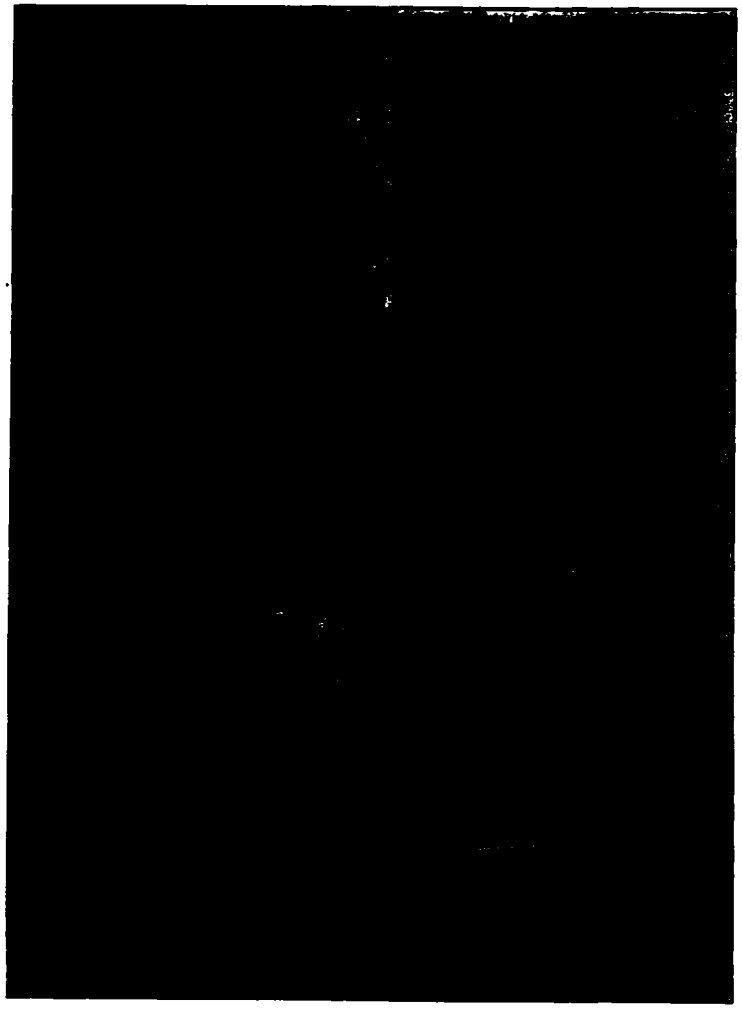

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THE HISTORY OF THE CAVALRY OF THE ARMY OF NORTHERN VIRGINIA.

BY CAPTAIN J. G. HARBORD, ELEVENTH U. S. CAVALRY,
COLONEL PHILIPPINE CONSTABULARY.

AS long as our government shall endure; while Anglo-Saxon blood retains the characteristics which have made the race for a thousand years a conqueror: so long as men shall love the Old Flag which waves now even in distant isles of the southern seas,—so long will the history of the great Civil War, the struggle between North and South, be of vital interest to the sons of the republic. To the military student, to any of the tens of thousands whose fathers had a part in those stirring scenes, such interest cannot but be of great and permanent consequence.

The War of Secession marked the beginning of a change in the functions of cavalry in warfare, which had for many generations remained substantially the same. The cavalry role in that war was that of an auxiliary. The cavalry raided, screened and picketed. Incidental to those operations it fought, but as against infantry it usually fought on foot. "Up to the Valley campaign of 1864, it was only when cavalry were opposed to cavalry that the hostile squadrons

charged in the old style using the saber." (Ropes). Whether the day of such fighting against infantry is over is mooted by military men of our time. With magazine carbines in the hands of the cavalry, one may well wonder if there will ever be another Brandy Station, a Rummel's Farm, or a Yellow Tavern, or the clash of ten thousand sabers in the Shenandoah Valley of another war.

The generation that fought the great Civil War is fast passing away. Of the hundreds of thousands of men-at-arms who flourished from 1861 to 1865, there remain but a few. The great generals are dead. The men who rode and fought with Stuart and Hampton and Fitzhugh Lee are scattered and gone. The few survivors feel no more the fire and enthusiasm of youth; the cause has been a lost one for many a year. The deeds of those men are the heritage of the men and women of our time, whether born south or north of Mason and Dixon's line. Let us then cherish the survivors as best we may, and see that their achievements and those of their brothers gone before are not forgotten.

1861–62.

In June, 1861, a month before the battle of Bull Run, the nucleus of the cavalry of the Army of Northern Virginia, which at the high tide of the Confederary two years later reached the number of twelve thousand horsemen, consisted of twenty-one officers and some three hundred men in front of General Johnston's army which faced the Federal General Patterson's forces in the lower Shenandoah Valley. This small body of cavalry was under command of Lieutenant-Colonel James E. B. Stuart, of the Virginia Infantry, a graduate of the United States Military Academy, and a son-in-law and disciple of that great cavalryman of the old regular army of the United States, General Philip St. George Cooke. He brought to the cause which was destined to cost him his life, the traditions of the old time American cavalry, the experience gained in Indian warfare, and a capacity for cavalry command, which if ever born in man must have been in the Stuart blood. With his little command he was already showing himself worthy of his training, by efficiently watching the Federals in Johnston's front for over fifty miles, making himself so useful to that general that when he was transferred to the West he wrote to Stuart: "How can I eat, sleep or rest in peace without you upon the outpost?" In the battle of Bull Run seven companies of Federal cavalry were faced by about the same number under Stuart, whose command had marched from the Valley in time to take part in the battle with such efficiency that General Early said: "Stuart did as much toward saving the battle of First Manassas as any subordinate who participated in it." His command pursued the fleeing Federals for twelve miles. Stuart had been made a colonel of cavalry on the 16th of July, and in September, on Johnston's recommendation, was promoted to be brigadier general and given the cavalry brigade of six regiments.

After Bull Run the Confederate cavalry organized, equipped after a fashion and drilled on the outposts. It scouted through Loudon and other northern counties of Virginia, and constantly annoyed the Federal pickets in front of Washington. For some weeks Stuart's headquarters were in sight of the Capitol dome. In December the new cavalry leader with cavalry and infantry fought the battle of Dranesville and met his first reverse.

No cavalry operations of importance took place in the first two months of 1862, but early in March the Confederate cavalry evacuated its position at Manassas and other points in the tier of counties fronting Washington, and conformed to the Federal movement to the Peninsula which now defined itself. A Federal reconnaissance in force in the last week in March along the Orange & Alexandria Railroad was observed by Stuart and four Virginia regiments of his brigade, but no serious engagement took place. In the withdrawal from its winter positions part of the Confederate cavalry went along and parallel to the Manassas Gap Railway to connect with General Jackson then in the Shenandoah Valley, and part went to Richmond.

The original term of enlistment in the Confederate army had been for twelve months, and to anticipate the dissolving

of the army the Confederate Congress now ordered a reorganization, a part of the plan being an election of company and regimental officers throughout the service. April, 1862, found the cavalry of the Confederate army in Virginia undergoing this reorganization. The elevation of juniors over seniors, and the disorder that invariably follows such an upheaval, brought disappointment and soreness of heart to many, but pride and loyalty to the cause for which they fought soon wrought recovery.

The cavalry with General Jackson in the Shenandoah, twenty-six companies under Ashby without regimental organization, and two Virginia regiments which joined about the time of the battle of Port Republic, played its proper part in concealing his movements during his fruitful activity in that region, and screened his departure from the Federals when he went to join General Lee in June. Though characterized by a Federal general as "rabble cavalry," his troops ran before them; they successfully raided a portion of the Manassas Gap Railroad, in addition to previous destruction wrought when on the way to the Valley; destroyed all bridges over the Shenandoah, and at Strasburg faced both ways towards hostile forces. Many times they carried infantry mounted behind them, who used their rifles with good effect on the Federal cavalry. They captured enough arms at Winchester and Martinsburg to enable them to exchange their muzzle-loading double-barreled shotguns for carbines, and at the same time took an abundance of ammunition for the newly acquired weapons. They flanked Jackson's forces, picketed the passes of the Blue Ridge Mountains, guarded the trains, and were active in the pursuit of the Federals after the battle of Port Republic, effecting one important capture of stores at Harrisonburg.

Meanwhile stirring events were taking place near Richmond. On the 4th of April McClellan had advanced upon Yorktown, which, after a month, was evacuated by the Confederates, the duty of covering the movement and protecting the rear falling upon Stuart's cavalry brigade. They materially delayed the Federal pursuit toward Williamsburg. The remainder of the withdrawal to Richmond was marked

by nothing more than a few small cavalry skirmishes. General McClellan came up the peninsula toward the Confederate capital, but disappointed in the detention of an expected army corps for the safety of Washington during Jackson's operations in the valley, was hesitating. The wounding of General Johnston in the battle of Fair Oaks brought General Robert E. Lee to the command of the Army of Northern Virginia. The position of the Federal right flank was not exactly known to General Lee, who ordered Jackson to him from the Shenandoah, and on the same day started General Stuart on the first of his great raids — "to make a scout movement to the rear of the enemy with a view of gaining intelligence of his operations, communications, etc., driving in his foraging parties and securing such grain, cattle, etc., for ourselves as you can arrange to have driven in. * * * One of the chief objects of your expedition is to gain intelligence for the guidance of future movements." Accordingly the Confederate cavalry leader, with twelve hundred men and two guns, started from Taylorsville on June 12th, in lightest marching order, carrying three days' rations and sixty rounds of ammunition per man, and marched to the northwest to give the impression that he was going to reinforce Jackson. In four days they rode around the Federal army, but two squadrons of cavalry being on the duty of guarding the flank of that immense army. They located the Federal right, broke the Richmond & York River Railroad, captured stores, animals and prisoners, and destroyed transports on the Pamunkey River, the only engagement worthy of note being the affair near Old Church, so often quoted by the respective advocates of the pistol and saber.

With the Federal army directly between him and his capital when he was at Tunstall's Station on the 13th, General Stuart was within five miles of its camps, and only four miles from the great depot at White House Landing. His chief's injunction to caution was remembered, however, and he withstood the temptation to go there. The original intention had been to return by the Federal right, but fearing interception in that direction, the plan was changed, and the raiders pushed on around to the south, swam the swollen Chick-

ahominy, and safely rejoined at Richmond. "All doubt as to the location of the Federal army was solved, and the possibility was demonstrated of those movements which on the 27th of June culminated in the defeat of the Federal right wing at Cold Harbor." (H. B. McClellan.) This was the initial Confederate raid, the first employment of cavalry in what is now a tenet of every cavalry creed. "The greatest result of Stuart's Chickahominy raid was, however, a moral one. It caused a great excitement and commotion throughout the Army of the Potomac, and shook the confidence of the North in McClellan." (Wagner.) Though it turned out that the Federal opposition was insignificant, Stuart and his horsemen had dared the unknown, had pioneered in an undiscovered field for cavalry, and in addition to the immediate results had set a mould for the cavalry of all time.

