believe to be better. Forward, forward! repeats Bossuet to humanity.

What conclusions are there to draw from what cavalry did in the Transvaal? What conclusions relative to what it can do in our hemisphere? How could the English make reconnaissances with their long lines of deployment, in that unknown country, sparsely inhabited and little cultivated, where their horses could not find nourishment to which they were accustomed? The veldt grass satisfied the Boer ponies, but was not enough for foreign horses.

The British clung to the railroads, to the few routes which served as guiding points, and dared not venture into the open country, where the Boers maneuvered intelligently.

Reconnaissance and exploring are generally made by fighting. Rarely can one man by himself see and render an account. The contact must be made with the rifle, and protected or broken, as circumstances demand. Scouting is the beginning of the battle, and not the base of the plan of campaign, which is fixed beforehand, other things being given, strategy, politics. Cavalry, by its mobility, feels a long way in advance of the uncovered enemy, locates him, attaches itself to him until the arrival of the main body, or breaks off the fight, if necessary.

To demand strategic information of cavalry, is generally to prepare oneself for disappointment. This information is no longer fresh or true when it arrives. The tactical information at the beginning of the battle is different.

How could the English cavalry, instructed and armed, according to Mr. Conan Doyle, like that of Charlemagne, have adapted itself, from day to day, to the necessity to hunt out the wings and the rear of the long lines where the Boers were intrenched, and understand that the latter must be forced out of their holes before being charged?

How could the Boers, ignorant of the discipline of concerted action, of the sentiment of command, have individually guessed what they could have gained, if once, when the English were beaten back in confusion by their fire, they had mounted their horses and pursued to the bitter end? What intuition could have made them come out of their holes and hurl themselves, with mounted groups, upon the retreating

line of fugitives, while the foot groups maintained the advantage already held?

Instruction is the state of mind formed in time of peace, the sentiment of military stability under the same command which can so lead the different groups mutually to aid one another, as to attain the total destruction of the enemy. It is also, as Bonvalot wrote, the national sentiment, life, sufferings and common interest, which develop the spirit of military stability in the fight.

The armies of to-day closely resemble the Boer army. The reserves enter them a great deal with their independence. What influence will the spirit of instruction and the theoretical tendencies of employment have upon individual action?

Who can deny the importance of this action and consequently the influence of instruction and of maneuvers?

And I am wholly convinced that we are here entirely wrong. I am not a believer in those theatrical evolutions where we only seek a training which can be but approximate, and possibly even to the detriment of mobility, and of things unexpected; where masses are made to maneuver when they probably will not maneuver in war. Generals and colonels acquire the custom of having their command always bunched behind them; when in war, if they wish it to render its maximum useful effect, it must be accustomed to act by fractions, cooperating towards a single aim.

This is, in fact, the definition of echelon movement, but not of that which has become a drill arrangement, where everyone regulates himself upon his neighbor and is absolutely tied, and which, contrary to the aim of the regulations, ends in making cavalry stiffer and heavier than it was 300 years ago.

Echelon is not a combat arrangement, but a result of the combat. To attack or to defend, we engage only enough for the thrust or the parry, and according to circumstances the remaining fractions are employed to the last, if necessary, united or separately. But to start to the attack in a previously known echelon, and to march in that formation, closing up the echelons on each other, on their guides, is, near a

well informed and active enemy, to expose them to destruction, without being able to give battle.

The echelon which I mean, platoon, squadron * * * is connected with the others only by the object, which generally at the setting out is some distance away: little by little it draws near and approaches the fractions which are operating against it. At the moment of attack some can be united, but they must not wait for others, and each should do the best it can towards the common end. The chiefs go with an echelon, and according to the result of the combat they act with the nearest united one at the last. How much is unforeseen! Yes, but the secret of victory in the future is in the unforeseen.

The unforeseen, coupled with what I called at the commencement of this study the "sentiment of command" or obedience, (which I should like to see replace the apparent discipline of "Garde à Vous") follows a known and understood plan, simple and without fine phrases, and when one knows his leader, all forces are concentrated on the end in which all live and believe.

What a difference from what was done in the last European wars, and from what we saw done in the maneuvers. From the first day cavalry was massed in united large bodies waiting for the opportunity which never came, and which it should have sought out and created if it wished to escape being forced into a charge where it would be sacrificed—a heroic and useless show. Useless, did I say? Are the most important results worth the dismemberment or the loss of one or two more cavalry divisions, which cost much money and, above all, time to reconstruct? Cavalry can only charge troops shaken and ripe for retreat. Then the horse is the real weapon; it would be useless to put a saber in the trooper's hand, if with the instinct of the horseman, it gave but little aid to his movement and fierceness, if I may use an expression so little in accord with the present benevolent philosophy. The importance of the movement of this cavalry is incalculable, a movement which is not the classic charge of the regulations, but rather a combination

of land slides coming from everywhere, and always following the common prey to the death.

Could Prince Frederic Charles have foreseen this employment of cavalry, when, after 1870, he wrote, that the cavalry of the future would be formed in one rank?

If its objective has not been well shaken up by some other arm of service, the cavalry itself must try to shake it before hurling itself upon it.

It is the utilization of its weapons, combined with its capacity for mobility, which must produce the most numerous and unforeseen results. Some platoon or squadron groups can approach rapidly, to overwhelm in a few seconds an objective point by concentrated fire. But if a false move is made, they either remount or the other fractions mounted and held sheltered in readiness, throw themselves forward like an avalanche. The formation matters little, only the aim of the chief must invariably be understood. Attacks must be made from all sides before the disorganized enemy can recover his self-possession.

The wavering which permits a charge upon cavalry, as well as upon infantry, can be sought in a similar manner. The maneuvering echelon, designed to permit the combat echelon to arrive at the shock, has, in order to fulfill its rôle, different weapons, the effect of which it must utilize, according to the terrain. It must recollect that its principle arm in this endeavor will often be the rifle. Perhaps, also, horse artillery should be used.

This disorder can be strategically produced by operations against the supplies in the rear, the lines of communication, or even solely against the populations of the invaded countries. The customs of this day demand enormous quantities of provisions and ammunition. At the least break in the regularity of their arrivals the masses become demoralized, and cannon and small arms induced to silence, are only encumbering material. This is a use of cavalry which the last wars, except that of Secession in the United States, did not adopt. In the Transvaal, a raid of small extent is cited, from Prinsloo, in rear of Methuen, to the station of Graspan, after the days of Modder River. This little operation meant a great deal to

the English army during the fifteen days of inactivity which followed that series of combats.

In a like manner De Wett speaks in his book, during the operations around Paardeberg, of the seizing of a convoy, which forced Lord Roberts, in order not to be stopped, as did Methuen, to put his army on half rations until the hemming in and capitulation of Cronje. The English army, despite its being accustomed to good living, endured this privation. What an inexhaustible mine in this order of ideas! But to develop it we must know how to march cavalry, how to make it hurry over roads for miles and miles with many columns and overcome the fatigues of long marches. We must know how to make men and horses live, by carrying what is necessary when we cannot live on the country; how to break garrison habits; how to give in the twenty-four hours as much as possible of the indispensable nourishment and repose, by utilizing convenient hours and localities. We must free ourselves from all dead weight, carriages, doctors, veterinarians. We must be well trained and trainable. The cavalry officer who has not passed his life with his horse, whatever be his age or grade, is not capable of commanding in his arm of service. He must live, think, reflect, decide, drink, eat, and even sleep with his horse; and that throughout his whole military life.

To day, when we make fifty kilometres we think we have gone round the world, and we rest, publishing our prowess and photographs in the newspapers. The airs of ballets danced upon neatly swept drill grounds, absorb both time and men. We criticise distances and intervals, which is always easy, since we take as standards the figures imprudently printed in the regulations.

The beautiful maneuvering grounds should be sold and with the proceeds, new terrains, different in soil and appearance, leased for periods of a few days or a few months. But let us have no more classic, beautiful terrains for cavalry, where masses can be made majestically to maneuver. They must be avoided at any price. The more difficult or cut-up a terrain is, the better it is for cavalry. We do not expect to meet upon it, and surprise is introduced with a better

effect. We must hunt for that terrible labyrinth of which Dr. Conan Doyle speaks, and use it against the thoughtless ones who live in it.

This is the cavalry of the future. More cavalry than ever; that is to say, always moving towards a clear aim, arriving when and where it is not expected, producing sudden effects, pursuing or disappearing in order to reappear; executing ever the unforeseen, the unexpected, the impossible, the unimaginable.

This is what we should figure out in our maneuvers in order usefully to prepare ourselves for war. But is it possible? To be sure, up to a certain point, and on condition that the fault-finders are honest and sincere. But we must forsake the daily deification (where work ends towards noon, on an open terrain, around a point where authorities and strangers, peaceful spectators, lunch after the exhibition. Then the cannons thunder, the infantry climbs to the assault, the cavalry charges, and the fairy drama is ended with a flag-waving balloon ascension. What will be the result of victory decreed and of criticism which follows this phantasmagoria?

The battle will be composed of partial combats, often far away and unseen—connected only through the final aim, in which all must coöperate—an aim which must not be chosen at hazard by the director of the maneuvers, but because of its strategic importance. There must be umpires everywhere to judge the performances, and in the evening or the following morning they can sum up the ensemble of the day and draw conclusions—never routine or dogmatic deductions, but only ideas and subjects of discussion.

Originality in the employment of cavalry is a grand quality. All principles and receipts are placed at the service of incapables who ought to go back into the ranks or on the retired list. Cavalry chiefs should be bold and full of new ideas every day. Their spirit must be active and on guard, but not in an office with the feet against a stove. A cavalry officer has no ability who does not pass his life with his horse. The troop sees him, has its eye on him, and understands him instinctively. One thinks of a horseman only

as on horseback, and the ideas which spring up in the rest and ease of an office are not the ideas of a horseman, but of a capitalist, a mathematician or a poet. Poetry is necessary for a horseman, but it is the poetry of motion. He should dream and do superhuman things which later become legendary. Many at thirty years old are incapable, but some remain enthusiastic until death, fools, discussed and ridiculed in time of peace, heroic and invincible in war.

PONY BREEDING IN ENGLAND.

BY CHIEF VETERINARIAN D. GOLDBECK-DIMIN.

FROM "MILITAR-WOCHENBLATT," No. 110.

TRANSLATED BY JOHN S. JOHNSTON, 1ST LT. ARTILLERY CORPS, U.S.A.

THE greater number of horses in use in England are ponies. From time immemorial the doctors' carts, the milk-wagons, the cabs and other public vehicles have all been drawn by ponies. "Young England" has almost always learned his horsemanship on the back of a pony, not merely on the road, but also in the chase.

The introduction into England of the game of polo gave a marked impetus to the breeding of small horses, which had never fully recovered from the attempt made during the middle ages to suppress it, in an effort to encourage the breeding of heavy horses. This favorite game among horsemen was imported from India. The Mauipurits, from whom the English soldiers learned the game, used ponies twelve hands high. It was introduced into India proper in 1864. (Sir Joseph Fayer, *Recollections of My Life*, Bartenheim, 1900.) It was first played in England in 1872 by the officers of the Tenth Hussars, who had just returned from India. In the rules of the Indian Polo Association the height of the pony was given as thirteen hands three inches. In England the height was first raised to fourteen hands, and later, as it

was found very difficult to find suitable ponies of this height, to fourteen hands two inches.

From the above rules respecting height it will be seen that the English and German interpretations of the term pony differ considerably. With us, a horse that is fourteen hands, that is, 1.42 m. high, would be called a small horse; no horse over 1 m., or at the most, 1.20 m. high would be called a pony. When speaking of English ponies we always think of the little Shetland ponies, while in reality there are many other good and interesting breeds native to the country. There is still less resemblance between what we understand to be a pony and the English polo pony, an animal fourteen hands two inches high, strongly built, capable of carrying a weight of thirteen stone (a stone equals fourteen pounds), having great endurance, active and obedient, full of life and energy.

In England such ponies are not to be found at all times, and consequently the price of good polo ponies has risen enormously, often exceeding that of good thoroughbreds. The Polo Association consequently took a lively interest in the breeding of ponies, but obviously only in such breeds as were suitable for riding. These hunter-ponies were entered in a separate class in the stud book. The Association unquestionably deserves great credit for the energy with which they labored in the cause: prizes were offered, exhibitions were held, and various other means were resorted to to encourage the breeding of polo ponies.

Following the South African War another interest was brought to bear upon the industry. It had been discovered that the polo pony was the ideal mount for mounted infantry. The reasons for this are so plainly to be seen that it does not seem necessary to set them forth here in any greater detail. The Polo Association went a step farther and was reorganized as the "Polo and Riding Pony Society," established to promote the breeding of ponies for polo, riding and military purposes.