By the 25th of June Jackson from the Shenandoah reached Ashland where he was joined by Stuart and five regiments of cavalry, the remainder of the cavalry command being stationed on the Confederate right between White Oak Swamp and the James River. The cavalry now thoroughly scouted the country toward the Pamunkey River, and for the battle of Gaines' Mill took such a position on Jackson's left that any Federal retreat toward that stream could be intercepted by them. There was no opportunity to use cavalry in any of the battles of the Seven Days, but while they were taking place the cavalry scouted to White House, up and down the Chickahominy, and afterwards formed the Confederate advance when McClellan retreated to Harrison's Landing.

In July General Stuart was made a major general and his cavalry command organized into two brigades under Brigadier Generals Wade Hampton and Fitzhugh Lee. Little history was made for a month after the Seven Days battles. The cavalry brigades alternately did picket duty toward Charles City and the Federal army, and were in camp of instruction at Hanover Court House. Meanwhile the Federal army of Virginia under General Pope, was concentrated between the two branches of the Rappahannock River. By the last of July three Confederate infantry divisions were

at Gordonsville under Jackson watching and opposing the movements of Pope, who had now pushed his advance to the Rapidan. One cavalry regiment was placed on Jackson's outpost, its colonel in command of the outpost, and on August 2d, had a sharp engagement at Orange Court House with the Federal cavalry. Hampton's brigade was left below Richmond observing the region towards Charles City and Fredericksburg. There had been some annoying small raids by the Federals from near Fredericksburg, and as an offset to them, Stuart with Fitzhugh Lee's brigade started from Hanover Court House on the 4th of August and marched via Bowling Green to Grace Church; thence to Massaponnax Church, near where he diverted another raid against Lee's communications, and making some captures, made good his return to Jackson's lines by the 10th. The battle of Cedar Mountain took place on the 9th, in which the brigade of General Beverly H. Robertson from the Shenandoah valley was the only Confederate cavalry that had a part. That Jackson did not attempt to immediately follow up his victory over Banks was due to information gained by his cavalry of the strength and position of the Federals. The brigade of Robertson now came under Stuart's command. The turn in the direction of the Orange & Alexandria Railroad near its crossing of the Rapidan enabled Lee, by going through Stevensburg, to reach Brandy Station on the Rappahannock almost as easily as could General Pope. He tried to avail himself of this opportunity by ordering Stuart to seize Rappahannock Station, while the infantry of Jackson and Longstreet were to turn Pope's left. But the capture of Stuart's adjutant general while on one of the numerous small raids which the untiring chief of Confederate cavalry was continually sending out, led to the discovery of Lee's plan, which was fixed for August 18th, and Pope's army fell back on the 18th and 19th without loss.

General Lee was extremely anxious to get contact with Pope before he could be reinforced by troops from the Peninsula, and pushed Jackson to Brandy Station by the night of the 20th. One regiment from Robertson's brigade being detached to guard the fords of the upper river, General

Stuart, with the remainder of the two brigades, crossed the Rapidan on the 20th. Fitzhugh Lee and his brigade proceeded by Kelly's Ford, where he had a skirmish with the Federal cavalry and drove them over the river. Stuart, with Robertson's brigade, moved for Brandy Station and there engaged five Federal cavalry regiments under General Bayard, and drove them across the Rappahannock. Jackson came up, but though two regiments from Fitzhugh Lee's brigade joined him, there was nothing more that Stuart could accomplish that night. The next morning a Virginia regiment was sent across at Beverly Ford, securing it by a quick dash, but not being joined by the infantry, was obliged to return to the south bank. The next day Stuart, with about 1,500 men, raided to the rear of the Federal army, and that night struck the railroad at Cattlett's Station. The weather was stormy and the march exceedingly tiresome and severe. The object of the expedition was attained. The moral effect of the raid was strong for the Confederates; several hundred tents, large supply depots and long trains were destroyed. General Pope narrowly escaped capture. As an offset for the capture of Stuart's adjutant general, with important papers, a few days before, Pope's personal baggage, with information as to his plans, position and strength, and some $520,000 in Federal money, fell into Confederate hands, and was safely carried back, with other booty, to their lines.

The cavalry of the Army of Northern Virginia did well its service of security and information, and in nearly every instance successfully opposed the efforts of the Federal cavalry to obtain information, while gaining much that was of value for its own army. When General Jackson made his historic march around by Thoroughfare Gap, he was joined at Gainesville on the 26th by Stuart, with all the cavalry except one regiment, which had been left at Brandy Station as a rear guard and to watch the fords of the river. As Jackson approached Bristoe Station he sent the Second Virginia Cavalry to surprise and capture it, which was done. The main Federal depot was at Manassas Junction, and Jackson saw the wisdom of attacking that place before reinforcements could reach it from Alexandria, towards which city a wild

engine had fled when Bristoe was taken. He accordingly sent a small brigade of infantry and the cavalry to accomplish it. The place was taken about midnight; the booty was enormous and the loss insignificant. Immense stores of food and clothing were taken. Considerable controversy was current at the time as to whether the honor of the success belonged to Stuart or the infantry brigadier, but as the former was the senior officer, and would have been held responsible had disaster occurred, it should seem that the honors should go the same way.

Fitzhugh Lee, with three regiments, was sent to harass the Federal rear, and at Fairfax Court House had an engagement with a Federal brigade retreating toward Alexandria from an attack on Jackson at the Junction. The withdrawal of Ewell on the afternoon of the 27th from Bristoe Station was covered by two regiments of Robertson's brigade. During Jackson's concentration at Groveton on the 28th his flanks and rear were protected by the cavalry, who kept him informed of Pope's intention of crushing him before the junction with Longstreet's division. That afternoon Stuart and part of his cavalry attacked the Federal horse under Bayard at Haymarket, thinking to communicate with Longstreet, who was now trying to emerge from Thoroughfare Gap, but were unsuccessful, and withdrew to Jackson's right flank. On the 29th the attempt to join Longstreet was successful, and Stuart and the cavalry with him remained on his right; the other flank of the army, Jackson's left, being guarded by Fitzhugh Lee and the remainder of his brigade. That afternoon Stuart saw infantry columns approaching Longstreet's right, and his report was the cause of reinforcements being sent there. It was at this time that the novel ruse was employed by the cavalry of dragging brush up and down the road to deceive the Federals into the belief that columns were arriving from the direction of Gainesville, the consequences of which are seen in the failure of Fitzjohn Porter to comply with his orders to march toward Pope that afternoon because of his belief that the Confederates were in force in his front. On the 30th there came an opportunity to Robertson and his brigade to charge. He had advanced

to the vicinity of the Lewis house with the hope of striking the Federal rear near Stone Bridge, and "here he met Buford's cavalry brigade in one of the handsomest cavalry fights of the war, the honors of which fairly belong to Munford and the Second Virginia Cavalry." (H. B. McClellan.) On the 31st Stuart and the cavalry command preceded the march toward Chantilly, one regiment having been sent back to occupy Manassas Junction, where it made a few captures. On the day after the battle of Chantilly, Fitzhugh Lee's brigade held Fairfax Court House. That day the regiment, which had many days before been left as rear guard at Brandy Station, rejoined, and Hampton's brigade arrived from Richmond, there no longer being Federal troops near the Confederate capital.

General Lee now made his first attempt to carry the war on to Northern soil and invaded Maryland. His rear was covered by the cavalry which followed him across the Potomac on the 5th of September. Munford now succeeded to the temporary command of Robertson's brigade, and the cavalry guarded the line between the river and the Baltimore & Ohio Railroad, Fitzhugh Lee holding the left, Hampton the center and Munford the right. There were skirmishes at Hyattstown and Poolesville but the general line was held for a week, when the advance of the Federal army caused the cavalry to move on. Hampton went toward Middletown, Fitzhugh Lee to Frederick and Munford with his brigade now very much reduced, went to the mountain gap at Jefferson. Hampton's rear guard as he passed through Frederick had a skirmish, but withdrew to Middletown without loss. Not aware that the fall of Harper's Ferry had rendered the mountain gaps unimportant to him, Stuart continued to hold Crampton's, Braddock's and the Boonsboro Gaps, withdrawing Hampton from an engagement with Federal cavalry near Middletown in which he was holding his own, to send him to Munford's assistance at Crampton's Gap. Meantime Fitzhugh Lee from his place on the left was trying to gain the Federal rear and determine whether a movement of the army of the Potomac was actually in progress or not. This he did not succeed in doing, and on the 13th

Stuart was still in doubt as to what was going on in front of him. The gaps were carried by the Federals on the afternoon of the 14th. Munford's attenuated brigade at Compton's Gap had stood the severest fighting and had made a very steadfast dismounted defense. He retired toward Boonsboro and had the right of the army at Antietam. Hampton's brigade covered the rear of the infantry of McLaw's division marching from Harper's Ferry to Antietam and also joined on the right for the battle. After the engagement at Turner's Pass on the 14th Fitzhugh Lee's brigade covered the withdrawal of the infantry from the mountain, engaged the Federals next day at Boonsboro, being flanked out of successive positions, and making another stand at the intersection of the Keedysville Road. He occupied the greater part of the day delaying the Federal march.

In withdrawing from Boonsboro a very gallant charge was made by Colonel W. H. F. Lee with the Ninth Virginia in column of fours through the streets of the town. This charge served its purpose, which was to gain time for the orderly withdrawal of the rest of the brigade. At Antietam Fitzhugh Lee's brigade was on the left of the line. There was, however, no part for the cavalry in that bloody battle. When the army started to recross into Virginia, the brigade of Fitzhugh Lee covered the withdrawal of the infantry and crossed with that of Munford at Sheperdstown. Stuart with Hampton's brigade went to Williamsport on the 18th to create a diversion for the crossing of the Army of Northern Virginia on the 19th. On the 20th he recrossed into the Old Dominion. Munford's command was engaged near Boteler's Ford on the night of the 19th. The army now marched beyond Martinsburg, discouraged and thwarted, and the time for its recuperation was gained for it by its cavalry.

General Stuart, with 1,800 selected men, and four guns under the gallant Pelham, on October 11th again forded the Potomac, and in his Chambersburg raid of three days once more rode around McClellan's army and carried the reality of war north of Mason's and Dixon's line for the first time. The Federal general could mount but little more than a regi-

ment in numbers to intercept the Confederate horsemen, and Stuart and his men rode into Pennsylvania, captured Chambersburg, destroyed much public property, took twelve hundred horses and several hundred prisoners. The Federal General Averell had been moved down the north side of the Potomac to intercept Stuart; General Pleasanton on the road to Mechanicstown was to try to cut him off should he make for the fords below the Army of the Potomac. When Pleasanton arrived at Mechanicstown he was within four miles of Stuart, who was apparently heading for the crossing at the mouth of the Monocacy. Pleasanton overtook and attacked the rear guard near Poolesville, but Stuart gained the road to the Little Monocacy and screened his after movements while making for his intended crossing at White's, three miles further down. Had this ford been steadfastly held by troops as was contemplated in Federal orders, it should have gone very hard with Stuart's command. A force of infantry guarded it in such a position that to dislodge them seemed almost hopeless. But Colonel W. H. F. Lee, who had reached the ford while Stuart was still engaged near Poolesville, impressing the Federal general with the idea that he was trying for the Monocacy crossing, had summoned the Federal infantryman to surrender, and the latter marched away without firing a shot, believing that he was about to be charged by Stuart's entire division.