In this way all ponies suitable for riding, including all available breeds, were given the opportunity of entry in a stud book: but no provision whatever was made for the entry

of driving ponies. The only course open to these ponies was to secure entry in the Hackney stud book. So it comes about that Welch ponies may be found entered in entirely different books. No provision was made for a family stud book for the Shetland ponies. The Welch breeders were the first to appreciate this anomaly and to take steps to get up a stud book. The first volume of this book is still incomplete. The breeders of other sections—Dartmoor, Exmoor, New Forest—will certainly follow the example of the Welch breeders within a very short time.

The Polo Association did not take kindly to this idea at first; but it is now believed that it will be to their advantage also, as it will permit the selection of the best specimens of each family for breeding purposes. The production of large numbers of polo ponies and mounts for mounted infantry will then be a much simpler matter than it is at present.

Although almost nothing is known about them, the ponies of England are, perhaps, the most interesting class of horses in existence. Let us consider the New Forest pony. In Hampshire there is an immense tract of land called the New Forest, comprising some 42,000 acres, mostly poor, swampy moorland; this is the common pasture of the "Foresters." Here the ponies are allowed to run at large, the size of the herds depending upon the ability of their owners to care for them during the winter, and ranging in number from 100 or more downward. Since the government collects a "marking" fee of two shillings per head, it takes pains to ascertain the exact number of animals in these herds. The last enumeration showed 3,000 head, of which 1,800 were brood mares. From spring until autumn the ponies are allowed to roam at will, feeding wherever they choose. Each stallion collects and jealously guards his own "harem." Naturally the closest inbreeding is unavoidable. In autumn some 1,800 head are taken up; the rest are allowed to remain at large.

The young animals are practically never caught except when they are to be marked or sold; at all other times they

are allowed to run wild. In the entire community some 2,000 head are used for working or breeding purposes.

The New Forest Association is seeking to improve the breed by introducing genuine black Galloway stallions, imported from Rum Island, on the west coast of Scotland, where they are raised in much the same manner as the New Forest ponies. Excellent results have also been obtained from thoroughbreds, particularly the famous stallion Marske; but the wild ponies do not seem to take kindly to the blooded stallion. If turned loose among them, the wild or half-wild herds will almost always drive him out.

The New Forest pony is rather large, from twelve hands to thirteen hands two inches high. If taken up young and well fed he grows as tall as fourteen hands two inches. Although poor specimens are not rare, the greater part of these ponies are of very good quality. Their hoofs are strong and well formed, their hips are often somewhat sloping, but their hocks are the best one could wish. They are of a great variety of colors, although dark brown or piebald specimens are rare. The large number of dapple grays among them indicates a strain of Arab blood. Their chests are not always broad enough, but their shoulders are strong and well built. A cheerful and contented disposition under all circumstances is one of their characteristic traits. If taken entirely wild, their domestication is never completed until they are thoroughly broken; but this accomplished, they are perfectly good natured and tractable. They are never treacherous.

The ponies of Wales inhabit all the hills and wastes of the twelve counties, so that it is impossible to give any statistical data regarding them. Numerous herds also find their feeding ground in the adjoining sections of Shropshire, Herefordshire and Monmouth. To be sure the shepherds have driven them out of many good pastures, but there still remain many more which the sheep have made "foul," but the ponies find very much to their liking.

An effort is being made to improve the breed by introducing thoroughbred stallions, in particular small Hackneys (Comet, Fireway, Alonzo, The Brave), and occasionally a

right trim Hackney poney is produced. The strong trotters are called cobs.

In making up the stud book in North Wales the following have been fixed upon as typical features of the pony: Height, not over 12.2 hands. Color, dark brown or brown preferred, gray or black admissible, chestnut or piebald not admissible. Action, like that of the hunter; a slinking gait is inadmissible. The pony must move promptly and with life, with free shoulder action, hind legs well bent and hind quarters well drawn under. General characteristics: The pony must display marked pony traits, must unite with a robust constitution that unmistakable spirit which is common among mountain ponies; its whole appearance must indicate life and vigor. Head, small, sharp muzzled and well set on; forehead, wide and tapering toward the nose; nostrils, wide and flexible; eyes, bright, kind, intelligent and expressive; ears, small, pointed and well formed; jaw, fine; throat should have no indications of shortness of breath or broken wind. Neck, of suitable length, strong but not too heavy, with heavy mane in the case of stallions. Shoulders, good shoulder blades. Back and loins, strong and well covered by muscles. Hind quarters, long; tail, handsomely carried and well set on, resembling the Arab as closely as possible. Hocks, low, sharply outlined, with powerful joints; never bandy legged or cow-hocked. Forelegs, well set on; not tied in, good, muscular forearm; short cannon; fetlocks not too long; fetlock joint, broad and of good conformation; hoof, sound and hard.

Exmoor and Dartmoor are extensive pony breeding estates. The first comprises 18,810 acres, mostly in possession of the heirs of Mr. Knight. When the estate was sold to Mr. Knight the original pure stock of Exmoor ponies did not pass with the estate, but were taken by the former proprietor, Sir F. Dyke Acland, to Halnicote, Taunton; only some twelve mares were left at Exmoor. After numerous futile attempts to cross the Exmoor with other breeds, the breeders returned to the pure Acland stock, and at present are producing some splendid animals, showing on a small scale all the features of the thoroughbred.

The Dartmoor ponies enjoy a wild life similar to that of the Exmoor. As a rule they are born and spend all their lifetime in the open, without being broken to either harness or saddle. The greater part of the last named ponies are dark brown. The Dartmoor ponies often attain a height of 13.2 hands; the stallions fourteen hands. Obviously there are among these a number of improved breeds particularly suitable for polo purposes.

The ponies or "Galloways" of Cumberland and Westmoreland have always been famous for endurance, the "Felt-sider" (mountain bred) as well as the pony from the moors. At the present time the greater number of the herds, often numbering sixty head, are still entirely wild. The animals employed in agriculture are also used for breeding purposes, but proper attention is not paid to the selection of stallions. The only improved breed of these ponies, viz.: that bred by Lord Christopher B. Wilson, of Rigmaden Park, Kirkcudbright, Westmoreland, the so-called Wilson ponies, have gained a world-wide reputation. They are powerful ponies, resembling the cob, with strong muscular development and a characteristically deep chest.

The Connemara ponies of Ireland are animals ranging in height from twelve to fourteen hands and upward. Lately they have been crossed with small hackneys, with very good results. Like all wild horses, they are spirited, lively and sure footed. The moist climate—perhaps the most humid in all Europe—has given them a very long coat. Due to their Spanish ancestry there are many pacers among them.

From the most ancient times the ponies of Scotland have been famous. They are rather large, thirteen to fourteen hands, and will evidently become larger by breeding. They resemble the little cobs of Wales. They are frequently called Galloways, but this name belongs properly only to the black ponies of the Island of Mull.

The smallest of the ponies, the Shetlands, are most sought for children, because of their tractability. There are on the island some 860 ponies employed in agriculture and some 4,000 which run wild, or are used only for breeding purposes. The number of these wild ponies and the scarcity of natural

feed prevents them from growing to any great size. The islanders have to fight with these wild ponies, which are accustomed to feeding themselves summer and winter, for such supplies of seaweed as they need. At times the ponies, which are wonderful swimmers, are driven to astonishing distances from the land.*

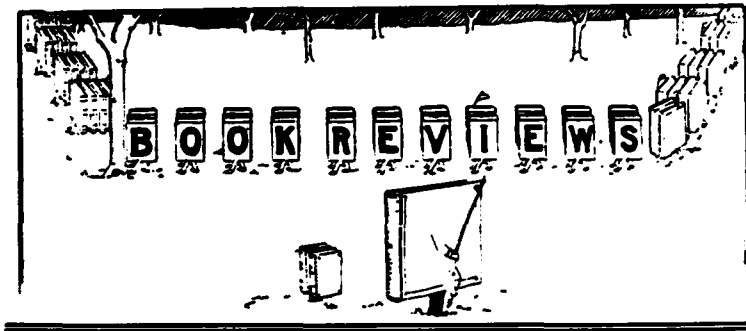
*For an exhaustive study of these races, see my book, *Horsebreeding and Breeds of Horses in England*. Leipzig, 1902. R. C. Schmidt & Co.



AN ENGLISH OPINION.

[From *Broad Arrow*, August 20, 1904.]

The success of the U. S. Cavalry Association and its JOURNAL, written by cavalrymen alike keen and capable, suggests that for the British cavalry there might and ought to be some similar institution. At present there is none; and yet never has the cavalry arm been so important and its training and organization such matters of deep and earnest consideration. Those who wear the shoe know if and where it pinches; those who have served or are serving in the cavalry have felt or are feeling the pinch, and their practical experiences should not be lost. Of course, there is the *United Service Institution* available for the discussion of cavalry questions, but only to a very limited extent, and an association devoted specially and entirely to cavalry matters could and would go much more thoroughly into them than is possible in an institution ranging over the whole area covered by the navy and army. Such thorough consideration of cavalry details, which go to make up complete efficiency, is, it seems to us, almost a necessity, and it is to be hoped that steps may be taken to supply this want. What our cousins over the sea can do so well and with such practical effect surely we might do too. And what, in this sort of way is done with admirable results by the Royal Artillery and Engineers is a distinct encouragement to the cavalry. In response to a suggestion in our issue of the 21st May last, the editor of the JOURNAL OF THE U. S. CAVALRY ASSOCIATION has kindly forwarded copies of his publication to the principal military clubs and institutions, in order to give an idea of what is being done in this respect by the American cavalry. In it will be found the rules and regulations governing the Association, which may prove of assistance to officers of our own mounted branch who are inclined to consider the question of the formation of an institution on similar lines.



**Kansas
Historical
Society.**

Volume VIII has been received and is a most interesting book. Its publication is under the direction of Hon. Geo. W. Martin, Secretary of the State Historical Society of Kansas.

The volume contains much of interest to army men. A historical review of Kansas without a mention of the army would be like Hamlet with the principal character omitted.

Former Adjutant General Fox, of the Kansas National Guard, gives an extended review of the work of the Seventeenth Kansas Cavalry. The sketch is written in a happy vein and inspires the reader from beginning to end. A story by Robert M. Peck, who served in the First Dragoons before the war, gives his experience on the Kansas plains. It is a paper that deserves to be read by every soldier, particularly every cavalryman. Indeed, a military library can scarcely be considered complete without the volumes of this association. Officers of the army who wish to secure it may do so by writing to the secretary of the society at Topeka, Kansas.

**The
Semaphore
Simplified.**

"The Semaphore Simplified" is the title of a system of cards for learning the signal drill, just published by Gale & Polden, Ltd., of London, England. At first sight the learning of the letters seems very easy, especially when you take

them in order of the alphabet, but when the letters are taken out of order, as in spelling words, confusion results. One cannot apply the rules laid down so easily.

The system also depends upon holding two flags at certain fixed angles, in some cases differing by only forty-five degrees for different letters. It can readily be seen that in fast work one will vary the angles, and the result will be a guess as to what the sender intended to make.

The old system now in use has only three movements, to right for "one," to left for "two," and to front for "three." The combination of numbers is not difficult to learn, and if the flags are not waved through a fixed angle it does not make any material difference, as one can easily tell whether it is waved to the right, left, or front of the sender.

One can easily become proficient by practice with the system now in use, while it is doubtful if one could ever rely on the "Semaphore Simplified."



MEMBERSHIP OF THE UNITED STATES CAVALRY ASSOCIATION.

We give the list of members in the Association in somewhat different form, the names being now arranged alphabetically.

It is the intention to correct this list with every issue. If any errors are noted it will be conferring a favor if you will call attention to them.

The Association is anxious to increase its membership and in its efforts to do this all the members can give their assistance. If you know of any prospective members or subscribers, or any person who might be interested in the JOURNAL, the Council will be glad to have the address so that a copy of the JOURNAL may be mailed.

ALPHABETICAL LIST OF MEMBERS.