Both sides did good cavalry work in this raid. Pleasanton in his pursuit marched seventy-eight miles in twenty-four hours, while the Confederate cavalry covered the eighty miles from Chambersburg, Pennsylvania, to White's Ford in twenty-seven hours, with only one halt of an hour, including the fight for the passage of the river. At the Poolesville fight Stuart's men had charged in true cavalry form, and had also fought dismounted with equal facility. Their losses on this raid had been insignificant. It had caused terror in the loyal homes of Pennsylvania, had elated Confederate sympathizers at the North, and gained time for the recuperation of Lee's discouraged army.

But these results, the commotion and consternation caused at the Federal capital, the captures made and the information

gained, were less important than the physical and moral effect on the Federal cavalry. It disheartened them thoroughly and ruined their horses, rendering a remount indispensable before they could again take the field, and thereby delayed the movement of the Army of the Potomac south of the river for nearly a month. To General McClellan's personal fortunes it meant much, for from this delay came his removal from command and the end of his active military career. This second of the three rides which the Plumed Cavalier of the Confederacy made around the Army of the Potomac, was his greatest raid. The cost was trifling and the results were substantial.

There was little interval between the return of the cavalry from its Chambersburg raid and the resumption of active work in front of its army. Taking the cue from their opponent, two reconnaissances in force to determine if the Army of Northern Virginia was still in the Valley were undertaken by the Federals on the 16th of October. One of these under General Hancock advanced from Harper's Ferry toward Charlestown, being opposed by Munford's brigade, which compelled the deployment of the Federal force, but eventually retired before it beyond Charlestown, which was occupied by Hancock's column until the afternoon of the next day. The other column, under General Humphreys, was confronted by Stuart, with Fitzhugh Lee's brigade, a brigade of infantry, and on the 17th by Hampton's brigade. General Humphrey's cavalry did not seek conflict with their enemy, and his column returned to Shepherdstown on the same day. These Federal columns, however, ascertained that Lee was still before them in the Valley, which was their object.

For the next two or three weeks there were numerous contacts between the opposing cavalries, as in the performance of its duty in front of its army one would clash with the other. Fitzhugh Lee's brigade was now greatly reduced in effective strength by scratches and grease heel among the horses, which seem to have affected the Federal cavalry about the same time. As Lee's army marched south before the Army of the Potomac, Stuart with his brigade and some artillery went by Snicker's Gap into Loudon County, on the

night of the 30th of October being near Bloomfield. A picket of Federal cavalry at Mountsville was routed by them next morning. In the pursuit of these men by the Ninth Virginia Cavalry it encountered Bayard's Federal brigade at Aldie. When the remainder of the command arrived, a mounted fight took place in a narrow road. The Federals retired for the time being, but that night both contestants withdrew, Stuart going on the 1st to cover the front of Hill's infantry near Union and Philemont. Advancing through Union, the cavalry advance guard met the Federal cavalry, and was driven back upon the main body, but was not pressed farther that day. On the 2d they still occupied the same front. That day the battle of Union occurred between the weak brigade of less than a thousand men under Stuart, and Pleasanton's command of a cavalry and an infantry brigade of about double the number of men. The cavalry of Stuart was dismounted, and fought from behind stone fences with such steadiness that the Federal commander mistook them for infantry. The day was stubbornly contested, but they were forced back for over a mile before dark, and that night bivouacked near Upperville.

In case of a Federal advance southward, Stuart had been instructed to proceed along the eastern base of the mountains, observing and delaying them as he could. He now knew that the Army of the Potomac was so moving, but determined to divide his command, sending part to Piedmont and retiring with the remainder to Ashby's Gap, which it was desired should be kept open for Jackson's infantry corps. Pleasanton had been reinforced by another cavalry brigade, and next morning advanced against the cavalry near Upperville, and by afternoon had driven them out of the town. Three regiments were sent by Stuart to Piedmont to guard his trains, and with the other two he retired from Upperville toward Ashby's Gap. That night a Federal brigade having followed his three regiments toward Piedmont, the other two were sent after them, and expecting to be met by Hampton's brigade near Ashby's Gap he retained with him only a small picket. By a movement of the main army the necessity for the cavalry holding Ashby's Gap had passed,

however, and Hampton's brigade was diverted toward Markham's Station on the 4th. Through a misunderstanding the three regiments which had been sent to Piedmont the day before retired from there on the advance of the Federal brigade before mentioned, going toward Markham Station. When the two regiments that were sent later arrived near Piedmont they found it in possession of the Federals, but making a detour united with the remainder of the brigade, and by the morning of the 4th reached Markham's and engaged with the Federal cavalry. There was a sharp fight, but the Confederates were obliged to retire, and went to Barbee's Cross Roads, where Stuart joined them, and Hampton's brigade arrived on the night of the same day.

The battle of Barbee's Cross Roads occurred on the 5th, an affair of more importance than the events of the preceding few days. The Confederate right was partially turned by two of the Federal regiments; another came against their left, and a fourth was launched against the center. On the left the Federal colonel met a mounted charge of the First North Carolina by dismounting part of his men behind a stone wall, which gave him a protected front and flank fire into the charging force and threw them into confusion. Taking advantage of this state of affairs, the mounted portion of his regiment countercharged with success. Stuart, convinced, as he says, that the whole affair was a demonstration to divert his attention from the Federal movement on Warrenton, ordered Hampton's brigade to retire by the Flint Hill Road and the other by the Orleans Road. There was no pursuit.

In the next few days there were minor engagements at Amissville and Corbin's Cross Roads. The cavalry of the Army of Northern Virginia had made a gallant record in delaying the southward march of McClellan. While Stuart had been operating in the country around Aldie and Upperville, destined to see harder fighting in the campaign of the next year, Colonel Chambliss, with three regiments which had not yet come under Stuart's command, was occupying the country between Warrenton and Fredericksburg. Both armies were now moving down on opposite sides of the Rap-

pahannock towards Fredericksburg. There was much skirmishing, covering and guarding fords, but the cavalry took little part in any operations of importance. The brigades of Hampton and Fitzhugh Lee picketed the upper river, while the brigade of W. H. F. Lee, now a general officer, operated on the lower Rappahannock.

On November 27th, Hampton, with several troops of his brigade, crossed the river at Kelly's Ford, and in a two day's raid surprised and captured a Federal cavalry picket at Hartwood Church. Two weeks later, with about five hundred men of his brigade, he made another raid towards Dumfries, and followed it by a third on the 17th of December in the same region. Both raids were made in extremely severe winter weather, and both were successful in bringing about small captures, though the weather was exceedingly trying on his troops. The terrain at Fredericksburg precluded any use of cavalry in that sanguinary conflict. Fitzhugh Lee's brigade picketed the fords of the Rappahannock above the Confederate left, while W. H. F. Lee was in prolongation of the Confederate right. Between the 26th and 31st of December Stuart, with the brigades of the two Lees and Hampton, made one of his characteristically showy raids near Annandale, the Occoquon and Fairfax Court House, returning after some captures by way of Middleburg and Warrenton to Culpeper Court House, having produced no results worth mentioning, except to make the Federals uneasy for their communications, and to demonstrate the skill with which he and his cavalry could thread their way through a region fairly swarming with Federal cavalry and infantry posts.

And thus the year ended. The cavalry laurels for the year 1862 rested largely with the Confederates. They had proved that they realized the advantage of aggressive handling of their mounted force, and all through the year had used their cavalry with effect. Their organization was better than the Federal, and their appreciation of the cavalry function more correct. Besides screening, reconnoitering and picket duty, they had charged in battle, and fought dismounted when occasion demanded, had inaugurated the raid as a feature of modern war, and had been successful in two great raids and numerous small ones. The cavalry of the Army of Northern Virginia had increased in numbers and efficiency. It was better armed and better mounted than at the beginning of the year. Its morale was fine, with pride in its past achievements, and fair hopes for the coming year.

1863.

The cavalry of the Army of Northern Virginia, like its Federal opponent, after Fredericksburg passed the winter of 1862–63 in picketing, outpost duty and frequent skirmishes. The winter was a very severe one, which did not, however, prevent the activity of the cavalry. The cavalry of each army was watching the fords of the Rappahannock River which divided them. In the first six weeks of the new year a number of unimportant skirmishes took place. The Southerners with pride in the achievements of the previous year, were daring and aggressive.

Early in February, Fitzhugh Lee's brigade, which had been wintering in Caroline County, went to Culpeper where it relieved the brigade of Hampton in picketing the upper Rappahannock. Late in the month, under orders to reconnoiter the Falmouth Road, Lee with four hundred men crossed at Kelly's Ford and turning eastward drove back the Federal picket at Hartwood Church, skirmishing with Averell's cavalry. Two Federal divisions, backed by the Reserve Brigade, were sent after them, but the Confederates spent that night north of the river and next day made good their return to the south side. Three weeks later, however, the Federal cavalry for the first time became conscious of its power, and the Confederate cavalry had to learn the lesson of caution and that its opponent had well nigh graduated from the conditions that had retarded his progress the year before. This lesson was learned at the battle of Kelly's Ford, fought March 17th. General Fitzhugh Lee's cavalry was near Culpeper Court House in the angle formed by the Orange & Alexandria Railroad and the Rappahannock, and Averell with three thousand men was sent to cross the

river and destroy them. At Kelly's Ford the river was obstructed and his passage contested by sharpshooters on the south bank, who delayed his passage for an hour and a half. But the crossing of the swollen stream was finally effected and the Federals came on a half a mile west, when they saw the gray clad troopers of Lee advancing to the attack. Averell now dismounted a force of sharpshooters behind a stone wall which connected the points where his right and left rested and held his mounted reserves on either side of the road, while on both his right and left a regiment was dismounted to use carbine fire. The Third Virginia regiment charged in column of fours down the stone wall, using the pistol across it. This regiment and another then tried to force the Federal right, but failed and rejoined the remainder of the brigade. Meanwhile a charge from the Federal left had been met by three regiments. As the two regiments which charged the Federal right retired, it exposed the left flank of this force, which was in turn charged by the Federal cavalry. This drove the Confederates out of the clearing, but the withdrawal was creditably made. The proportion of numbers had been about two to one in favor of the Federals. Lee made a new stand behind Carter's Run, dismounting his men in line across the road by which he had retired, and covering his front with mounted skirmishers. The Federals followed him, but coming to the edge of the clearing which lay in his front, began dismounted fire and did not advance farther. After some time, there being no apparent intention on the part of the Federals to come on, Lee sent his whole line to the charge without reserves. Bearing in mind the doctrine that cavalry victory will rest with the side that throws in the last formed reserves, this seems to have been indiscreet, but no harm resulted from it, and General Lee probably knew his opponent. Two regiments were on the right of the road and met with stubborn resistance, but pushed their charge to the Federal guns, fought to a standstill there, and retired without pursuit from the cavalry in their front. On the other side of the road three regiments charged to the dense woods and drove everything before them.

The fight thus ended, and the Federals withdrew and recrossed the river without molestation, but without having accomplished the destruction for which they came. The Confederate losses, however, were quite severe. Both Generals Stuart and Fitzhugh Lee report on this fight that the Federals whenever hard pressed fell back to the protection of their artillery and dismounted men, indicating a disinclination on their part to measure weapons with the Confederates in the open ground.

From the battle of Kelly's Ford until the opening of the campaign of Chancellorsville, there were many skirmishes with the Federal cavalry, some of them of considerable importance, generally near some of the fords of the Rappahannock or along the Orange & Alexandria Railroad. The deplorable condition of the Federal cavalry as turned over by General McClellan to his successor in the previous November was not much improved by that officer, and its effective force had generally been powerless when opposed to the strong and efficient cavalry of the Army of Northern Virginia. Better days were now dawning for the Federal cavalry. General Hooker appreciating the fact that the cavalry had a higher function than furnishing orderlies and escorts, and his organization of the Cavalry Corps of the Army of the Potomac just previous to Chancellorsville furnished the Confederates an opponent approaching their own efficiency, and destined to contest the future on more equal grounds than had been the case in the preceding year.

The first independent operation of the new cavalry corps was the Stoneman raid, which was to interpose between the Army of Northern Virginia and Richmond, destroy railroads and inflict general damage. To Averell was given the task of drawing off the Confederate cavalry to the north, leaving Stoneman free in his dash to the Confederate rear, and Buford's brigade was accordingly sent to Kelly's Ford. Fitzhugh Lee's brigade was now up near Salem, on the Manassas Gap Railroad, and did not return in time to take any part against the Stoneman raid. The force available to oppose Stoneman amounted to two regiments and part of another. Kelly's Ford was contested with Buford on April 14th by

sharpshooters from the Ninth Virginia and a part of the Thirteenth Virginia. The Federals were unable to force the passage. While this was going on at Kelly's Ford a Federal division approached the ford at the railroad bridge above, and a party crossed the stream. An attack of the Ninth Virginia sent them back to the north side, and there was no further attempt to force the crossing that day. Next morning the brigade of Buford went to the railroad crossing and waited for orders which never came, while the division of Gregg moved to Beverly Ford. W. H. F. Lee sent all available force to the threatened crossing, and by a charge of the Thirteenth and Ninth Virginia drove back some Federals who had already crossed and discouraged further attempts. "Thus ended this expedition. The bold action of two small cavalry regiments, aided by a swollen stream, thwarted the plans of the Federal commander and delayed for a fortnight the advance of the grand army of the Potomac." (H. B. McClellan.)

When the rivers ran down, Fitzhugh Lee's brigade was brought back to Culpeper Court House, Stuart being charged by General R. E. Lee to prevent any further movement against his communications. The small force now available picketed the Rappahannock and Rapidan for over fifty miles. The last days of April came, and the preliminary movements before the battle of Chancellorsville began by the crossing of two Federal army corps at Kelly's Ford on the night of the 28th. Stuart, with his cavalry, waited long enough next day to develop the intention of the Federals, and on reporting it to Army Headquarters was ordered to join the left of the Army of Northern Virginia, giving requisite orders to protect public property along the railroads. W. H. F. Lee, with two regiments, was accordingly ordered to the Rapidan by way of Culpeper, to cover the Virginia Central & Gordonsville, Fitzhugh Lee's brigade being started for Raccoon Ford, leaving a party to harass the Federal advance and rejoin later. At the crossing of the Rapidan the brigade halted for a few hours, one regiment being sent on, and at daylight finding itself at Wilderness Run, from where, after a spirited contest for the bridge, it was driven toward Chancellorsville. The remainder of the brigade reached Wilderness Tavern

in the early forenoon and delayed the Federal advance some hours. Learning that a portion of the Federal army had already gained Chancellorsville, it was now directed on Todd's Tavern, and reached there at dark. Before the brigade dismounted it had the opportunity to engage with a New York regiment which was returning from a reconnaissance. In the darkness of the woods identities were confused, and a pause to wait developments gave the Federal regiment an opportunity to withdraw, each side probably with the impression of advantage gained.

On the 1st of May General Lee, moving toward Chancellorsville, had his right guarded by two of Fitzhugh Lee's regiments while the others operated on his left. Here on the following day the march of Jackson's corps along the Furnace and Brock Roads was so thoroughly screened by Fitzhugh Lee's command that Jackson succeeded in bringing three divisions opposite the Federal right flank. There was no opportunity for the use of cavalry on the battlefield on the Southern side, and Fitzhugh Lee and his forces were then employed in guarding the road to Ely's Ford. By the wounding of Jackson and Hill, Stuart came to the command of Jackson's corps and fought it through the battle.

For some weeks after Chancellorsville there was little activity on the part of either army, each remaining on its own side of the Rappahannock near Fredericksburg. Toward the end of May the brigade of W. E. Jones, which had been doing duty in the Shenandoah Valley since its organization in the previous November, arrived and became a part of Stuart's cavalry division, as did also the brigade with which Robertson arrived about the same time from North Carolina. The division now consisted of five brigades and numbered present for duty about eight thousand men. In the first week of June the main body was stationed near Culpeper Court House and Brandy Station, with pickets at the never-ending duty of holding the fords of the upper Rappahannock. The remainder of the Army of Northern Virginia was still south of the river and near Fredericksburg.

On the 8th of June General Lee requested authority of his government to make the invasion of the North, and, an-

ticipating its approval, made Culpeper Court House his first objective, from whence a northeast road ran towards Washington, and a northwest road led to the Valley of Virginia. By the night of the 8th two corps were there, a third still facing the Federals at Fredericksburg. The cavalry division was to begin its serious work the next day beyond the Rappahannock, and the commanding general that afternoon reviewed his cavalry near Culpeper, it being noteworthy that, careful of their strength for the arduous weeks ahead, he would not allow them to pass at the gallop. That evening the brigades moved to be in readiness for the morrow. Hampton's brigade returned to its camp between Brandy Station and Stevensburg. Colonel Munford, in command of Fitzhugh Lee's brigade, was to guard the upper river, and crossed to Oak Shade beyond the Hazel River. W. H. F. Lee's brigade was stationed on the road to Welford's Ford. Jones' brigade was on the Beverly Ford Road, with the artillery, about two miles from the ford; and Robertson's a little further south and west, picketing the lower fords. All were to march early on the 9th.

General Hooker suspected Lee's intentions, and directed a cavalry reconnaissance to ascertain if any Confederate infantry had arrived near Culpeper Court House. On the night of the 8th Pleasanton, with three divisions of the Federal cavalry corps, some eight thousand cavalry, three thousand infantry and twenty-four guns, bivouacked north of the Rappahannock between Beverly and Kelly's Fords. Next morning Buford's division was to cross the river at Beverly Ford; the other two divisions were to pass by Kelly's Ford; whence Gregg's division was to march on Brandy Station, where Buford's division would have preceded him; and the other division under Duffié was to go to Stevensburg.

General Stuart passed the night on Fleetwood Hill, an eminence half a mile east of Brandy Station and four miles from Beverly Ford. This hill had been his headquarters for some time past, and commanded an open plain all around it, except to the northeast where there was higher ground. He seems to have been unaware of the nearness of the

Federal cavalry; had made merely a nominal observation of the river; and his artillery, for the expected early start on the 9th, was parked in a most exposed place in front of Jones' brigade. It seems strange that such a cavalryman as he was, and one so accomplished in outpost duty, should have allowed himself to be surprised. He had in store for him the lesson which waits to be learned by every man who undervalues his opponent.

At dawn Gregg's division crossed at Kelly's Ford and, preceded by the division under Duffié, took the road for Stevensburg, leaving an infantry brigade near the ford. There was no opposition except from the picket at the river. Following Duffié as far as Madden's, Gregg's division turned toward Brandy Station. Duffié continued to move towards Stevensburg. At the same hour, under cover of a fog and the roar of the dam above the ford, Buford's division crossed at Beverly. A picket at the ford contested the crossing, but was pressed back to the open fields near St. James' Church, where Jones' brigade had spent the night. As it retired a charge was made by a few men of the Sixth Virginia, which was met by the Eighth New York and Eighth Illinois. The artillery which was in front of Jones' brigade should, from its exposed position, have been captured, but for the momentary confusion in the Federal ranks caused by the death of the gallant Colonel Davis who led their charge. The guns were hurried to the woods, leaving their headquarters desk and some papers in Federal hands. The charge of the Sixth Virginia was supported by another of the Seventh Virginia from Jones' brigade. The remainder of Jones' brigade now came into position on the left of St. James' Church, four of Hampton's regiments coming in on the right. W. H. F. Lee's brigade had marched to the sound of the guns and taken a position on the Cunningham farm, threatening the Federal right and rear. He dismounted his men behind a stone wall and had a good field of fire towards the Federal line.

Meanwhile Hampton on the right had extended his line to partly turn the Federal left. The brigades of both Hampton and Jones now advanced, and were met by a stout charge

of two Federal regiments, one of them of the old regular army. Meanwhile Gregg was steadily coming up from the south. Robertson, who it seems had gone to the support of his picket at the ford, arrived after Duffié and Gregg had separated. While realizing the meaning of Gregg's march toward Brandy Station, he also knew of the advance of the other division to Stevensburg; was not able to stop the advance of Gregg without leaving undefended the road in his front, and decided to hold his ground, and was actively engaged with neither. The advance of the Federals from Kelly's Ford had been reported by him to Stuart and Colonel M. C. Butler, and two regiments were sent toward Stevensburg to head off any force aiming for Culpeper Court House. With these two regiments and Robertson's brigade in that direction, no uneasiness was felt about an attack from the way of the lower crossings.

We have seen how Gregg's march had been unhindered by Robertson, and the advance of his division came in sight of the station and of Fleetwood Hill about the time Hampton and Jones were advancing in front of Buford. It was headed for Fleetwood Hill, the key to the battlefield, and now occupied only by a staff officer or two and some orderlies. A single gun was hurried on the hill and opened fire on his advance, and caused a delay to organize for what Gregg supposed would need to be a serious attack. A regiment from Jones' brigade was urged at speed to the hill and contested it with the leading regiment of Gregg's division until the brigade of Hampton and the remainder of Jones' could concentrate there. The position of W. H. F. Lee on the extreme left almost promised him possession of the road by which the Federals had advanced from Beverly, and once occupying this road he would be in rear of the Federal right. The Federal movements necessary to avert this danger gave Stuart the chance to call off Jones and Hampton from their earlier positions and bring them to Fleetwood Hill. "And now the first contest was for the possession of Fleetwood Hill, and so stubbornly was this fought on either side that all of Jones' regiments and all of Hampton's participated in the charges and countercharges that

swept across its face." (H. B. McClellan). A brigade on each side clashed sabers when Hampton came up, and the fighting was furious. In the end Gregg retired to the station and a little while later was driven from there and retired toward Stevensburg. "Thus ended the attack of Gregg's division upon the Fleetwood Hill. Modern warfare cannot furnish an instance of a field more closely, more gallantly contested. Gregg retired from the field defeated, but defiant and unwilling to acknowledge a defeat. He re formed his division on the same ground on which he had formed it, to make the attack, and without further molestation moved off to effect a junction with Buford's division near St. James' Church. He had been outnumbered and overpowered, but when the fighting was over he retired from the field at his own gait." (H. B. McClellan).