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 Allen, Chas. J., brig. gen. ret., 1828 Jefferson Place, Washington.
 Allen, Henry T., capt. 6 cav., Manila, P. I.
 Anderson, Cooper, maj., Telluride, Colo.
 Anderson, E., capt. 7 cav., Ft. Myer, Va.
 Anderson, E. D., capt. 12 cav., Manila, P. I.
 Anderson, Geo. S., col. 8 cav., Jefferson Bks.
 Andrews, H. M., maj. art., Ft. Leavenworth.
 Andrews, L. C., capt. 15 cav., West Point.
 Andrews, E. P., maj. 4 cav., Ft. Assiniboine.
 Appleton, D., col. 130 W. 59 st., N. Y.
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 Armstrong, W. H., 2 lt. P. R., Cayce, P. R.
 Arnold, Fred. T., capt. 4 cav., Ft. Riley, Kas.
 Arnold, Percy W., capt. 7 cav., Camp Thomas, Ga.
 Arnold, Sam'l B., capt. 1 cav., Ft. Clark, Texas.
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 Baldwin, Frank D., brig. gen., Denver, Colo.
 Ball, Louis R., 1 lt. 13 cav., Manila, P. I.
 Ballin, Alfred, 1 lt. Phil. scouts, Manila.
 Bamberger, R. S., 2 lt. 7 cav., Camp Thomas, Ga.
 Banister, Wm. B., maj. M. D., Jefferson Bks. Mo.
 Barger, R. L., lt. col., Columbus, Ohio.
 Barker, C. R., lt. Annapolis, Ala.
 Barnard, J. H., 2 lt. 5 cav., Ft. Huachuca, Ariz.
 Barnum, M. H., capt. 6 cav., Jefferson Bks.
 Barriger, Wm. S., 2 lt. 15 cav., Ft. Ethan Allen.
 Barry, John A., 2 lt. 2 cav., Manila, P. I.
 Barry, Thomas H., brig. gen., Atlanta, Ga.
 Barton, F. A., capt. 3 cav., Ft. Yellowstone.
 Barton, R. M., 1 lt. 5 cav., Ft. Huachuca, Ariz.
 Bates, W. E., lt. 333-337 Walnut st., Philadelphia.
 Beach, F. H., capt. 7 cav., Camp Thomas, Ga.
 Beach, Wm. D., maj. 10 cav., Washington.
 Beck, Wm. R., capt. ret., River Drive, Passaic, N. J.
 Bell, Jas. M., brig. gen. ret., Washington.
 Bell, J. F., brig. gen., Ft. Leavenworth.
 Bell, O. W., capt. 7 cav., Ft. Myer, Va.
 Bell, Sherman M., adj. gen., Denver, Col.
 Bell, W. H., Jr., 2 lt. 1 cav., Ft. Clark, Texas.
 Beiling, J. E., maj. Q. M., Washington.
 Benjamin, J. A., 1 lt. 8 cav., Ft. Apache, Ariz.
 Benson, H. C., capt. 4 cav., Jefferson Bks. Mo.
 Bernard, T. P., 2 lt. 3 cav., Ft. Assiniboine.
 Biddle, D. H., 1 lt. 6 cav., Ft. Meade, S. Dak.
 Biddle, James, col. ret., San Francisco, Cal.
 Biddle, John, maj. eng., Washington, D. C.
 Biegler, George W., 1 lt. 15 cav., Manila, P. I.
 Bigelow, John Jr., maj. 9 cav., care War Dept., Washington, D. C.

Bigelow, M. O., capt. 8 cav., West Point, N. Y.
 Bishop, H. S., maj. 5 cav., Ft. Apache, Ariz.
 Birby, W. H., lt. col. eng., Jones bldg., Detroit.
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 Blockson, A. P., maj. 1 cav., World's Fair station, St. Louis, Mo.
 Blunt, S. E., lt. col. O. D., Rock Island Arsenal.
 Boice, Chas. H., 1 lt. 7 cav., Ft. Myer, Va.
 Bonna, P. S., lt. col. 6 cav., Ft. Keogh, Mont.
 Boniface, J. J., 1 lt. 4 cav., Ft. Riley, Kan.
 Booth, Ewing E., capt. 10 cav., Ft. Leavenworth.
 Boughton, D. H., maj. 11 cav., Ft. Leavenworth.
 Bowdish, Myron B., 2 lt. 10 cav., Ft. Washakie.
 Bowen, W. H. C., maj. 12 inf., Buffalo, N. Y.
 Bowie, H., 1 lt. 9 cav., Oklahoma City, Okla.
 Bowman, George T., 1 lt. 15 cav., Ft. Ethan Allen, Vt.
 Boyd, Carl, 2 lt. 3 cav., Ft. Yellowstone, Wyo.
 Boyd, Charles T., capt. 10 cav., Reno, Nev.
 Braden, C. 1 lt. ret., Highland Falls, N. Y.
 Brainerd, D. L., maj. C. S., New York City.
 Brambila, R. M., lt. 14 inf., Manila, P. I.
 Breck, Samuel, brig. gen. ret., Boston, Mass.
 Brees, H. J., 1 lt. sig. corps, Ft. Leavenworth.
 Brett, Lloyd M., capt. 7 cav., Washington, D. C.
 Briand, Christian, 1 lt. 15 cav., Ft. Myer, Va.
 Bristol, Matt C., 2 lt. 13 cav., Manila, P. I.
 Brooks, E. C., capt. 11 cav., Ft. Sheridan, Ill.
 Brown, L. T., lt. col. 33d & Smallwood sts., Pittsburg, Pa.
 Brown, L. G., 2 lt. 12 cav., Manila.
 Brown, Oscar J., capt. 1 cav., Ft. Sam Houston, Texas.
 Brown, R. A., capt. 4 cav., Ft. Leavenworth.
 Brown, William C., maj. 3 cav., Ft. Assiniboine, Mont.
 Bryan, R. B., capt. 5 cav., Ft. Grant, Ariz.
 Bryant, W. A., capt. Montclair, N. J.
 Buchanan, E. A., 2 lt. 9 cav., Wawona, Cal.
 Buchan, F. E., 1 lt. 3 cav., Fort Leavenworth.
 Bull, Henry T., 2 lt. 13 cav., Manila, P. I.
 Burkhardt, S. Jr., capt. 19 inf., Vancouver Bks., Wash.
 Burnett, Chas., 2 lt. 15 cav., Ft. Myer, Va.
 Burnett, George R., 1 lt. ret., Iowa City, Ia.
 Burroughs, James M., 1 lt. 12 cav., Manila, P. I.
 Bush, F. N., lt. Peoria, Ill.
 Butler, James S., 1 lt. sig. corps, Manila, P. I.
 Butler, Matt C., Jr., capt. 7 cav., World's Fair station.
 Butler, Rodman, 2 lt. 6 cav., Ft. Keogh, Mont.
 Byram, Geo. L., capt. 6 cav., Ft. Meade, S. Dak.
 Cabanis, A. A., capt. 24 inf., Ft. Missoula.
 Cable, Wm. A., lt. 103 W. 55th st., New York.
 Cabell, De Rosey C., capt. 1 cav., Ft. Clark, Tex.
 Caldwell, R. C., 1 lt. 7 cav., Camp Thomas, Ga.
 Calvert, E., 1 lt. 9 cav., Ft. Walla Walla, Wash.
 Cameron, Geo. H., capt. 4 cav., Ft. Riley.
 Camp, Beaufore R., 2 lt. 9 cav., S. Francisco.
 Card, C. S., lt. 1139 Clarkson st., Denver, Col.
 Carlton, C. H., brig. gen. ret., Rye, Westchester County, N. Y.
 Carpenter, E., capt. art., Ft. Totten, N. Y.
 Carpenter, L. H., brig. gen. ret., Philadelphia.
 Carr, Camillo C. C., brig. gen., St. Paul, Minn.
 Carr, Eugene A., brig. gen. ret., Washington, D. C.
 Carroll, Henry, col. ret., Lawrence, Kans.

Carson, John M., Jr., maj. 12 M. D., West Point.
 Carson, L. S., 1 lt. 5 cav., Ft. Hill, Okla.
 Carson, T. G., capt. 10 cav., Ft. Washakie, Wyo.
 Carter, Wm. H., brig. gen., Manila, P. I.
 Cartmell, N. M., 1 lt. 19 cav., Ft. Robinson, Neb.
 Case, Frank L., 1 lt. 12 cav., Manila, P. I.
 Casidy, H., capt. 235 alumetave, Chicago.
 Cassel, D. T. E., 1 lt. 7 cav., Camp Thomas, Ga.
 Castro, Thos. R., 2 lt. 13 cav., Indianapolis, Ind.
 Cavanaugh, H. L. T., capt. 10 cav., Ft. Robinson, Neb.
 Chaffee, Adna R., lt. gen., Washington, D. C.
 Chapman, G. L., lt. 25 inf., Ft. Reno, Okla.
 Chapman, L. A., 1 lt. 1 cav., Ft. Leavenworth.
 Chase, Geo. F., lt. col. 12 cav., Manila, P. I.
 Chase, John, brig. gen., Denver, Col.
 Cheever, B. H., maj. 6 cav., Ft. Meade, S. Dak.
 Chittly, Wm. D., capt. 4 cav., Columbia, Mo.
 Churchill, C. Robert, capt. 45 Morris Bldg., New Orleans.
 Clark, Chas. H., maj. O. D., Springfield, Mass.
 Clark, Wm. H., 913 Marquette Bldg., Chicago.
 Clark, Wm. F., capt. 2 cav., Manila, P. I.
 Clayton, P. Jr., capt. 11 cav., Jefferson Bks. Mo.
 Cleveland, J. Wray, 146 Broadway, N. Y.
 Clifton, Wm. H., Jr., 1 lt. 13 cav., Manila, P. I.
 Cooke, L. J., 2 lt. 11 cav., Jefferson Bks. Mo.
 Coffey, Edgar N., 1 lt. 2 cav., Manila, P. I.
 Coffey, W. J., 9 cav., Ft. Walla Walla, Wash.
 Cole, Geo. M., gen., Hartford, Conn.
 Cole, James A., capt. 6 cav., Ft. Meade, S. Dak.
 Coleman, J., 1 lt. 9 cav., Ft. Walla Walla, Wash.
 Collins, R. L., 2 lt. 2 cav., Manila, P. I.
 Collins, Thos. D., maj. 3 cav., West Point.
 Conklin, John Jr., capt. art., Ft. Ethan Allen.
 Connel, Wm. M., 1 lt. 7 cav., Camp Thomas, Ga.
 Conrad, H. J., capt. 10 cav., St. Louis Exposition.
 Conrad, Julius T., capt. 10 cav., Chester, Pa.
 Converse, G. L., capt. ret., Columbus, Ohio.
 Cooley, Wm. M., 2 lt. 15 cav., Ft. Wingate, N. M.
 Cooper, L. B., brig. gen. ret., Denver, Col.
 Cooley, Harry N., 1 lt. 12 cav., Manila, P. I.
 Coppock, E. R., 2 lt. 5 cav., Ft. Apache, Ariz.
 Corcoran, Thos. M., capt. 15 cav., Manila, P. I.
 Corneil, W. A., 1 lt. 12 cav., Ft. Robinson, Neb.
 Corstian, L. W., capt. 9 cav., San Francisco.
 Couchman, T. M., 1 lt. 2 cav., Manila, P. I.
 Cousenman, W., capt. 35 Rush st., Chicago.
 Cowan, F. R., capt. Parkersburg, W. Va.
 Cowin, W. B., 1 lt. 3 cav., Ft. Assiniboine.
 Cowles, W. H., 2 lt. 4 cav., Ft. Riley.
 Cox, Edwin L., 2 lt. 9 cav., San Francisco.
 Cox, A. B., 1 lt. 8 cav., Jefferson Bks. Mo.
 Craig, H. Jr., 1917 Chestnut st., Philadelphia.
 Craig, W., capt. 12 cav., Manila, P. I.
 Craig, M., capt. 10 cav., Ft. Leavenworth.
 Craighill, Wm. E., capt. eng. Mobile, Ala.
 Craighill, D. J., brig. gen. ret., Washington, D. C.
 Crane, Jas. J., lt. col. 4 inf., San Juan, P. R.
 Crawford, Wm. T., 1 lt. ret., Dallas, Texas.
 Crease, Geo. O., capt. 4 cav., Orchard Lake, Mich.
 Crommies, M. L., 1 lt. 19 inf., Ft. Leavenworth.
 Croft, E., capt. 2 inf., Ft. Logan, Col.
 Crosby, Herbert B., capt. 11 cav., Manila, P. I.
 Crowder, E. H., col. 1 a., Washington, D. C.
 Crozier, Wm., brig. gen., Washington, D. C.
 Cuse, Thos., maj. Q. M. dept. St. Louis.
 Cullen, D., 1 lt. 3 cav., Ft. Assiniboine, Mont.
 Cullen, J., 1 lt. 3 cav., Ft. Assiniboine, Mont.
 Cunningham, T. H., 2 lt. 5 cav., Jefferson Bks.
 Curry, W. L., capt., Columbus, O.
 Cusack, Joseph E., capt. 12 cav., Manila, P. I.
 Cushman, L. A., capt. 13 cav., Manila, P. I.
 Cushman, S. E., capt. 5 cav., Ft. Huachuca, Ariz.
 Dalton, H. F., 1 lt. 4 inf., Ft. Leavenworth.
 Davidson, A. H., 1 lt. 13 cav., Manila, P. I.
 Davis, B. O., 2 lt. 10 cav., Ft. Washakie, Wyo.
 Davis, C. O., capt., Corsicana, Texas.
 Davis, E., 1 lt. 11 cav., Ft. Des Moines, Iowa.
 Davis, F. E., 2 lt. 8 cav., Jefferson Bks. Mo.
 Davis, G. B., brig. gen., Washington, D. C.
 Davis, Ira D., capt., Houston, Tex.