When Gregg had retired a new Confederate line was formed, running almost north from the Fleetwood Hill along the slope of the hills which extended to near Welford's Ford of the Hazel River. Due to an open road to his right and rear, W. H. F. Lee had by this time moved west of his position of the early morning, and was on the hills north of the Welford house. A gap between his right and the left of Jones' brigade it was now constantly expected would be filled by Munford with Fitzhugh Lee's brigade from Oak Shade. The withdrawal of W. H. F. Lee to his new position had been unmolested, but with the new line established he was charged from the front. This amounted to little, but General Buford's division had been working to its right until he had reached a position on the Confederate left, where a successful charge would place him in rear of their line of battle. Dismounted fighting and mounted charges now took place there. W. H. F. Lee's brigade lost two commanders, one wounded and the other killed, by 4:00 o'clock. The Federal cavalry in their front were finally driven back. Munford arriving and coming in on the right of this brigade while the fighting was going on. His part of the battle consisted of dismounted fighting. Duffié had now come up from Stevensburg, and the three Federal divisions being united, their general withdrew them. His withdrawal was undis-

puted. The two regiments sent toward Stevensburg under Colonel Butler made a good fight, but one of them became stampeded, and Duffié and his division made their way to Brandy Station instead of going on to Culpeper, and as we have seen, joined Pleasanton and recrossed the river with the other two divisions. The Federals lost in this battle of Brandy Station, or Fleetwood Hill as the Confederates call it, 936; the Confederates 523. The line of battle had been over three miles long, and the combat had lasted for ten hours. With varying honors there had been every kind of fighting to which modern cavalry are trained, but the operations were principally mounted, and the weapon the *arme blanche*. The proportionate loss of officers was very heavy. It was the first great cavalry battle of the war, the dawn of great days for the Federal cavalry and the first dim shadow of coming events for the cavalry of the Army of Northern Virginia. "Never before or since," says General Rodenbough, "were conditions so favorable for the cavalry duel. Men and horses were in their prime, the opposing numbers nearly equal, and the infantry on either side exercising a moral rather than a physical support." The Confederate cavalry had compensated for its surprise that June morning by gallant promptness, but nevertheless it stood checked at the very beginning of the Northern invasion—an unfavorable omen for the eventful summer of 1863. "Had the Federal commander used his opportunities with the vigor and skill that Stuart displayed in the conduct of an obstinate and desperate defense, the Confederate cavalry would have been dealt a blow from which it would hardly have recovered." (General G. B. Davis.) The information found in Beckham's captured desk was of some use to the Federal commander, although it was too early for it to have contained Lee's plan for the Northern invasion, as has been claimed. The sight of Longstreet's infantry in the direction of Culpeper, proclaimed their presence there, to ascertain which had been the principal object of the Federal movement.

The Federal army now conformed to the Confederate movement, and faced them in the new position. Lee's next objective was the fords of the upper Potomac, to be reached

mainly through the valley of the Shenandoah. The Loudon Valley, between the two mountain ranges which traverse this part of the Old Dominion, approximately parallel with the Shenandoah River, and the passes of the Blue Ridge leading out of it to the east, were now to be watched by the cavalry, supported if necessary by Longstreet's corps. Behind this screen Ewell's corps started up the valley preceded by Jenkins' and Imboden's cavalry brigades. Longstreet's presence in the Loudon Valley, besides supporting Stuart, loaned itself to the belief that Manassas and Centerville might be Lee's real objectives, a belief which that general was willing to encourage.

When Longstreet's purpose had been accomplished he was to pass Ashby's and Snicker's Gaps to the Valley. This movement, which made his right flank vulnerable, was to be masked by the cavalry brigades of Generals Fitzhugh Lee, Beverly H. Robertson and W. H. F. Lee. It thus became necessary to occupy the two central passes of the Bull Run Mountains, Aldie and Thoroughfare Gaps, which, on June 15th, General Stuart started to do by sending Colonel Chambliss with W. H. F. Lee's brigade to Thoroughfare Gap, Colonel Munford with Fitzhugh Lee's brigade to Aldie, and Robertson and his brigade to Rectortown, where he was available to reinforce either of the other two. Hampton's and Jones' brigades were guarding the fords of the upper Rappahannock and covered the march of Hill's corps en route for the Shenandoah Valley from near Fredericksburg. Munford, going to Aldie, marched by Salem, Piedmont and Upperville, and reached Middleburg on the 17th, and halted between there and Aldie and pushed his pickets through the pass to the east end. As there seemed little prospect of a Federal advance through Thoroughfare Gap, Chambliss, on the 17th, was sent from there to Middleburg, arriving on the 18th; Robertson, on the 17th, was also sent to Middleburg. An engagement at Winchester, reported to the Federal authorities from the Valley, proclaimed Confederate infantry there headed north, and General Hooker moved to conform to the probable intentions of his opponent, his actions being cov-

ered by the Federal cavalry. He now tried to push his cavalry through to the Valley to get definite information.

The same day, therefore, that Munford picketed the gap of Aldie, Pleasanton received orders to pass it and scout the Loudon Valley and beyond. An infantry division supported him, and he took with him two divisions of the Federal cavalry corps, detaching a single regiment to make a detour by Thoroughfare Gap and the west slope of the mountains to Middleburg. The main body intended to push across the Loudon Valley from Aldie to Ashby's Gap, which opened on the Shenandoah Valley. This was, of course, in ignorance of the position of the Confederate cavalry brigades just described. The regiment sent south was to meet the main body at Middleburg, which expected to be that far on its road to the Valley.

When Colonel Munford, early on the morning of the 17th, had arrived near Aldie and established his picket at the pass, he had with him two of his regiments. Of the other three, arriving later in the day, one regiment was sent past Dover's Mills, to go into camp near Aldie. This regiment was commanded by Colonel Rosser, of Shenandoah Valley fame in another year, and in obeying his orders he encountered the Federals, driving back the picket previously established. Rosser made a saber charge on the advancing Federals, and drove them back to their main body at Aldie, and then stationed his sharpshooters among some haystacks south of the Snickersville Road, and held the remainder of his regiment in support of them. When the brigade commander arrived, he dismounted a small detachment behind a stone wall on the opposite side of the road, with orders to hold fast. The other two regiments mentioned as having arrived later in the day were disposed on the Middleburg Road. Meanwhile, Rosser's supports had found work in repulsing charges made on the sharpshooters among the haystacks. The small detachment on the north of the Snickersville Road was having hard work to hold on, having been charged twice and compelled to fall back to a more advantageous position. Two regiments were sent to that side of the road to share the burden, and three distinct charges were met by them in

countercharges. Two more regiments now arrived on that part of the field. Two squadrons of sharpshooters were dismounted and placed at the stone wall behind which the small detachment had been posted, and commanded the road with the wall in their front and strong fences on either side. The ground was cut up by gullies, and charging formations against the front of the mounted cavalry, their flanks both being protected, were limited to columns of fours. There were several determined charges by the Federals, which were met by the saber in a hand-to-hand road fight. The Federals, as they charged by, received the fire of the dismounted sharpshooters, and on retiring again received it in retreat. A final charge by the Third Virginia drove the Federals almost to Aldie, but it was in turn charged and driven back. The sharpshooters among the haystacks were captured.

The difference in numbers in this battle was about five to four in favor of the Federals. Stuart withdrew Munford's brigade at dark of the 17th. The Federal regiment which had come by Thoroughfare Gap to Middleburg, there ran into the whole Confederate cavalry division, and ceased to exist as a regiment, but five officers and two dozen men regaining the Federal lines.

The 18th passed without other event than preparation by both leaders for the next day. On the morning of the 19th the Federal cavalry moved, and encountered Stuart just east of Middleburg. The Confederates were forced back by a flank attack, dismounted on their right and took up a position half a mile to the rear. That evening Jones' brigade came up and was posted at Union. Next morning Hampton's brigade arrived and replaced that of Chambliss on the Upperville Road, the latter being moved to the left in front of Union. Stuart's five brigades now occupied a north and south line from Middleburg to Union, and faced six Federal brigades, backed by an infantry division. On the 21st one Federal division of cavalry advanced on the Union Road to turn the Confederate left flank, and simultaneously the other advanced to take the attention of their right. This feint became the principal attack, and Stuart was steadily pushed back through Upperville until at twilight, after an all

day's stubborn resistance, he formed line two miles west of Upperville across the pike. On the next day the Federal cavalry sought the Army of the Potomac, and Stuart went to Rector's Crossroads on the pike between Upperville and Middleburg.

In five days' fighting the Federals had reached the eastern base of the Blue Ridge, and Stuart's purpose there had failed to the extent that partly from observation and partly from the determined character of his resistance, the Federals were assured that Lee's infantry was moving northward through the Valley.

In his place on the right flank during the march of the infantry from the Rappahannock to the Potomac, General Stuart was a pioneer in a then new cavalry field—cavalry screening on a large scale. This duty had been well done, and now at its close there were two alternatives for passage of the Potomac to rejoin the infantry: one to cross at Shepherdstown, just below the infantry and artillery and behind them; the other to cross below the Federal army and join the infantry in Pennsylvania by as short a route as the other and over better roads, to other advantages of this plan being added the consternation such a movement would produce at the Federal capital. Much discretion had, from the nature of his duty, been entrusted to General Stuart in his position on the right flank, and that it was still given him is evident from the fact that General Lee twice approved this ride to the Federal right which Stuart three times recommended, notwithstanding that to General Lee many objections to it must have been apparent. What either General Stuart or General Lee had in mind as possible to be gained in compensation for the risk that General Lee would be without the information his cavalry could give him, or that Stuart's cavalry, which could not be replaced in the whole South, might be captured or annihilated, must have been something far beyond what was actually accomplished.

The Army of the Potomac were now veterans. Many thousands of such men were not liable to be stampeded by the picturesque daring of a few thousand cavalrymen. The responsibility for this detour has been discussed for forty

years, but it seems it can hardly be shifted from General Lee, the man in command, who could have had it otherwise had he so wished, and who gave such discretion to Stuart, though through the discretion imposed it descends in limited degree to the latter. General Lee's adjutant general says that while so trusted, Stuart was expected to maintain communication with the main column, and "especially directed to keep the commanding general informed of the movements of the Federal army." General Fitzhugh Lee, who saw all of it and was part of it, but who writes after the fact, says Stuart, with his experience, activity and well known ability for such work, should have kept himself interposed always between the Federal army and his own, and while working close on Meade's lines, have been in direct communication with his own army commander.

However, on June 24th, two days before the Army of Northern Virginia crossed the Potomac into Maryland, Stuart left over half the cavalry with the main army, and with the brigades of Hampton, Fitzhugh Lee and Chambliss, the very flower of the Southern cavalry, set out on the famous detour to the right, a project alluring to the Plumed Cavalier in its brilliancy, but destined to waste the strength of his men and horses in a tiresome march, to deprive his general of his unrivaled skill and ability and of all information regarding the position and movements of his enemy, and to mark the turning point of the high tide of the great rebellion.

The selected brigades were assembled at Salem on the night of the 24th, leaving the brigades of Jones and Robertson to protect the right and rear of the last infantry corps, now making its way down the Shenandoah Valley, "with full instructions as to following up the enemy in case of withdrawal and joining our main army." (Stuart's report). The command started at 1:00 A. M., on the 25th. At Haymarket an encounter with Federal infantry shunted them south by way of Buckland Mills and Wolf Run Shoals crossing of the Bull Run. Information of this infantry movement was sent, but probably never reached General Lee. On the 27th the command reached Dranesville, having passed

Fairfax Court House with a sharp skirmish the day before. That night saw the dangerous passage of the Potomac at Rowser's Ford accomplished, and morning found them in Maryland. After a brief rest the command went to Rockville, Hampton's brigade taking a shorter road by Darnestown, and there captured a hundred and twenty-five wagons loaded with Federal supplies, and cut the telegraph wires. Six miles east of Rockville the column turned north, General Stuart then believing he was east of the Federal right. They marched all night, and just after dawn reached Hood's Mill on the Baltimore & Ohio Railroad; destroyed some track, cut the wires and burned the bridges at Sykesville. That afternoon by 5 o'clock, still unmolested, they reached Westminister and halted for the night, men and horses being well nigh tired out.

By this date, the 29th, the Confederate infantry had reached Cashtown and Fayetteville, Ewell's corps being preceded by Jenkins' and Imboden's cavalry brigades from the Potomac to Chambersburg for information and supplies.

In the progress of events Hooker had been superceded by Meade, who on the 28th headed his line of movement for Frederick, northeast of him, placing his cavalry to the right and front. A division of cavalry made up from the defenses of Washington was given to General Kilpatrick, who was detached on the 28th and sent east to intercept Stuart's command. On the 29th this division camped at Littletown, seven miles from Hanover, Stuart being that night, as we have seen, at Westminister, which is ten miles from Hanover. The two commands were now close enough together that each should have known of the other's presence. Stuart, seldom lacking in the service of security and information, was aware of Kilpatrick's proximity, but the latter was unsuspecting. Early next morning his rear was just passing through Hanover as Stuart's advance entered the town. The tired Confederate command was strung out guarding over a mile's length of wagon train captured at Rockville. Kilpatrick missed one of the great opportunities of the war.

Aware of Kilpatrick's nearness and the great danger to his command, Stuart had disposed of it to guard against an attack from his left front. Chambliss marched in front of the captured wagons; Hampton brought up the rear and Fitzhugh Lee guarded the left flank. General Kilpatrick had blundered into the position least favorable to the use of the formation in which the Confederates were marching, and his rear guard was able to repulse the attack made by their advance, but lost its pack trains. The Federals formed line south of Hanover, and the two cavalries faced each other all day without action. That night the Confederates marched by the right to Jefferson on the York Road, hoping for news from Ewell's Corps. From there they turned north to Dover, from where, after a short halt on the evening of July 1st, they kept on towards Carlisle, still groping for news of the infantry. Carlisle was held by the Federals, and learning for the first time of the retrograde movement of the main army toward Gettysburg, the tired cavalry now turned south, marched all night, and next morning was at Hunterstown. Kilpatrick having come north from Hanover, had also turned toward the sound of the cannon, and at Hunterstown encountered the rear of Stuart's column under Hampton. They fought all day and at night bivouacked there. Stuart and the other two brigades reached General Lee at Gettysburg on the evening of July 2d, and Hampton joined them next morning.

As has been well said, "Every circumstance that might have contributed to a different result at Gettysburg, will be judged in the light of the final catastrophe, and from this point of view the capture and retention of the long wagon train was a mistake. Comparatively, it was an unimportant capture, and the delay in bringing it in but multiplied the woes due to this unfortunate absence from the proper place by increasing the number of days that Lee was without due information. Unhindered, the column would probably have passed Hanover on the 30th in front of Kilpatrick and been with the infantry that night. The prisoners taken were also an encumbrance. Lee had no information from or of Stuart's cavalry from the time of crossing the Potomac on the 27th until they joined on the night of the 2d, and whether from a failure to use six thousand cavalry Stuart had left with him,

or from other cause, had been during this time without accurate information of the movements or position of the main Federal army." (Colonel W. H. Taylor.)

Meade had, it is true, been deprived of his cavalry, except one division, until noon of the 2d, and a portion of an infantry command had been diverted to the east to protect communication with Washington. And it is claimed that the Federal Sixth Corps was kept out of the first two days battles by the presence of Stuart in Meade's rear. The strain on General Halleck's nerves seems to have been considerable, judging from the frantic telegrams he sent to Meade, but matters had progressed to a point where his condition was no longer of much importance. Stuart's adjutant general, and his loyal biographer in after years, says: "It was not the want of cavalry that General Lee bewailed, for he had enough of it had it been properly used. It was the absence of Stuart himself that he felt so keenly; for on him he had learned to rely to such an extent that it seemed as if his cavalry was concentrated in his person, and from him alone could information be expected."

The cavalry of Jones and Robertson left by Stuart in the Upper Loudon Valley followed the last corps across the Potomac. Robertson, in command of the two brigades, to prevent a possible movement of the Federals to the Shenandoah to place themselves across Lee's line of retreat, had maintained nearly thirty miles of outposts from Winchester by Charlestown to Harper's Ferry until it was known that the Federal army had crossed into Maryland. Then in compliance with General Stuart's orders he swept the Valley clear of everything that pertained to the Army of Northern Virginia, crossed the Potomac after the infantry, and reached Cashtown on the 3d.

When Stuart rejoined the army at Gettysburg on the evening of July 2d, he was placed on the York Road behind the left of the Confederate infantry. In the plan for Pickett's assault on the 3d of July, a diversion was to be created by a cavalry attack on the Federal right flank. The right rear of the Federal army was to be struck by the cavalry in coöperation with Pickett's grand attack upon the center. Stuart

moved about noon for the point from which he was to deliver his attack. "This was no mere reconnaissance to develop the position or movement of the enemy. Stuart had with him the main strength and flower of the Confederate cavalry led by their most distinguished commanders. His force comprised four brigades with twenty regiments and battalions and four batteries. ("Battles and Leaders of the Civil War.") There were the brigades of Chambliss and Jenkins, which moved first toward position, followed by those of Hampton and Fitzhugh Lee, with the artillery. They moved two and a half miles on the York Road, turned off to the right by a country road which ran southeast by the Stallsmith farm, where Stuart posted Chambliss and Jenkins and some artillery on Cress' Ridge. The brigades of Hampton and Fitzhugh Lee were placed on the left of the first two; the Confederate line extending opposite the Federal front and a mile from it, and being screened by two patches of woods between Rummel's and Stallsmith's farms. The ground was not unlike that at Brandy Station, the Confederates at first, as there, having the advantage of position. The ridge occupied by Stuart commanded a large area of cultivated fields. Some distance to his front were the farm buildings and fences of Rummel's, which eventually became the key to the field and gave the name to the battle..

The Federal cavalry occupied the extreme right of their line, General Custer and brigade on the morning of the 3d being in position along the Hanover-Gettysburg Turnpike. General Gregg, with two brigades of his division, came in on the left of Custer's position and nearer Gettysburg. Their line faced nearly north, just above and parallel to the Hanover-Gettysburg Road. Their right controlled the junction with this pike of the Low Dutch Road, which crossed it about at right angles and connected the three roads, which, diverging from Gettysburg on the east, take the directions respectively of Baltimore, Hanover and York. The Hanover Pike, along which the Federal line extended, was some two miles north of the one to Baltimore. If Stuart could force the Federals from their line along the Hanover Road and get possession of the Baltimore Turnpike, then by both of these

great roads he would have direct access to the rear of the Federal main line of battle, with no troops intervening. General Stuart sent a strong picket post of a battalion from Jenkins' brigade to occupy the Rummel barn in front of his line.

About 2 P. M., when the sound of the cannonade that preceded Pickett's charge was still echoing, the Federal Colonel McIntosh, commanding one of Gregg's brigades, determined to develop what was in his front, and accordingly ordered a New Jersey regiment to move to the wooded crest to his right front and slightly beyond the Rummel barn. Its advance caused a deployment of the battalion in the barn to a line of fences a little in front of the buildings. The fight was a dismounted one from behind parallel fences. A Pennsylvania regiment was now put into the combat, partly dismounted. The left of the battalion which had originally occupied the barn was reinforced by a dismounted squadron from Chambliss' brigade, and still more on the same flank by sharpshooters from Hampton's and Fitzhugh Lee's brigades, the Second Virginia Cavalry holding the extreme left. On the crest back of the Rummel barn a battery was doing good work, being rivaled by a Federal battery in position on the Hanover Road. This last, with the help of another which now came up, concentrated so severe a fire on the Rummel barn, which during the foregoing events had been filled with Confederate sharpshooters, that the place became untenable and was abandoned. It was at once occupied by the Federal center. These dismounted Confederates, part of Jenkins' brigade, armed with Enfield rifles, were driven back still farther toward the woods, behind which lay Stuart's reserves, and the movement caused his left, composed of dismounted skirmishers from Hampton's and Fitzhugh Lee's brigades, to fall back also. The Federal line correspondingly advanced, and part of a Michigan regiment was sent in on their left dismounted, the balance of the regiment supporting it.

Stuart now determined to try a mounted attack on the Federal right, and a column moved out of the woods and formed for that purpose, but were driven back by the accuracy of the Federal artillery, which had already silenced the

Confederate guns posted on the crest back of Rummel's barn. The New Jersey regiments which had formed the Federal attack on the buildings were now out of ammunition, and they were relieved by the Fifth Michigan, commanded by Colonel Alger, destined many years after to figure in another war. This regiment was armed with Spencer carbines, repeaters, and was itself already short of ammunition. As it reached the line it was to relieve, a dismounted regiment from the brigade of Chambliss came up to support the Confederate skirmishers, and made a hot assault on the Federal line. The troops the Michigan regiment had come to relieve tried to withdraw, but the gallant Confederates advanced again on both flanks. Three times the line wavered backward and forward, the honors lying first with one side and then with the other. Then the Federal line fell back from the fences, and the Confederates pressed them hard. Another Michigan regiment, which now charged mounted from the Federal right, swept back the Confederate dismounted line, but itself retiring was struck in flank by the Ninth and Thirteenth Virginia Regiments of Chambliss' brigade. The Fifth Michigan, they of the Spencer carbines, had now partly mounted, and charged in on the flank of the two regiments just named, only themselves to be charged in flank by the First Virginia of Fitzhugh Lee's brigade. The First Virginia and the two Michigan regiments now had a pistol and carbine fight across a stone wall, the brave Virginians also enduring a flanking fire from each side. The First North Carolina and the Jeff Davis Legion now came to the support of the Virginians, who, still under a terrific artillery and carbine fire from the flanks, were compelled to fall back.