Davis, M. F., capt. 1 cav., Ft. Leavenworth.
 Davis, Norman H., 2 lt. 14 cav., Manila, P. I.
 Davis, T. F., lt. col. 30 inf., Ft. Logan H. Roots, Ark.
 Davis, W., col. ret., The Albion, Baltimore, Md.
 Day, Clarence R., capt. 5 cav., Macon, Mo.
 Dean, W., 1 lt. 15 cav., Ft. Ethan Allen, Vt.
 Deegen, J. A., 1 lt. 12 cav., Manila, P. I.
 Deltrick, L. L., 1 lt. 13 cav., Manila, P. I.
 Dickman, J. T., capt. 5 cav., Washington, D. C.
 Diquie, B. P., 1 lt. 3 cav., Ft. Leavenworth.
 Dixon, V. D., 1 lt. 5 cav., Ft. Wingate, N. Mex.
 Dockery, A. B., lt. 5 cav., Ft. Wingate, N. M.
 Dodd, G. A., maj. 3 cav., Philadelphia.
 Dodge, C. C., gen., 19 E. 75 St., New York.
 Dodge, Francis S., brig. gen., Washington, D. C.
 Dodge, T. A., capt. ret., New York City.
 Dolan, T. J., capt. 2021 Walnut st., Philadelphia.
 Donaldson, T. G., capt. 5 cav., Ft. Hill, O.
 Donovan, A. E., vet. art., Vancouver Bks.
 Dorsey, B. H., 1 lt. 4 cav., Jefferson Bks.
 Dorst, J. H., col. 3 cav., Ft. Assiniboine.
 Dougherty, C. A., 2 lt. 13 cav., Manila, P. I.
 Drake, C. B., capt. 14 cav., Manila, P. I.
 Dudley, Clark D., 1 lt. 14 cav., Manila, P. I.
 Dunf. Robt. J., capt. 5 cav., Ft. Riley.
 Ducker, H. M., vet. art., Peekskill, N. Y.
 Duval, W. P., maj. art., Washington, D. C.
 Ely, Ed. H., maj., Rutland, Vt.
 Early, Orson L., 2 lt. 5 cav., Ft. Riley.
 Eaton, W. R., lt. box 952, Denver, Col.
 Edgerly, Winfield S., col. 2 cav., Manila, P. I.
 Edmunds, C. W., lt. 425 Walnut st., Philadelphia.
 Edwards, Frank A., maj. 4 cav., Rome, Italy.
 Edwards, Frank B., 1 lt. 7 cav., Ft. Hamilton.
 Edwards, Frank B., 1 lt. 7 cav., St. Paul, Minn.
 Edwards, W. W., 2 lt. 10 cav., Ft. Robinson, Neb.
 Elliott, S. H., capt. 11 cav., Ft. Des Moines, Ia.
 Ellis, R. B., 1 lt. 14 cav., Manila.
 Ekinke, LeRoy, capt. 10 cav., Ft. Ethan Allen.
 Ely, E. J., 2 lt. 15 cav., Ft. Ethan Allen, Vt.
 Ely, H. E., capt. 2 inf., Ft. Leavenworth.
 Engel, E., 2 lt. 9 cav., Ft. Walla Walla, Wash.
 English, E. G., 2 lt. 5 cav., Ft. Apache, Ariz.
 Enos, Copley, 2 lt. 1 cav., Ft. Sam Houston, Texas.
 Ensign, R. S., lt. 10 cav., Ft. Washakie, Wyo.
 Erwin, J. B., maj. 3 cav., Ft. Leavenworth.
 Estes, Geo. H., capt. 20 inf., Manila, P. I.
 Eves, Thos. B., 2 lt. 5 cav., Three Rivers, Cal.
 Estes, H. L., lt. 110 Jackson ave., New Orleans, La.
 Evans, E. W., capt. 5 cav., Jefferson Bks. Mo.
 Evans, Geo. H., capt. ret., Pittsburg, Pa.
 Fair, John S., 1 lt. 5 cav., Ft. Leavenworth.
 Farber, Chas. W., capt. 5 cav., 513 Broadway, Albany, N. Y.
 Farmer, Chas. J., 1 lt. 10 cav., Ft. Leavenworth.
 Farnsworth, H. S., capt. 7 inf., Manila, P. I.
 Farnum, F. H., 2 lt. 11 inf., Ft. D. A. Russell.
 Faulkner, A. C., 1 lt. art., Ft. Du Pont, Del.
 Fecht, Jas. E., 1 lt. 9 cav., Presidio San Francisco.
 Fenton, C. W., capt. paymr. cav., Manila.
 Fisher, Ronald E., 2 lt. 14 cav., Manila.
 Fitch, Roger S., 1 lt. 4 cav., Ft. Leavenworth.
 Fleming, J. J., capt. Q. M., San Antonio, Tex.
 Fleming, R. J., capt. 10 cav., Ft. Robinson.
 Foerster, L., 1 lt. 5 cav., Ft. Huachuca, Ariz.
 Foltz, Fred S., capt. 2 cav., Manila, P. I.
 Fonda, Ferd. W., 1 lt. 10 cav., Ft. Mackenzie.
 Foote, S. M., capt. art., Ft. Myer, Va.
 Forbush, W. C., col. ret., The Markenee, 129 Main st., Buffalo, N. Y.
 Foreman, Milton J., maj. 3412 Vernon Ave., Chicago.
 Forsyth, Jas. W., maj. gen. ret., Columbus, O.
 Forsyth, Wm. W., capt. 9 cav., Ft. Keogh, Mont.
 Fortescue, G. R., 1 lt. 10 cav., Washington.
 Foster, A. B., capt. 19 inf., Vancouver Bks.
 Foster, Fred, W., maj. 5 cav., Whipple Bks. Ariz.
 Foster, Leo F., capt. art., Ft. Fremont, Cal.

Fountain, S. W., lt. col. 4 cav., Jefferson Bks.
 Foy, Robert C., 1 lt. 1 cav., West Point, N. Y.
 Frazer, Walter, ret. 13 cav., Manila, P. I.
 Friedman, H. B., brig. gen. ret., Leavenworth.
 Fuller, C. J., capt. Salinas, Cal.
 Fuller, A. M., capt. 9 cav., Knoxville, Tenn.
 Fuller, Ezra B., maj. ret., Columbia, S. C.
 Funston, Fred., brig. gen., Chicago, Ill.
 Furlong, J. W., capt. 6 cav., Ft. Meade, S. D.
 Galbraith, J. G., maj. 1 cav., Des Moines, Ia.
 Gale, George H. G., maj. 1 g. d., Star Building, St. Louis.
 Gardenhire, W. C., 2 lt. 15 cav., Ft. Ethan Allen.
 Gardner, Edwin F., lt. col. ret., Holliston, Mass.
 Gardner, John H., capt. 2 cav., Manila, P. I.
 Garity, George, 1 lt. 2 cav., Gen. Hospital, Presidio, San Francisco.
 Garrard, Joseph, lt. col. 14 cav., Manila, P. I.
 Gaston, Joseph A., maj. 1 cav., Ft. Sam Houston, Texas.
 Gatley, Geo. G., capt. art., Manila, P. I.
 Gaudot, Julien E., 1 lt. 11 cav., Ft. Des Moines, Iowa.
 Gibbins, H., 1 lt. 9 cav., Ft. Walla Walla, Wash.
 Gilles, Alvan C., 1 lt. 4 cav., Jefferson Bks. Mo.
 Glasgow, Wm. J., capt. 13 cav., Manila, P. I.
 Glenava, S. E., 1 lt. 1 cav., Ft. Clark, Tex.
 Godfrey, E. S., col. 9 cav., Ft. Riley, Kan.
 Godson, W. F. H., 1 lt. 10 cav., Ft. Robinson.
 Godwin, E. A., lt. col. 9 cav., San Francisco.
 Going, K. B., 1 lt. 15 cav., Ft. Ethan Allen.
 Goldman, H. J., capt. 5 cav., Ft. Apache, Ariz.
 Goodale, Geo. S., capt. 2 inf., Manila.
 Goode, George W., capt. 1 cav., Ft. Clark, Tex.
 Goodspeed, Nelson A., 2 lt. 3 cav., Ft. Assiniboine, Mont.
 Gordon, Geo. A., col., Savannah, Ga.
 Gordon, Wm. W., 2 lt. 2 cav., Manila, P. I.
 Gould, J. H., vetn. 11 cav., Ft. Riley, Kan.
 Graham, Alden M., 2 lt. 1 cav., Ft. Clark, Tex.
 Granger, R. S., 1 lt. art., Ft. Riley.
 Grant, Frederick D., brig. gen., New York.
 Grant, Walter S., 1 lt. 8 cav., St. Paul, Minn.
 Gray, Alonso, capt. 14 cav., Manila, P. I.
 Greely, Adolphus W., brig. gen. chf. sig. off., Washington, D. C.
 Gresham, John C., maj. 15 cav., Ft. Myer, Va.
 Grierson, B. H., brig. gen. ret., Jacksonville, Ill.
 Grierson, C. H., capt. 10 cav., Ft. Robinson.
 Griffith, F. D., Jr., 2 lt. 6 cav., Ft. Meade, S. Dak.
 Griggs, Everett G., capt. 1 cav., Tacoma, Wash.
 Groome, J. C., capt., 1222 Walnut st., Philadelphia, Pa.
 Groe, F. W., col., 142 Logan ave., Denver, Col.
 Grove, W. B., capt. sub. dept., Kansas City.
 Grubert, G., 2 lt. 11 cav., Ft. Sheridan, Ill.
 Grutzman, W. K., vetn. 15 cav., Ft. Myer, Va.
 Guent, John, capt. ret., 16 Revere, Atlantic City, N. J.
 Guilfoyle, J. P., maj. mil. sec., Manila, P. I.
 Haight, C. S., 1 lt. 4 cav., Ft. Leavenworth.
 Haldeman, Horace L., lt. col., Real Estate Bldg., Philadelphia, Pa.
 Hall, C. G., capt. 5 cav., Ft. Du Chene, Utah.
 Hall, W. P., brig. gen., Washington, D. C.
 Hammond, Andrew G., maj. 3 cav., World's Fair Station, St. Louis.
 Hammond, C. L., 347 Greenwood ave., Chicago.
 Hanna, M. E., capt. 3 cav., Ft. Assiniboine, Mont.
 Harbord, James G., capt. 11 cav., Manila, P. I.
 Hardeman, L., capt. 11 cav., Ft. Des Moines, Ia.
 Hardie, Francis H., maj. 14 cav., Manila, P. I.
 Hardin, E. K., maj. 7 inf., Manila, P. I.
 Harper, Roy B., capt. 3 cav., Ft. Assiniboine, Mont.
 Harris, E. R., 2 lt. 11 cav., Ft. Des Moines, Ia.
 Harris, F. W., capt. 4 cav., Vienna, Austria.
 Harris, Moses, maj. ret., New York City.
 Harrison, Ralph, capt. 2 cav., Manila, P. I.
 Hart, A. C., 1 lt. 10 cav., Ft. Robinson, Nebr.