Then came the first breathing spell. Pickett's charge was even then failing in front of Cemetery Ridge. Far over on the Federal left the gallant Farnsworth was riding to his death before the Confederate infantry of Law. Stuart, on the Federal right flank, had been forced by the Federal initiative into a defensive fight instead of the offensive action for which he came. So far there was little advantage on either side. Both had gained, and in turn lost. The Con-

federates still held the key to the field, the Rummel buildings, and had so far outweighed their antagonist in numbers at each particular point. Now the Plumed Cavalier brought out his last reserves, the superb brigades of Hampton and Fitzhugh Lee, and made the final supreme effort to turn the fortunes of the day for the Lost Cause. It was the moment for which cavalry wait all their lives—the opportunity which seldom comes—that vanishes like shadows on glass. If the Federal cavalry were to be swept from their place on the right, the road to the rear of their center gained, now was the time. On the result of the charge he was to make hung the fate of the Army of the Potomac for Gettysburg; the victory in the last battle the Confederacy was to fight north of Mason and Dixon's line; more, the very fortunes of the Confederacy itself. It was about 3 o'clock on that July afternoon when the columns began to appear in the open, eight gallant regiments, taking their places for the charge. "In close column of squadrons advancing as if in review, with sabers drawn and glistening in the bright sunlight, the spectacle called forth a murmur of admiration." The banners of Hampton and Fitzhugh Lee fluttered in the lead; the gait increased; orders could be heard; it was the most dramatic charge of cavalry ever made on American soil. Every artillery gun within range opened on them with shell and canister, and they charged true for the batteries. The First Michigan, led by its colonel, with the gallant Custer at his side, charged squarely from the front to meet them. The Fifth Michigan charged in from one flank, parts of the First New Jersey, Third Pennsylvania, and scattered men from other Michigan regiments, charged in with McIntosh on the left flank. No more desperate conflict characterized the cavalry fighting of the days of Murat and La Salle. It was hand-to-hand, terrible strife, all weapons and strength possible being used. With both flanks pierced by charges, and facing one from the front, the column split and melted, the Southern cavaliers were scattered and routed and driven back to the woods beyond Rummel's farm. Stuart re-formed his men, established new lines and skirmished with some semblance of energy,

but there were no more charges; the serious work of the day and summer was over, and the Confederate tide was receding.

As the darkness fell, Stuart returned by the York Pike and prepared to guard the retreat of Lee's beaten army to the Potomac. The battle of Rummel's Farm had lasted four hours and the casualties had been about ten per cent. of the numbers engaged. The importance of this battle on the Federal right flank at Gettysburg cannot be measured by casualties or by numbers engaged. The battle of Gettysburg is generally regarded as the turning point of the rebellion. It had wavered for two days in the balance. Had the Confederate horsemen gained the rear of the line of battle, there is small reason to doubt that the Federal army would have been struck by panic; Lee would have swept on to Philadelphia, New York, Washington; who shall say what might have followed? Who can be sure that we should have been a united nation to-day?

While the fight at Rummel's farm was going on, the brigades of Robertson and Jones were busy on the Confederate right. Robertson had moved from near Berryville on the 1st, and reached Cashtown on the 3d. One regiment of Jones' brigade was left near Harper's Ferry, which reduced his brigade to three regiments. From Cashtown they were sent to Fairfield to guard the trains, and en route encountered a Federal regular regiment. The Seventh Virginia charged this regiment, the Sixth United States, but getting a severe dismounted fire on each flank, broke and fled. The fight was redeemed, however, by the Sixth Virginia, which charged boldly and routed the Federals.

The 4th was a day of quiet for both armies, the Confederate commander preparing for the retrograde movement. Fitzhugh Lee's and Hampton's brigades were ordered to march by way of Cashtown, guarding that flank, and to bring up the rear on the Williamsport Road, on which the trains guarded by Imboden's command were to travel. Jenkins' and Chambliss' brigades under Stuart's personal direction were to go by way of Emmittsburg, thus guarding the left flank. Robertson near Fairfield had been ordered to hold the Jack Mountain passes and was now informed of the move-

ment through Emmittsburg which it seemed probable would be held by Federal cavalry. It was daylight on the 5th when the columns entered Emmittsburg. There it was learned that Federal cavalry had passed through north the afternoon before. Considering the marching infantry, it seemed likely that this cavalry could do no damage unless by passing Oeiler's Gap and intercepting the trains, which were moving down the Greencastle Pike, toward Williamsport. Stuart accordingly determined to keep on by Cavetown and try to intervene should the Federal cavalry try to pass by Oeiler's Gap. When the column reached the mountain pass it encountered Federal cavalry. The two brigades were divided, one going towards Leitersburg and the other to the left toward Smithtown, but the one which went to the right retraced its steps and after dark followed the other through the mountains.

The opposing force was the cavalry of Kilpatrick, which after the passage of the gap, retired to Boonsboro. Next morning Stuart, whom Jones' brigade now joined from toward Fairfield, set out for Boonsboro, believing that Kilpatrick had gone there. That day Buford joined Kilpatrick at Boonsboro, and it was planned that the former should make for the trains at Williamsport, while the latter attacked Stuart, thought to be at Hagerstown. When Stuart had reached Cavetown he sent Jones to hold Funkstown. Chambliss had gone straight from Leitersburg to Hagerstown, and Robertson's brigade took the same route, both, as Stuart says, together forming a very small command. Stuart himself, with Jenkins' brigade, went by Chewsville towards Hagerstown. When he reached Chewsville he learned that the Federals were nearing Hagerstown in force and that Chambliss needed help. Jenkins' brigade was accordingly hurried on, but arriving found the Federals in possession. Stuart pressed them vigorously, hoping to divert them from the trains at Williamsport.

When they got Hagerstown cleared, the Federals retiring toward Williamsport, artillery firing was heard in that direction. The cavalry, with the exception of the commands of Hampton and Fitzhugh Lee, under command of the latter,

Hampton having been wounded at Rummel's farm, and Baker having his brigade, were now at Hagerstown and were hurried in pursuit. They overtook them and successful charges were made by the Ninth and Thirteenth Virginia. A stand made by the Federals was rendered untenable by the dismounted fire from Jenkins' brigade, and being dislodged and pressed by the mounted troops, they made a counter charge which was met by the Fifth North Carolina and repulsed. The Eleventh Virginia backed up this charge with another, using the saber, and routed the Federals. They were so pressed that the force at Williamsport gave up the capture of the trains and withdrew at night. Fitzhugh Lee and his two brigades reached Williamsport by the Greencastle Turnpike about that time. On the 7th, the Seventh Virginia, against its old opponent of Fairfield, the Sixth United States, redeemed itself, and forced them to fall back.

Lee's army was now north of the Potomac, swollen by summer rains, waiting for it to fall, and from the 8th to the 12th the cavalry covered its front. There was sharp fighting, generally dismounted, on these days between the Federal and Confederate Horse, in which "both parties claim the victory, and with apparent sincerity." (H. B. McClellan.) On the 12th, the infantry being intrenched, Stuart uncovered their front, but the Federals did not attack. Jones' brigade was now sent south of the Potomac to guard the communications through the Valley. The army was crossed on the night of the 13th, the cavalry taking the place of the infantry in the trenches. Fitzhugh Lee's brigade held the line of Longstreet's corps; Baker with Hampton's brigade that of Hill's corps; while those of Chambliss and Robertson's held the line of Ewell's corps. The crossing was successfully made, and by the morning of the 14th the cavalry had followed the infantry.

Baker was now ordered to picket the river from Falling Waters to Hedgesville, the remainder of the cavalry being sent toward Leetown, Robertson going to the fords of the Shenandoah. On the 16th, to attack a body of Federal cavalry between Leetown and Shepherdstown, Fitzhugh Lee's and Chambliss' brigades were sent toward the latter place,

Jenkins from Martinsburg toward the same point, while Jones was notified to coöperate from near Charlestown. Lee and Chambliss drove the Federals to within a mile of Shepherdstown. Jenkins' brigade came up and supported them. The fight was a dismounted one and lasted until nightfall, and during the night the Federals retired toward Harper's Ferry. A day or two later Baker's brigade was forced back from Hedgesville. The Federals east of the Shenandoah, which was a torrent from rains, were now moving south to interpose between the Army of Northern Virginia and its capital. Longstreet's corps was sent to oppose this movement. His advance was cavalry under Robertson; the rear of Ewell's corps which followed being brought up by Baker's brigade, and Jones' being left to picket the lower Shenandoah as long as was necessary, and then to follow the main body. The other three brigades tried to reach Manassas Gap, but the Federals already held it.

By the 25th the Army of Northern Virginia was again on the line of the Rappahannock. This line was occupied in rest and quiet until about the middle of September, when it passed behind the Rapidan. The Army of the Potomac marched to occupy Culpeper County about the middle of September, preceded by its cavalry, which crossed at Kelly's and the fords above it on the 13th. Jones' brigade, under Lomax for the time, was attacked near the old field of Brandy Station and pressed back. Stuart's whole command retired by night to the Rapidan. The next day the Federal advance reached the river and a small combat took place on the north bank between some of them and the Sixth Virginia Cavalry.

There were many skirmishes in the following weeks in the same old region, which had so long been the stage for cavalry action. There was a spirited encounter at Jack's Shop on the 22d, resulting from an advance made by Buford's division from Madison Court House. Stuart's charges had no effect, nor did subsequent efforts dismounted; and while engaged in front the Confederate leader received word that his left had been turned, and his retreat by Liberty Mills Ford cut off. He had a narrow escape for his command, but

managed by extreme boldness to make good his retreat to the ford and escape across the Rapidan.

On October 9th General Lee began the Bristoe campaign by moving by his left, leaving the Rapidan, and on the 10th his infantry were passing through Creglersville and Russel's Ford, on the Robertson River. In screening this line of march, Fitzhugh Lee's division, with some infantry, remained at Raccoon Ford; Hampton's division, under the corps commander, went to the right flank of the army. The night of the 9th the latter division was at Madison Court House. Next day one brigade preceded the infantry toward Woodville, and two brigades went toward James City.

From Russel's Ford the Federal picket was driven back to Bethsaida Church, where their reserve was attacked by one brigade in front and the other in the right and rear, and routed. Near James City the division of Kilpatrick was met, but the two cavalries went into position facing each other, and beyond skirmishing, the day saw no action on the part of either. The Federals left that night. On the 11th, leaving one brigade at James City, Stuart reached the neighborhood of Culpeper Court House with five regiments, where he found Kilpatrick's division had preceded him. He was badly outnumbered and made no attack, but waited. Fitzhugh Lee with his division, when the infantry left, had occupied the line they vacated. On the 11th a reconnaissance from Stevensburg by Buford's division was attacked by him, driven across Raccoon Ford, and followed with sharp fights at the ford and Stevensburg. Buford made for the Rappahannock, with Lee following him toward Brandy Station.