Hartman, J. D. L., capt. 1 cav., Ft. Leavenworth.
 Harvey, Charles G., 1 lt. 2 cav., Manila, P. I.
 Harvon, John P., 1 lt. 6 cav., Ft. Meade, S. D.
 Hathaway, C. E., 2 lt. 9 cav., Wawona, Cal.
 Hawkins, Clyde E., capt. 2 cav., Manila, P. I.
 Hawkins, Clyde E., capt. sub. dept., Denver, Colo.
 Hay, W. H., capt. 10 cav., Ft. Robinson, Nebr.
 Hayden, John I., capt. art., San Francisco.
 Hayden, Ralph N., 2 lt. 7 cav., Camp Thomas.
 Hayne, Paul T., Jr., 1 lt. 14 cav., Manila, P. I.
 Hazard, Oliver P. M., 1 lt. 2 cav., Manila, P. I.
 Hazard, Russell T., 1 lt. 1 cav., Ft. Clark, Tex.
 Heard, J. W., capt. 3 cav., Ft. Assiniboine.
 Heaton, Wilson G., 1 lt. 13 cav., Manila, P. I.
 Hedekin, C. A., capt. 3 cav., Ft. Apache, Ariz.
 Heideberg, E. R., capt. 4 cav., Ft. Meade, S. Dak.
 Heidt, Grayson V., 1 lt. 14 cav., Manila, P. I.
 Hein, O. L., lt. col. ret., Washington, D. C.
 Heintzelman, S., 1 lt. 6 cav., Ft. Leavenworth.
 Hemphill, J. E., 1 lt. sig. corps., Nome, Alaska.
 Hennessey, P. J., 2 lt. 5 cav., Ft. Huachuca.
 Henry, Guy V., capt. 12 cav., 117 58 st., N. Y. City.
 Henry, J. B., Jr., 2 lt. 4 cav., Fort Leavenworth.
 Herman, Fred J., 1 lt. 9 cav., Wawona, Cal.
 Hern, W. S., lt. 622 Commercial Place, New Orleans, La.
 Herron, Joseph S., capt. 2 cav., Manila, P. I.
 Hersner, F. W., 1 lt. 4 cav., Ft. Leavenworth.
 Hickey, J. B., maj. 11 cav., 20 3d ave., N. Y.
 Hickman, E. A., 1 lt. 1 cav., Ft. Sam Houston, Tex.
 Hickok, H. R., capt. 15 cav., Ft. Myer, Va.
 Hilgard, M. K., 1 lt. 16 inf., Ft. McPherson, Ia.
 Hill, Wm. P., vetn. 12 cav., Manila, P. I.
 Hill, Zeph T., maj., Denver, Col.
 Hirsch, Harry J., capt. 20 inf., Manila, P. I.
 Hodges, H. L., 2 lt. 1 cav., Ft. Clark, Texas.
 Hodgeson, F. G., maj. Q. M. D., Vancouver Bks.
 Hoff, J. V. R., lt. col. M. D., Ft. Leavenworth.
 Holabird, S. B., brig. gen. ret., Vineyard, Haven, Mass.
 Holbrook, L. R., capt. 5 cav., Ft. Leavenworth.
 Holbrook, W. A., capt. 5 cav., Whipple Bks.
 Holcomb, Freeborn P., 1 lt. 14 cav., Manila, P. I.
 Holliday, Milton G., 2 lt. 15 cav., Ft. Myer, Va.
 Hope, F. W., lt. Broad and Front sts., Red Bank, N. J.
 Hopkins, A. T., lt., Watertown, S. D.
 Hoppin, C. B., maj. 15 cav., Ft. Ethan Allen, Vt.
 Hornbrook, J. J., capt. 12 cav., Manila, P. I.
 Horton, W. E., capt. Q. M. D., Washington, D. C.
 Howard, H. P., capt. 14 cav., Manila, P. I.
 Howard, J. H., 2 lt. 9 cav., San Francisco.
 Howell, J. R., col., Bohemian Club, San Francisco.
 Howze, R. L., capt. 6 cav., World's Fair Station, St. Louis.
 Hoyle, George S., maj. ret., Indian Spring.
 Huggins, E. L., brig. gen. ret., Muskogee, I. T.
 Hughes, J. B., capt. 4 cav., Jefferson Bks. Mo.
 Hughes, Martin B., col. 1 cav., Ft. Clark, Tex.
 Hume, John K., 2 lt. 14 cav., Manila, P. I.
 Husaker, I. L., 2 lt. 3 cav., Ft. Apache, Ariz.
 Hunt, Levi P., maj. 13 cav., Ft. Meade, S. Dak.
 Hunter, G. K., maj. 6 cav., Ft. Meade, S. Dak.
 Hunt, Geo. G., col. ret., 1 arliele, Pa.
 Huston, James, 1 lt. 10 cav., Washakie, Wyo.
 Hyde, A. P., 1 lt. art., Ft. Terry, N. Y.
 Hyer, B. B., capt. 13 cav., Manila, P. I.
 Ingerton, W. H., capt., Amarillo, Tex.
 Irons, J. A., maj. insp. gen., Star Bldg., St. Louis, Mo.
 Jackson, Henry, brig. gen. ret., Leavenworth.
 Jackson, R. F., 1 lt. 3 cav., Washington Bks.
 Jacobs, Douglas H., 2 lt. 14 cav., Manila, P. I.
 Jeffers, S. L., 1 lt. 7 cav., Camp Thomas.
 Jenkins, J. M., capt. 5 cav., Ft. Huachuca, Ariz.
 Jennings, E. T., 2 lt. 2 cav., Ft. Myer, Va.
 Jerrard, E. P., Jr., capt. 10 cav., Oklahoma City.
 Jewell, Chas. H., vetn. 13 cav., Manila, P. I.
 Jewell, James M., 2 lt. 14 cav., Manila, P. I.
 Johnson, A., capt. 13 inf., Alcatraz Island, Cal.

Johnson, C. P., capt. 10 cav., Ft. Robinson, Neb.
 Johnson, F. O., maj. 2 cav., Manila, P. I.
 Johnson, F. C., 1 lt. 2 cav., Manila, P. I.
 Johnson, H. B., 2 lt. 3 cav., Ft. Assiniboine.
 Johnston, G., 1 lt. sig. corps., Benicia Bks., Cal.
 Johnston, J. A., gen. 2111 Mass. ave., Washington, D. C.
 Johnston, W. T., capt. 13 cav., Ft. Myer, Va.
 Jones, C. R., 273 S. Fourth st., Philadelphia.
 Jones, F. M., 1 lt. 9 cav., Wawona, Cal.
 Jones, G., capt. 11 cav., Ft. Des Moines, Ia.
 Jorlau, H. B., 1 lt. O. P., Frankford, Pa.
 Joyce, K. A., 2 lt. 6 cav., Ft. Leavenworth.
 Jurch, A. J., 2 lt. 4 cav., Jefferson Bks. Mo.
 Karpis, Wm. L., 1 lt. 6 cav., Omaha, Neb.
 Keller, Frank, 2 lt. 8 cav., Jefferson Bks. Mo.
 Kelly, Wm., 1 lt. engr., 100 Bldg., New London, Conn.
 Kelly, Wm., Jr., capt. 9 cav., West Point, N. Y.
 Kelly, William H., capt. 10 Glenway st., Dorchester, Mass.
 Kendall, Henry F., maj. 12 cav., Washington.
 Kendall, Henry M., maj. ret., Soldiers' Home, Washington.
 Kennedy, W. B., maj. ret., Los Angeles, Cal.
 Kennington, Alfred E., capt. 7 cav., Camp Thomas, Ga.
 Kerr, James T., lt. col. a. g., Washington, D. C.
 Kerr, J. B., col. 12 cav., San Francisco, Cal.
 Kerby, Monroe, capt. 25 inf., Manila, P. I.
 Ketcheson, H. C., Leavenworth, Kan.
 Keyes, Allen A., 2 lt. 14 cav., Manila, P. I.
 Keyes, E. A., 2 lt. 6 cav., 1000 3d st., San Diego, Cal.
 Kibbourne, Louis H., 2 lt. 5 cav., Ft. Sill, Okla.
 Kibban, Julius N., capt. sub. dept., 3d and Olive, St. Louis.
 Kimball, Gordon N., 1 lt. 12 cav., Manila, P. I.
 King, Albert A., 1 lt. 5 cav., Ft. Sill, Okla.
 King, Charles, brig. gen., Milwaukee, Wis.
 King, Ed. L., capt. 2 cav., Colon, Panama.
 Kirkman, Hugh L., 5 cav., Ft. Sill, Okla.
 Kirkpatrick, George W., capt. 15 cav., Ft. Ethan Allen, Vt.
 Kline, J., brig. gen. ret., Ft. Snelling, Minn.
 Knight, J. T., maj. gen. dept., Philadelphia.
 Knox, R. J., 1 lt. 24 inf., Ft. Missoula, Mont.
 Knox, Thomas M., 1 lt. 4 cav., Ft. Riley, Kas.
 Knox, T. T., col. ret., New York City.
 Koehrsperger, S. M., capt. 2 cav., Manila, P. I.
 Koehler, E. M., capt. 4 cav., Ft. Leavenworth.
 Koester, F. I., capt. 15 cav., Ft. Myer, Va.
 Kramer, J. L., maj., Parkersburg, W. Va.
 Kramer, L. B., 1 lt. 11 cav., West Point, N. Y.
 Krus, Hm., Herbert Z., 2 lt. 1 cav., Ft. Clark, Tex.
 Lacey, F. E., Jr., capt. 1 inf., Ft. Wayne, Mich.
 Lahm, F. P., 2 lt. 6 cav., West Point.
 Lake, B. M., capt. Alcatraz P. O., Denver.
 Landis, J. F. R., capt. 1 cav., Ft. Clark, Tex.
 Langdon, J. G., 1st lt. art., Ft. Riley, Cal.
 Langhorne, G. T., capt. 11 cav., Manila, P. I.
 Lanza, C. H., capt. art. corps., Birmingham, Ala.
 Leach, S. S., maj. eng., Ft. Leavenworth.
 Lear, B. J., 1 lt. 15 cav., Ft. Ethan Allen, Vt.
 Leary, E. M., capt. 11 cav., Ft. Riley, Kan.
 Lebo, Thos. C., col. 14 cav., Manila, P. I.
 Lechman, C. O., col., Kansas City, Mo.
 Leitzinger, brig. gen. ret., Richmond, Va.
 Lee, Fitzhugh, Jr., 1 lt. 12 cav., Manila, P. I.
 Lee, Geo. M., 1 lt. 4 cav., Ft. Riley, Kan.
 Lee, J. M., brig. gen., San Antonio, Tex.
 Leisher, R. W., 2 lt. 5 cav., Ft. Yellowstone, Wyo.
 Lewis, R. L., 20 inf., Manila.
 Lewis, J. H., 1 lt. 5 cav., Ft. Wingate, N. M.
 Lewis, LeRoy D., 2 lt. 4 cav., Ft. Riley, Kan.
 Lewis, T. J., capt. 2 cav., Louisville, Ky.
 Lincoln, James R., brig. gen., Ames, Iowa.
 Lindsey, J. R., capt. 15 cav., Ft. Ethan Allen.
 Lindsay, Elmer, capt. 1 cav., Ft. Clark, Tex.
 Linsinger, Clarence, 2 lt. 1 cav., Ft. Clark, Tex.
 Lippincott, Aubrey, 1 lt. 14 cav., Manila, P. I.
 Liverbrant, W. T., capt. 12 cav., Manila, P. I.
 Liverman, H. T., capt. Mansfield, La.
 Livermore, R. L., capt. 10 cav., Ft. Bayard, N. M.

Lochridge, P. D., capt. 13 cav., Manila, P. I.
 Lockett, James, maj. 4 cav., Ft. Riley, Kan.
 Lockwood, J. A., capt. ret., 530 8th Ave., N. Y.
 Logan, A. J., col., 19 3d ave., Pittsburg, Pa.
 Long, L. J., 1 lt. Telluride, Col.
 Long, John D., 1 lt. 13 cav., Manila, P. I.
 Longstreet, Jas., Jr., 1 lt. 14 cav., Manila, P. I.
 Lott, Abraham G., capt. 6 cav., Ft. Meade, S. D.
 Lond, John S., lt. col. ret., Washington, D. C.
 Love, Moss L., 2 lt. 2 cav., Manila, P. I.
 Love, Robt. R., 2 lt. 9 cav., Three Rivers, Cal.
 Lovell, Geo. E., 1 lt. 7 cav., Camp Thomas, Ia.
 Lowe, A. W., maj. 10 live st., Lynn, Mass.
 Lowe, Wilson, maj., Upper Alton, Ill.
 Lowe, Wm. L., 1 lt. 13 cav., Manila, P. I.
 Ludington, M. I., maj. gen. ret., Skaneateles, Onondaga Co., New York.
 Luedke, H. L., 2 lt. 25 semiary ave., Chicago.
 Lubin, Wm. L., 1 lt. 11 cav., Ft. Riley, Kan.
 Lull, T. E., 1st art., Ft. Worden, Wash.
 Lusk, Wm. V., vetn. 2 cav., Manila, P. I.
 Lyon, C. A., col., Sherman, Texas.
 McAndrews, Jos. R., 1 lt. 1 cav., Ft. Sam Houston, Tex.
 MacArthur, Arthur, maj. gen., San Francisco.
 Macklin, J. E., lt. col. 3 inf., Ft. Liscomb, Alaska.
 MacKinley, W. E. W., 1 lt. 1 cav., Washington, D. C.
 Macleod, Norman, Heut., North American Bldg., Philadelphia.
 McCabe, E. K. W., 2 lt. 6 cav., Ft. Keogh, Mont.
 McCain, Wm. A., 2 lt. 5 cav., Ft. Riley, Kan.
 McCarthy, D. E., maj. Q. M. D., Ft. Leavenworth.
 McCaskey, D. L., 4 cav., Ft. Leavenworth.
 McCaskey, Wm. S., brig. gen., Manila, P. I.
 McCernand, E. J., maj. a. g. st., Louis, Mo.
 McClintock, 1 lt. 15 cav., Ft. Wingate, N. M.
 McClure, A. S., 1 lt. 5 cav., Ft. DuChesne, Utah.
 McClure, N. F., capt. 5 cav., Ft. Huachuca, Ariz.
 McCord, J. H., 1st col. st. Joseph, Mo.
 McCormick, L. J., maj. 7 cav., Ft. Leavenworth.
 McCormack, W. H., capt. 9 cav., Wawona, Cal.
 McCoy, Frank R., capt. 3 cav., Manila, P. I.
 McCrosin, E. J., 614 Nat. Bank Bldg., Birmingham, Ala.
 MacDonald, A., vetn. 11 cav., Ft. Des Moines, Ia.
 MacDonald, G. H., capt. 1 cav., West Point.
 McDonald, J. B., capt. 1 cav., Ft. Assiniboine.
 McEnhill, Frank, 2 lt. 2 cav., Manila, P. I.
 McFadden, J. F., lt. 121 1/2 Chestnut st., Philadelphia.
 Meise, Oscar A., 1 lt. 2 cav., Manila, P. I.
 Meisnigle, J. A., lt. Leavenworth, Kan.
 McKendry, Henry J., 1 lt. 14 cav., Manila, P. I.
 McKee, Will J., gen., Indianapolis.
 McKinley, James F., 1 lt. 14 cav., Manila, P. I.
 McLeer, J. C., 1 lt. 15 Haver st., Brooklyn.
 McMullen, J. J., 2 lt. 15 cav., Ft. Ethan Allen, Vt.
 McMurdo, J. D., vetn. 10 cav., Ft. Robinson.
 McNally, R. E., 1 lt. 3 cav., Ft. Yellowstone, Wyo.
 McNamee, M. M., capt. 15 cav., recta 400 14 Railroad Bldg., 1515 Larimer st., Denver.
 McNamery, F. T., 1 lt. 6 cav., Ft. Meade.
 Macomb, A., capt. 5 cav., Ft. Huachuca, Ariz.
 Macomb, M. M., maj. art. corps., Washington.
 Maize, Sidney J., 2 lt. 3 cav., Boise Bks., Idaho.
 Mangum, W. P., Jr., 2 lt. 15 cav., Ft. Ethan Allen, Vt.
 Mann, H. E., 2 lt. 7 cav., Camp Thomas, Ga.
 Marshall, F., capt. 15 cav., West Point, N. Y.
 Martin, I. S., 2 lt. 15 cav., Ft. Ethan Allen, Vt.
 Martin, J. W., 1709 Walnut st., Philadelphia.
 Martin, W. F., 1 lt. 2 cav., Manila, P. I.
 Mason, Chas. W., maj. 4th inf., Manila, P. I.
 Maus, M. P., col. 20 inf., Manila, P. I.
 Mayo, Charles R., 2 lt. 12 cav., Manila, P. I.
 Meade, W. G., 2 lt. 11 cav., Ft. Riley, Kan.
 Means, Robert W., capt. 30 inf., Manila, P. I.
 Meigs, Fred., 2 lt. 5 cav., Ft. Leavenworth.
 McGill, S. C., 2 lt. 5 cav., Jefferson Bks. Mo.
 Melzer, C. F., 122 1/2 Wilcox ave., Chicago.
 Mercer, W. A., capt. 5 cav., Carlisle, Pa.
 Merritt, Wm., gen. ret., Washington, D. C.

Metcalfe, W. S. gen. Lawrence, Kan.
 Meyer, Oren B. capt. 14 cav. Manila, P. I.
 Michie, R. E. L. capt. 12 cav. Manila, P. I.
 Miller, Alex. M., col. eng. Washington, D. C.
 Miller, A. M., jr. capt. 9 cav. Ft. Walla Walla.
 Miller, Archie, 1st lt. 8 cav. Ft. Keogh, Mont.
 Miller, K. L., lt. 510 Madison ave. Albany.
 Miller, O. L., 501 Russell ave. Cleveland, O.
 Miller, Troop, 1st lt. 7 cav. Camp Thomas, Ga.
 Miller, Wm. H., lt. col. Q. M. dept. Chicago, Ill.
 Mills, Albert L., brig. gen. West Point, N. Y.
 Mills, A., brig. gen. ret. Washington, D. C.
 Mills, S. C., col. insp. gen. dept. Washington.
 Milner, A. M., 2d lt. 4 cav. Jefferson Barracks.
 Milton, C. W., gen. ret. The Chittenden, Colum-
 bus, Ohio.
 Mitchell, George E. capt. 13 cav. Manila, P. I.
 Mitchell, H. E., 2d lt. 3 cav. Boise Bks. Idaho.
 Moffet, Wm. P., 1st lt. 13 cav. 713 W. 19 st. Des
 Moines, Ia.
 Mohs, A. J., 2d lt. 4 cav. Jefferson Bks. Mo.
 Monahan, J. J., capt. West Chelmsford, Mass.
 Moore, Francis, brig. gen. San Francisco.
 Moore, J. A., lt. art. corps. Savannah, Ga.
 Morey, Lewis S., 1st lt. 12 cav. Manila, P. I.
 Morgan, G. H., maj. 9 cav. University of Min-
 nesota, Minneapolis, Minn.
 Morgan, John M., capt. 12 cav. Manila, P. I.
 Morris, Wm. V., 1st lt. 6 cav. West Point, N. Y.
 Morrison, C. E., col. Parkersburg, W. Va.
 Morrison, G. L., lt. 5 cav. Ft. Apache, Ariz.
 Morrow, H. M., maj. 1 cav. San Francisco, Cal.
 Morrow, J. J., capt. eng. Washington, D. C.
 Morton, C., col. 7 cav. Ft. Myer, Va.
 Morton, C. E., 1st lt. 16 inf. Ft. Leavenworth.
 Moseley, G. W., H. 1st lt. 1 cav. San Antonio, Tex.
 Mosier, Q. W., capt. pay dept. Kansas City, Mo.
 Mott, T. B., capt. art. corps. Paris, France.
 Mowry, P. L., 1st lt. 15 cav. Ft. Ethan Allen, Vt.
 Mueller, Albert H., 2d lt. 8 cav. Ft. Riley, Kan.
 Mueller, R. W., capt. Milwaukee, Wis.
 Müller, C. H., 2d lt. 10 cav. Ft. Robinson, Neb.
 Munma, Morton C., 1st lt. 2 cav. Manila, P. I.
 Munro, H. N., 2d lt. 1 cav. Ft. Sam Houston.
 Munro, J. N., capt. 3 cav. Ft. Assiniboine.
 Murphy, P. A., capt. 1 cav. Ft. Clark, Tex.
 Murphy, Will H., capt. Corsicana, Tex.
 Murray, C. H., maj. 4 cav. San Francisco, Cal.
 Myers, Hu B., 1st lt. 5 cav. Ft. Huachuca, Ariz.
 Nance, John T., capt. 9 cav. Presidio, San
 Francisco, Cal.
 Naylor, C. J., 2d lt. 4 cav. Jefferson Bks. Mo.
 Naylor, W. K., capt. 9 inf. Ft. Leavenworth.
 Nichols, Wm. A., maj. insp. gen'l dept. St.
 Louis, Mo.
 Nicholson, Wm. J., major 7 cavalry, Camp
 Thomas, Ga.
 Nims, A. C., capt. 5 cav. Ft. Huachuca, Ariz.
 Noble, Robert H., capt. 3 inf. Manila, P. I.
 Nockolds, C. vetn. 1 cav. Ft. Sam Houston, Tex.
 Nolan, D. E., capt. 30 inf. Washington, D. C.
 Nolan, Robert M., 1st lt. 1 cav. Ft. Clark, Tex.
 Norman, Wm. W., capt. 2 Punjab cav.
 Norton, Clifton R., 2d lt. 15 cav. Ft. Myer, Va.
 Norvell, Guy S., 1st lt. 5 cav. Jefferson Bks. Mo.
 Norvell, S. L., lt. col. ret. Tallahassee, Fla.
 Notmeyer, Wm. C., lt. Pierre, S. D.
 Noyes, Charles R., maj. 9 inf. Omaha, Neb.
 Noyes, Henry E., col. ret. 2913 Van Ness ave.,
 San Francisco, Cal.
 Oakes, James, brig. gen. ret. care N. Holmes &
 Sons, Pittsburgh, Pa.
 O'Connor, Charles M., maj. 14 cav. Manila, P. I.
 Odell, A. S., 1st lt. 11 cav. Ft. Riley.
 Olen, G. J., 1st lt. 10 cav. Ft. Mackenzie, Wyo.
 Olney, Edward M., 3d lt. 12 cav. Ft. Clark, Tex.
 Oliver, L. W., 1st lt. 8 cav. Ft. Riley, Kan.
 Oliver, Prince A., 2d lt. 4 cav. Ft. Apache, Ariz.
 Olmstead, E. North Broad st. Elizabeth, N. J.
 Orton, Edward P., capt. 2 cav. Manila, P. I.
 O'Shea, John, capt. 4 cav. Jefferson Bks. Mo.
 Ots, Frank L., 2d lt. 8 cav. Ft. Leavenworth.
 Ott, Frederick M., capt. Harrisburg, Pa.
 Overton, W. W., 2d lt. 15 cav. Ft. Ethan Allen.

Paddock, G. H., lt. col. 5 cav. 194 s. Clark st.,
 Chicago, Ill.
 Page, Charles, brig. gen. ret. Baltimore, Md.
 Paine, Wm. H., capt. 7 cav. Ft. Leavenworth.
 Palmer, B. 1st lt. 10 cav. Ft. Robinson, Neb.
 Palmer, W. H., lt. 2711 Prospect st. Tacoma.
 Parker, C. Jr., lt. 765 Broad st. Newark, N. J.
 Parker, Dexter Wm., Meriden, Conn.
 Parker, F. Le J., capt. 12 cav. Manila, P. I.
 Parker, James, lt. col. adj. gen'l dept. Star
 bldg., St. Louis, Mo.
 Parker, J. S., capt. 10 cav. Ft. Mackenzie, Wyo.
 Parker, Samuel D., 3d lt. 3 cav. Boston, Mass.
 Parsons, L., capt. 3 cav. Fayetteville, Ark.
 Patterson, W. L., 1st Porto Rico regt. Cayey
 Patterson, H. H., capt. 3 cav. Ft. Assiniboine.
 Paxton, R. G., capt. 10 cav. Ft. Robinson, Neb.
 Pearson, D. C., lt. col. 7 cav. Camp Thomas, Ga.
 Pearson, S. B., 1st lt. 9 cav. Three Rivers, Cal.
 Penn, Julius A., capt. 7 inf. Manila, P. I.
 Penfield, W. G., lt. ord. dept., Watertown
 Arsenal, Watertown, Mass.
 Perkins, A. S., 1st lt. 1 cav. Ft. Clark, Texas.
 Perkins, bas. E. capt. Nogales, Arizona.
 Perrins, Wm. A., maj. box 7, Roxbury, Mass.
 Perry, Alex. W., capt. 1 cav. Ft. Des Moines.
 Perry, Oran, gen. Indianapolis.
 Pershing, J. J., capt. 15 cav. Oklahoma City.
 Pershing, W. B., 1st lt. 4 cav. Ft. Myer, Va.
 Phillips, Ervin L., capt. 15 cav. Manila, P. I.
 Plücher, W., 1st lt. 9 cav. Ft. Bayard, N. M.
 Plücher, W., maj. 8 cav. Ft. Yellowstone, Wyo.
 Place, Oliver, 2d lt. 6 cav. Ft. Meade, S. Dak.
 Plummer, E. H., maj. 3 inf. Ft. Ebert, Alaska.
 Poillon, Arthur, 1st lt. 11 cav. Manila, P. I.
 Pond, G. E., col. Q. M. dept. Washington, D. C.
 Poore, Benj. A., capt. 6 inf. Ft. Leavenworth.
 Pope, Francis H., capt. 14 cav. Manila, P. I.
 Pope, Wm. R., 2d lt. 2 cav. Manila, P. I.
 Power, E. L., capt. Lebanon, Ore.
 Powers, Robert H., capt. 7 cav. Camp Thomas.
 Pratt, Richard H., brig. gen. Bemis point, N. Y.
 Prentice, J. D., lt. art. corps. Fremont, S. D.
 Price, E. E., 2d lt. 10 cav. Ft. Robinson, Neb.
 Prichard, G. B., jr., capt. 5 cav. Ft. Huachuca.
 Purington, G. A., 1st lt. 5 cav. Ft. Sill, Okla.
 Purviance, S. A., 1st lt. 4 cav. Ft. Leavenworth.
 Quinlan, D. P., lt. 9 cav. Hollidown, Pa.
 Ramsey, Frank D. W., capt. 9 inf. Ft. Jackson.
 Place, Washington, D. C.
 Randolph, H. M., maj. Denver, Col.
 Randolph, W. F., maj. gen. ret. Washington.
 Rankin, R. C., maj. Las Vegas, New Mex.
 Rawle, James, lt. Bryn Mawr, Pa.
 Rawle, Wm. B., lt. col. 11th 68th, Philadelphia.
 Raymond, J. C., capt. 2 cav. Ft. Meade, S. Dak.
 Rayson, M. C., 1st lt. 8 cav. Ft. Apache, Ariz.
 Read, B. A., 1st lt. 4 cav. Ft. Meade, S. Dak.
 Read, G. W., capt. 9 cav. Washington, D. C.
 Read, John H., jr., 2d lt. 11 cav. Manila, P. I.
 Read, R. D., jr., maj. 10 cav. Ft. Mackenzie.
 Reaney, R. A., 1st lt. 2 cav. Manila, P. I.
 Reel, Wm. O., 1st lt. 6 cav. World's Fair, St.
 Louis.
 Reeves, Jas. H., capt. 11 cav. Manila, P. I.
 Remington, F., 301 Webster ave. New Rochelle,
 New York.
 Renziehausen, W. B., lt. 4 cav. Jefferson Bks.
 Mo.
 Rethorst, Otto W., 1st lt. 5 cav. Ft. Sill, Okla.
 Reynolds, Robt. W., 2d lt. 13 cav. Manila, P. I.
 Rice, J. C., 1st lt. 7 cav. Camp Thomas, Ga.
 Rhodes, A. L., 2d lt. art. corps. Ft. Strong, Mass.
 Rhodes, C. D., capt. 6 cav. Washington, D. C.
 Rice, S., capt. 3 cav. Ft. Assiniboine, Mont.
 Rich, A. T., 2d lt. 25 inf. Ft. Sam Houston, Tex.
 Richard, J. J., capt. 25 Walling st. Provi-
 dence, R. I.
 Richmond, H. S., capt. 77 Madison ave.,
 Albany, N. Y.
 Ridgway, T., capt. art. Ft. Snelling, Minn.
 Riggs, Kerr T., 2d lt. 11 cav. Manila, P. I.
 Righter, J. T., jr., 1st lt. 4 cav. Ft. Leavenworth.
 Ripley, Henry L., maj. 8 cav. Ft. Sill, Okla.

Ripple, Ezra H., Scranton, Pa.
 Rivers, T. R., capt. 4 cav. Ft. Leavenworth.
 Rivers, Wm. J., capt. 1 cav. Manila, P. I.
 Robe, bas. E. brig. gen. ret. San Diego, Cal.
 Roberts, Hugh A., 1st lt. 3 cav. Ft. Riley.
 Roberts, T. A., capt. 7 cav. Camp Thomas, Ga.
 Roberts, Wm. M., 1st lt. D. Ft. Sill, Okla.
 Robertson, S. W., 2d lt. 15 cav. Ft. Ethan Allen.
 Rockenbach, S. D., capt. 12 cav. Manila, P. I.
 Rockwell, V. L., 1st lt. 1 cav. Ft. Des Moines.
 Rodgers, A., lt. col. 15 cav. Ft. Ethan Allen, Vt.
 Rodney, D. R., 2d lt. 5 cav. Ft. Apache, Ariz.
 Rodney, G. B., 1st lt. 5 cav. Ft. Apache, Ariz.
 Rodney, W. H., 2d lt. 1 cav. Ft. Clark, Tex.
 Roe, C. F., maj. gen. 26 Broadway, N. Y.
 Roome, B. R., lt. Pier 32 New River, N. Y.
 Roscoe, David L., 2d lt. 1 cav. Ft. Clark, Tex.
 Rosenbaum, O. B., capt. 25 inf. Ft. Sam Hous-
 ton, Tex.
 Rose, J. O., 1st lt. 15 cav. Ft. Ethan Allen, Vt.
 Rothwell, T. A., 2d lt. 5 cav. Ft. Duchesne.
 Roudiez, Leon S., capt. q. m. dept. Ft. Riley,
 Kan.
 Rowan, H., maj. art. Ft. Terry, N. Y.
 Rowell, M. W., capt. 11 cav. Manila, P. I.
 Rucker, Louis H., brig. gen. ret. Los Angeles.
 Ruggles, F. A., 2d lt. 9 cav. Ft. Myer, Va.
 Ruh en, lt. col. Q. M. Washington, D. C.
 Russell, E. K., maj. ret. Philadelphia.
 Russell, F. W., lt. Plymouth, N. H.
 Russell, Geo. M., 2d lt. 11 cav. Manila, P. I.
 Russell, S., maj. ret. Albany Hotel, Denver.
 Rutherford, S. McP., capt. 4 cav. Ft. Riley.
 Ryan, James A., capt. 15 cav. Ft. Myer, Va.
 Ryan, John P., capt. 6 cav. Ft. Leavenworth.
 Ryan, T. H., 1st lt. 1 cav. Ft. Leavenworth.
 Sands, G. H., capt. 5 cav. Ft. Meade, S. Dak.
 Sargent, H. H., capt. 2 cav. college sta. Tex.
 Sawtelle, G. J., capt. 3 cav. Jefferson Bks.
 Saxton, Albert E., capt. 5 cav. Jefferson Bks.
 Sayre, Farrand, capt. 5 cav. Ft. Leavenworth.
 Sayre, R. H., lt. 8 cav. New York.
 Schenck, A. D., lt. col. art. corps. Ft. Stevens,
 Oregon.
 Seberer, L., capt. 4 cav. Washington, D. C.
 Seibert, John, capt. Q. M. Chestnut st.,
 Philadelphia.
 Seibold, R. McA., capt. Q. M. D. St. Paul.
 Schroeter, A. H., 1st lt. 1 cav. Ft. Sam Houston,
 Texas.
 Schultz, Theo., 1st lt. 14 cav. Manila, P. I.
 Schuyler, Walter S., 2d lt. 20 cav. Manila, P. I.
 Schwann, Theo., brig. gen. ret. Aberdeen,
 St. Paul, Minn.
 Schwarzkopf, G. vetn. 3 cav. Ft. Assiniboine.
 Scott, Geo. L., maj. 10 cav. Onigum, Minn.
 Scott, Hugh L., maj. 11 cav. Manila, P. I.
 Scott, W. J., 1st lt. 10 cav. Ft. Robinson, Neb.
 Scott, W. S., capt. 1 cav. constabulary Manila.
 Scott, W. S., capt. Q. M. D. Cheyenne, Wyo.
 Seaton, A., 1st lt. 1 cav. Ft. Yellowstone, Wyo.
 Service, W. vetn. 1 cav. Ft. Mackenzie, Wyo.
 Sharpe, H. G., col. sub. dept. Washington, D. C.
 Shelton, R., 2d lt. 11 cav. Manila, P. I.
 Shelley, J. E., 1st lt. 11 cav. Ft. Sheridan, Ill.
 Sheridan, M. V., brig. gen. ret. Carlisle, Pa.
 Sheridan, P. H., 2d lt. 1 cav. Ft. Huachuca.
 Shouk, Wm. A., maj. 5 cav. Delahell, Wis.
 Sibley, F. W., maj. 2 cav. Manila, P. I.
 Sickel, H. G., maj. 12 cav. Manila, P. I.
 Sidman, F. E., 2d lt. 5 cav. Ft. Sill, Okla.
 Slevert, H. A., capt. 5 cav. Ft. Leavenworth.
 Sillman, Robt. H., 1st lt. 15 inf. Monterey, Cal.
 Sills, William G., capt. 10 cav. Ft. Sam Houston,
 Tex.
 Simms, W. col. Roncetto, Greenbriar, Va.
 Simpson, W. L., capt. 4 inf. Ft. Leavenworth.
 Simpson, W. S., capt. Bovina, Texas.
 Simson, Edgar A., capt. 5 cav. Ft. Riley, Kan.
 Slaven, T. H., capt. Q. M. D. Washington.
 Stoum, H. J., maj. 2 cav. Manila, P. I.
 Stoum, S. L. H., capt. 5 cav. Jefferson Bks. Mo.

Smalley, Howard R., 2d lt. 2 cav. Manila, P. I.
 Smedberg, Wm. R., maj. ret. San Francisco.
 Smedberg, Wm. R., jr., capt. 14 cav. Manila, P. I.
 Smith, A. L., lt. col. sub. dept. St. Louis, Mo.
 Smith, Cornelius C., capt. 14 cav. Manila, P. I.
 Smith, Frederick McP., lt. art. corps. Ft.
 Williams, Me.
 Smith, Albert C., 1st lt. 2 cav. Manila, P. I.
 Smith, Harry R., col. 14 cav. Manila, P. I.
 Smith, M. C., capt. 14 cav. Manila, P. I.
 Smith, R. M., 1st Philippine scouts, Manila.
 Smith, Selwyn D., 1st lt. 5 cav. Ft. Apache, Ariz.
 Smith, Talbot, 2d lt. 9 cav. Ft. Riley, Kan.
 Smith, Walter D., 2d lt. 11 cav. Ft. Des Moines.
 Smith, Walter H., 2d lt. 13 cav. Manila, P. I.
 Somerville, Geo. R., 2d lt. 14 cav. Manila, P. I.
 Spruile, Wm. A., vetn. art. Ft. D. A. Russell.
 Stanciliff, Ray J., vetn. 5 cav. Jefferson Bks.
 Starr, C. G., maj. inf. Manila, P. I.
 Steedman, C. A., col. 5 cav. Ft. Huachuca, Ariz.
 Steele, Matt. F., capt. 6 cav. Ft. Leavenworth.
 Steever, Edgar Z., col. 4 cav. Ft. Riley, Kan.
 Sterling, E. K., 2d lt. 3 cav. Ft. Assiniboine.
 Sterrett, R., 1st lt. 9 cav. Ft. Walla Walla, Wash.
 Steunenberg, Geo., 1st lt. 13 cav. Manila, P. I.
 Stevens, bas. J., capt. 2 cav. Manila, P. I.
 Stevenson, Wm. L., 2d lt. 11 cav. Jefferson Bks.
 Stewart, Geo., capt. 4 cav. Portland, Ore.
 Stewart, C. W., 2d lt. 5 cav. Ft. Huachuca, Ariz.
 Stewart, T. J., brig. gen. Harrisburg, Pa.
 Stiles, J. C., com. day bat. Brunswick, Va.
 Stickle, Geo. E., capt. 5 cav. Jefferson Bks.
 Stodder, C. E., capt. 9 cav. Ft. Walla Walla.
 Stodford, F. W., 1st art. Ft. Monroe, Va.
 Stott, Clarence A., 2d lt. 12 cav. Manila, P. I.
 Strub, Oscar, 1st capt. art. Ft. Leavenworth.
 Strong, F. S., capt. art. Ft. Barrancas, Fla.
 Strong, G., capt. 15th Dearborn, St. Louis.
 Stricker, Ross L., 2d lt. 10 cav. Ft. Meade, S. Dak.
 Sturges, Dexter, 1st lt. 11 cav. Manila, P. I.
 Sturges, Edw. A., 1st lt. 5 cav. Ft. Apache, Ariz.
 Stutz, Geo. W., capt. 415 Ellis ave. Chicago,
 Illinois.
 Sumner, S. S., maj. gen. Oklahoma City, Okla.
 Supple, E. M., capt. 10 cav. Davisport, Pa.
 Swager, B., capt. 13 cav. Manila, P. I.
 Swift, Eben, maj. 12 cav. Ft. Leavenworth.
 Swift, Eben, jr., 1st lt. 11 cav. Ft. Leavenworth.
 Swigert, Samuel M., col. ret. San Francisco.
 Symington, John, 2d lt. 11 cav. Ft. Riley, Kan.
 Tate, Daniel, L., capt. 3 cav. Boise Bks. Idaho.
 Tatum, H., 2d lt. 10 cav. Camp Thomas, Ga.
 Tautbee, Joseph P., 2d lt. 20 cav. Manila, P. I.
 Taulbee, M. K., 1st lt. P. R. Cayey.
 Taylor, C. W., maj. 13 cav. St. Paul, Minn.
 Taylor, T. B., 1st lt. 11 cav. Jefferson Bks. Mo.
 Taylor, W. R., 1st lt. 1 cav. Ft. Leavenworth.
 Tebbany, J., vetn. 9 cav. Ft. Walla Walla.
 Terrell, H. S., 1st lt. 10 cav. Ft. Mackenzie, Wyo.
 Thayer, Arthur, capt. 5 cav. World's Fair, St.
 Louis.
 Thomas, C. O., jr., 1st lt. 1 cav. Manila, P. I.
 Thomas, Earl D., col. 11 cav. Ft. Des Moines.
 Thornton, N. B., lt. col. 178 W. 57th st. N. Y.
 Thord, J. D., 1st lt. 1 cav. Ft. Leavenworth.
 Thompson, C. H., brig. gen. ret. Elkhart, Ind.
 Washington, D. C.
 Tompkins, D. D., 2d lt. 10 cav. Ft. Mackenzie.
 Tompkins, E. R., 1st lt. 12 cav. Jefferson Bks.
 Tompkins, F., capt. 11 cav. Ft. Des Moines.
 Towar, Albert, col. pay dept. Chicago.
 Towles, Churchill, maj. 11 cav. Houston, Tex.
 Townsend, C. C., capt. Greeley, Col.
 Townsend, C. C., Corsicana, Tex.
 Townsend, Orval P., capt. P. I. Cayey.
 Traub, Peter F., capt. 5 cav. Ft. Leavenworth.
 Treat, Chas. C., capt. art. corps. West Point.
 Tremaine, Wm. L., 1st lt. 15 cav. Ft. Myer, Va.
 Tripp, S. O., lt. col. Peoria, Ill.
 Trippe, P. E., capt. 12 cav. Richmond, Va.
 Trout, Harry G., capt. 2 cav. Manila, P. I.
 Troxel, Orlando, 2d lt. 12 cav. Manila, P. I.
 Tucker, W. F., lt. col. pay dept. Manila, P. I.
 Turner, Fred, G., 2d lt. 8 cav. Ft. Meade, S. Dak.

Turnbull, W., 1 lt. M. D., Ft. Strong, Mass.
 Tuthill, A. M., capt. Morenci, Ariz.
 Tyner, Geo. F., 1 lt. 2 cav., Manila, P. I.
 Uri, J. H., vetn. 6 cav., Ft. Meade, S. D.
 Valentine, Wm. S., capt. 5 cav., Ft. Wingate.
 Valliant, R. D., 2 lt. 3 cav., Ft. Yellowstone.
 Van Dusen, G. W., capt. art., Manila.
 Van Leer, S., 1 lt. 15 cav., Ft. Myer, Va.
 Van Natta, T. F., jr., 2 lt. 8 cav., Fort Sill, O. T.
 Vane Agnew, R. S., vet. 5 cav., Ft. Apache, Ariz.
 Van Voorhis, D., 1 lt. 2 cav., Ft. Leavenworth.
 Varnum, C. A., maj. 9 cav., Ft. Riley, Kan.
 Vostal, S. P., capt. 7 cav., Silver City, N. M.
 Vidmer, Geo., capt. 11 cav., World's Fair Station, St. Louis.
 Vile, C. D., col. ret., Los Angeles, Cal.
 Vierra, P. M., lt. Salinas, Cal.
 Vroom, P. D., brig. gen. ret., care Hdqrs. San Francisco.
 Wade, James F., maj. gen., Governor's Island.
 Wade, John P., capt. 2 cav., Manila, P. I.
 Wagner, A. L., col. a. g. dept., 22 Jackson Place, Washington, D. C.
 Wagner, H., lt. col. ret., 201 W. 43 st., N. Y. City.
 Waite, H. De H., 1 lt. ret., Berkeley, Cal.
 Walcott, Chas. C., jr., capt. (cav.) qm. dept., Prescott, Ariz.
 Waldo, Rhineclander, 1 lt. 17 inf., Manila, P. I.
 Walker, K. W., capt. 15 cav., Ft. Myer, Va.
 Walker, Kirby, capt. 11 cav., Manila, P. I.
 Walker, R. W., 1 lt. 5 cav., Ft. Huachuca, Ariz.
 Wallach, R. K., 1 lt. 3 cav., Ft. Assiniboine.
 Walsh, R. D., capt. 9 cav., Ft. Leavenworth.
 Wampold, L., capt., cor. Market and Jackson st., Chicago.
 Warburton, C. E., capt., 704 Chestnut st., Philadelphia.
 Ward, E. M., capt., 43 South street, New York.
 Ward, F. E., lt. col. 1 cav., Ft. Clark, Tex.
 Warren, Rawson, 2 lt. 11 cav., Ft. Sheridan.
 Wassell, Wm. H., capt. 22 inf., Manila, P. I.
 Waterman, John C., capt. 7 cav., Grand Rapids.
 Watrous, J. A., maj. pay dept., Omaha, Neb.
 Watson, Jas. W., capt. 10 cav., N-w Orleans.
 Watson, J., 1 lt. 8 cav., Jefferson Bks, Mo.
 Watts, C. H., maj. 5 cav., Ft. Huachuca, Ariz.
 Wells, A. B., brig. gen. ret., Geneva, N. Y.
 Wells, B., capt., Telluride, Col.
 Wesendorf, Max, capt. ret., Elizabeth, N. J.
 Wesson, Chas. M., 1 lt. 8 cav., West Point.
 West, Chas. H., col., Enid, Okla.
 West, E. M., 1 lt. 7 cav., Chickamauga Park, Ga.
 West, F., lt. col. insp. gen., Oklahoma City.
 West, F. W., capt. 11 cav., San Francisco.
 Westmoreland, Wade H., 2 lt. 11 cav., Fort Riley.
 Wetmore, W. B., maj., Allenhurst, N. J.
 Weibrecht, Chas. H., col., Alliance, O.
 Weyrauch, Paul H., 2 lt. 14 cav., Manila, P. I.
 Wheatley, Wm. F., 2 lt. 5 cav., Whipple Bks.
 Wheeler, Fred, maj. ret., Boston, Mass.
 Wheeler, H. W., maj., 11 cav., Ft. Sheridan.
 Whigam, W. H., capt., 38 Loomis st., Chicago.
 White, Geo. P., capt. (cav.) qm. dept. Presidio, San Francisco.
 White, H. A., capt. 11 cav., Ft. Leavenworth.
 Whitehead, H. C., capt. 10 cav., Ft. Robinson.
 Whitesides, J. C., lt., 3rd floor Keith Bldg., Philadelphia, Pa.
 Whitlock, F. O., 1 lt. 14 cav., West Point.
 Whitman, W. M., capt. 13 cav., Manila, P. I.
 Whiteside, S. M., brig. gen. ret., station A, Washington, D. C.
 Whiteside, W. W., 1 lt. 15 cav., Ft. Myer, Va.
 Wieman, Henry, 176 Grove st., Brooklyn, N. Y.
 Willen, John W., 1 lt. 13 cav., Manila, P. I.
 Williams, A. K., capt. 3 cav., Ft. Apache, Ariz.
 Williard, Harry O., capt. 5 cav., 10th and Dodge sts., Omaha, Neb.
 Willis, H. S., lt., 56 Allen st., Albany.
 Wilson, J. C., maj., 144 22d st., Chicago, Ill.
 Wilson, James H., brig. gen. ret., 133 Rodney ave., Wilmington, Del.
 Winans, E. B., jr., capt. 4 cav., Ft. Riley, Kan.
 Windsor, Henry, jr., Revere Copper Co., Boston, Mass.
 Winfree, E. W., 2 lt. 9 cav., Wagona, Cal.
 Winham, F. W., capt., Salinas, Cal.
 Winn, John S., capt. 2 cav., Manila, P. I.
 Winnie, C. C., 1 lt. 5 cav., Ft. Huachuca.
 Wint, Theodore J., brig. gen., Omaha, Neb.
 Winter, J. G., jr., 2 lt. 8 cav., Ft. Meade, Dak.
 Winter, M. A., col., 329 Pennsylvania ave., Washington, D. C.
 Winterburn, G. W., 1 lt. 9 cav., Three Rivers, Cal.
 Winters, Wm. H., 1 lt. 13 cav., Manila, P. I.
 Wise, H. D., capt. 9 inf., Madison Bks, N. Y.
 Wisner, J. P., maj. coast art., Ft. Miller, Cal.
 Wood, Edward E., col., West Point, N. Y.
 Wood, John P., lt. 5211 N 22d st., Philadelphia.
 Wood, Leonard, maj. gen., Manila, P. I.
 Wood, Robert E., 1 lt. 3 cav., West Point, N. Y.
 Wood, Thomas J., brig. gen. ret., maj. gen., 121 N. Main st., Dayton, Ohio.
 Woodruff, Charles A., gen. ret., Raleigh, N. C.
 Woodruff, Charles A., brig. gen. ret., 2802 Van Ness ave., San Francisco, Cal.
 Woodruff, Wm. S., 1 lt. Porto Rico regt., 1 ave. Woodward, Samuel L., brig. gen. ret., Clemens ave., St. Louis, Mo.
 Wotherspoon, W. W., lt. col. 14 inf., Washington, D. C.
 Woode, A. J., 1 lt. 8 cav., Ft. Keogh, Mont.
 Wright, E. S., capt. 1 cav., Ft. Clark, Tex.
 Wright, Wm. R., lt., 71 Leonard st., New York.
 Yates, A. W., capt. qm. dept., Portland, Me.
 Yates, Wm., capt. 14 cav., Laramie, Wyo.
 Young, E. C., col., Chicago.
 Young, Samuel B. M., lt. gen. ret., 25 E 60th st., New York City.
 Zane, Edmund L., 2 lt. 14 cav., Manila, P. I.
 Zell, Edward M., 2 lt. 7 cav., Ft. Myer, Va.
 Zinn, George A., maj. eng., Wheeling, W. Va.



AN AMERICAN PRODUCT SCORES ANOTHER GREAT VICTORY IN GERMANY.

Prof. Dr. Lintner, director of the "Scientific Station for the Brewing Industry of Bavaria at Munich," upon analyzing "Pilsner Urquell," the beers of the "Buergerliches Brauhaus" of Pilsen, Bohemia, and "Anheuser Busch's Budweiser," under date of May 17, 1904, makes the following statement sworn to before Dr. Pundter, Royal Notary, and verified by Hon. James H. Worman, U. S. Consul-General at Munich, Bavaria:

"Upon subjecting the several beers to a careful analysis I find that the 'Budweiser Beer,' submitted by the Anheuser Busch Brewing Ass'n, St. Louis, U. S. A., is very similar in all its characteristics to the finest and best Pilsner beers. It is effervescent, clear and sparkling, has a beautiful creamy foam, and is possessed of a pure, wholesome taste and an exquisite hop flavor. Its keeping qualities by far exceed those of the Pilsner beers, resulting from the use of the very best materials in brewing, and the thorough maturity of the product. The analysis further shows that no acids or other preservatives have been used in its production, and as a result of my examination I pronounce 'Budweiser' a well matured bottled beer of the highest quality."

This acknowledgment, coming as it does from the recognized headquarters of the brewing industry of the old world, must be a great source of gratification and in a measure a compensation to the Anheuser-Busch people for their unceasing efforts to produce the finest beer that can be made.

"THE SOUTHWEST LIMITED."

One of the few railroad companies that owns and operates the sleeping cars in service on its lines, is the Chicago, Mil-

waukee & St. Paul. The sleeping cars on this line were formerly Pullman cars, operated by the Pullman company, but for a dozen years past the railway company has owned and operated the sleeping car equipment. In building its sleeping cars, a departure from the old standard pattern of cars has been made to the extent of adding about six inches to the width and height of the sleepers. This permits of wider and higher berths. Length has also been added to the berths, so that comfort is found in them which is lacking in ordinary sleeping cars. These large cars are in service on practically all of the lines of the St. Paul Road, and are very popular with the traveling public.

"ANDERSON RYE."

The E. L. Anderson Distilling Company, of Newport, Kentucky, belongs to the best known line of distilling companies in the country. Its product is so well and favorably known among connoisseurs that anything we may say in its favor would not add to the reputation it has so widely attained. "Anderson" needs no introduction from the JOURNAL to army men. They know a good article when they taste it, and that is why it is so popular among them. A glance over the company's announcement in our advertising department will give the JOURNAL readers an opportunity to ascertain how reasonable their goods can be obtained. They certainly deserve a trial.

"POLISHINE."

With its well earned reputation for *greatness and modesty*, we may be excused for calling to the attention of a discriminating public the words of the immortal Shakespeare, who wrote or said: "*Ay, there's the rub.*" Of course, he referred to "Polishine," with which it is *so easy* to clean and polish all metals, etc., in just "one-half the time" with "just one-half the labor," and but "one-half the quantity" required in using other brands. Later he added: "What fools these mortals be" who fail to buy and use great "Polishine."