When Stuart was facing Kilpatrick at Culpeper, he heard the sound of the firing toward the Rapidan, guessed what it was, and withdrew his command and started for Brandy Station, hoping to join Lee there. The Federal commander saw his movement and also started for Brandy Station, the two bodies of cavalry moving at the trot and nearly parallel to each other. Two regiments of Stuart's command were detached to attack much larger bodies of the Federals that appeared to be separated from the main force. Two North Carolina regiments, moving through a lane in column of

fours to support one of these attacks, were charged with the saber by a Federal squadron, and broke and ran in wild flight, although they had on that same day done good work in other charges. A regiment was sent against the flank of the attacking squadron and routed it, but the time gained placed the Federals in possession of the Fleetwood Hill.

Fitzhugh Lee was now coming up in pursuit of Buford, ignorant of the fact that Stuart and his command were converging on the same point. His lines formed parallel to Kilpatrick's advance as the Federals came galloping up in front of Stuart, and Rosser's regiment charged in flank as they passed. With his command and that of Fitzhugh Lee joined, Stuart attacked the Federals around Brandy Station. They were now united under Pleasanton, and some of the scenes of that other battle of the 9th of June were reënacted on the old field. Lomax's and Chambliss' brigades were dismounted and formed the Confederate right, gaining a cross-fire on the Federal left, as a simultaneous frontal attack was made by the remainder of the command. It is stated that the Fifth, Sixth and Fifteenth Virginia Cavalries each made five distinct charges in the desperate conflict that ensued. Fleetwood Hill, as before, proved the key to the field, and the Federals held it so strongly that Stuart ceased to attack. Lee's division moved by its left, which threatened the Federal communication with the ford, and they withdrew and at dark crossed the Rappahannock. The Confederates spent the night on the hard fought field. The following day, the 12th, the brigade which had been left at James City was ordered to Culpeper Court House, and leaving Rosser with his regiment to the oft-done duty of picketing the river, the remainder of the command left for the front of the army, which was now moving on toward Warrenton.

So successful had been the cavalry in screening the movements of the army that the Federal general was now under the impression that it had halted near Culpeper Court House, and he accordingly directed three infantry corps and a cavalry division on that point, seeking battle. A very successful delaying action against this advance was consummated by Rosser and Young. The former delayed them until

almost night, falling back to Culpeper. To this point Young had brought the brigade from James City, and their combined fire prevented further advance that night. By a long line of campfires that night, and the rapid movement to and fro of one regimental band of music, the impression of a large force was given the Federals.

Meanwhile, Stuart moving for the front, had sent Lee's division to cross at Foxville, while he, with two brigades, moved on toward the Warrenton Springs. When at James City on the 11th, he had sent the Eleventh Virginia to Rixeyville on the Warrenton Road; on the 12th this regiment was making an unsuccessful attempt to dislodge two Federal regiments at Jefferson, when Stuart and the main body arrived and routed them, the actual fighting being done by two regiments. Two regiments were now sent to cross the Rappahannock above, while Stuart advanced to force the ford at the Springs. It was defended by men in rifle pits, supported by a mounted brigade and artillery, but the ford was forced, the bridge repaired, and the Federals driven back. Two brigades bivouacked that night in Warrenton. On the 13th Lomax's command was sent on a reconnaissance to Cattlett's Station, the other two brigades waiting for the ammunition wagons.

Warrenton Junction being held by the Federals in force, Lomax halted at Auburn where, late in the afternoon, he was joined by the other brigades. His command was there left to guard the rear, while the other brigades under Stuart marched for Cattlett's Station. Three miles from Auburn, the road passing from the woods into a clearing, Stuart beheld the march of a large part of the Army of the Potomac. The corps in front of Culpeper had been recalled, and others were marching parallel to the railroad. The advance had passed through Auburn after Stuart left there, and Lomax had retired toward Warrenton. Turning his command to return to Auburn the discovery was made by Stuart that they were between two marching columns of Federals. The hilly country and the darkness sheltered them from discovery through the night. The situation was an extremely perilous one, and it was an uneasy night for

General Stuart. Next morning, however, the columns were well past, and though discovered, he was able, after a slight engagement, to pass his command to the rear of the Federal position.

After the battle of Bristoe Station Lee's advance ceased, but there was a contact between the opposing cavalries for some days. There were skirmishes at Bull Run, Manassas, Groveton and Frying Pan Church. On the 18th, Stuart with Hampton's division was at Buckland, supported by Fitzhugh Lee's division at Auburn. Kilpatrick's cavalry and an infantry command were trying unsuccessfully to force the passage of Broad Run. It was now planned that Stuart should retire and draw the Federals after him in pursuit while Lee's division should interpose between them and Broad Run. Kilpatrick, however, left Custer's brigade at Broad Run before pursuing, and when Lee came up expecting to gain the rear he was opposed in the characteristic Custer style. According to agreement, at the first sound of the guns Stuart's command was faced about, Hampton's division fell upon Davies' brigade, Gordon's brigade took the road, and Young and Rosser charged on the flanks. The brigade of Davies was completely stampeded, and the two commands raced for the ford at Broad Run. Custer got his brigade off without serious disorder, but lost his headquarters wagons and personal baggage and papers. The pursuit was continued on the Gainesville and Haymarket Roads until the sentries of the Federal First Corps were reached. The 20th found the cavalry en route for the main Army of Northern Virginia, which was again on the line of the Rappahannock.

There was now a little respite before Meade endeavored to force the passage of the Rappahannock. As they retired the Confederate army had destroyed the railroad from Bristoe Station to the river. After repairing the railroad the Federals crossed at Kelly's Ford and did some damage, General Lee now withdrawing behind the Rapidan River and preparing for winter quarters. Late in November General Meade's Mine Run campaign began, but produced little activity for the cavalry of either side beyond the time honored occupation of guarding the fords of the intervening

rivers. The Army of the Potomac crossed the Rapidan on the 26th and moved toward Orange Court House. Next day their march was delayed by Hampton's division at New Hope Church, and the Confederate army left its camps to intrench Mine Run. In the afternoon Rosser, now a brigadier general, with a brigade attacked and destroyed a large ordnance train in the Federal rear and made some other captures. Two days later Hampton's division met that of Gregg and fought an engagement at Parker's Store. The two armies faced each other until December 1st, when Meade transferred his army north of the Rapidan, and both armies went into winter quarters.

The year had witnessed the cavalry of the Army of Northern Virginia at its best in efficiency, and at the greatest numbers to which it attained. It had successfully screened its army on a large scale, had preceded their advance on Northern soil, and had guarded their return in defeat south of the Potomac. It had, for the third and last time, circled the Army of the Potomac, had caused consternation in Washington, and had employed nearly all the Federal cavalry in trying to intercept it; but it had also been absent, half of it and its leader, from two of the three great days at Gettysburg. It had by its very efficiency educated an opponent, no longer lacking in confidence, in initiative or pertinacity, who had during the year clashed with it at Kelly's Ford, Brandy Station, Aldie, Upperville and Rummel's Farm, as a foeman worthy of its best steel. Its prestige was lessening through the increase of that of its antagonist. The name of Stuart had for rivals those of Gregg and the dead Buford; while for Hampton and Fitzhugh Lee, Custer and Merritt had risen. The resources of the South were already failing. Her currency was depreciating more and more, and her cavalry feeling the effect of no pay for man or mount. Horses were becoming scarce and worn out, and there were no more remounts from Northern soil. While her wealthy antagonist was establishing horse depots and a cavalry bureau, and sending its cavalry in turn to be remounted and refitted, and even then having trouble in keeping its cavalry supplied with mounts and equipments, the Southern cavalryman be-

tween campaigns was trying to recuperate his foot-sore and skinny charger as best he could individually, or to replace him by a visit to mortgage his home and buy another at a fabulous price in the worthless currency of his government.

Constantly under the saddle, ungroomed and unfed, suffering from footrot and scratches, as a mounted force the cavalry of the Army of Northern Virginia had seen its best days, and was probably already looking forward to the inevitable, which few doubted after the defeat on the Federal right flank at Gettysburg on the afternoon of July 3, 1863.

1864.

In January, General Fitzhugh Lee, with a large part of the cavalry of the Army of Northern Virginia, raided into Hampshire and Hardy Counties, West Virginia, of the tier of counties which borders on the Shenandoah Valley. The object of the raids seems mainly to have been supplies, and after securing some and destroying some wagon trains the command returned to Virginia. The severe winter weather had caused considerable suffering among them. Late in the same month General Early raided the same counties to try and capture the garrison of Federals at Petersburg and to destroy the Baltimore & Ohio Railroad. These objects were neither of them attained, but his cavalry under General Rosser captured a large wagon train, and the whole command safely withdrew from the State.

In February, Fitzhugh Lee and his command were in camp near Charlottesville, when General Custer raided Albemarle County in the last days of the month. Custer came within three miles of Lee's camp but made a hurried withdrawal, managing, however, to burn the bridges over the Rivanna River and to destroy some property. As Custer neared Stannardsville in the next county north of Albemarle, by a misunderstanding of orders, his command divided. The portion with which Custer was, about one thousand men, was charged by the First and Fifth Virginia Cavalries, led by Stuart in person, and at first the advantage was with the Confederates, but a successful countercharge from Custer's men drove the Virginians back. Custer eluded the force which concentrated at Banks' Ford and crossed the river.

On the 28th of February, when Kilpatrick started to raid Richmond and liberate the Federal prisoners confined there, he headed south from Stevensburg; there being at the same time a demonstration made on the Federal right to divert attention from his movements. Some infantry were thrown forward to Madison Court House, and that night Custer with fifteen hundred men left there for Charlottesville, where he arrived on the afternoon of the 29th without molestation. Late in the afternoon Stuart hearing of this movement, with Wickham's brigade marched in the same direction. The sound of firing told that an engagement was going on at Charlottesville, but before the brigade could reach there, word was received that the Federals had left, and Stuart turned his command north in the hope of heading his enemy near Stannardsville. About daylight next morning the Confederates reached the road on which Custer's command was retiring, and found that one portion had passed. They waited on their horses in the sleet for the main body. When Custer came up he ordered a charge, and pushed aside Stuart's cold and hungry command with ease.

Meanwhile Kilpatrick's expedition was going on. On March 1st, he was engaged in the defenses of the Confederate capital, but at night retired by the Meadow Bridge Road and camped at Atlee's Station. His original advance under Colonel Dahlgren had gone on to the James, had turned toward Richmond, and on March 1st was on the opposite side of the city from its chief. That day General Hampton, with a part of Gordon's North Carolina brigade, moved south from Hanover Junction, and after night surprised Kilpatrick's camp and drove him from it. The latter made good his escape with his command, but Colonel Dahlgren made a wide detour to Gloucester Point. The Confederate cavalry kept touch with him, and on the 3d he was ambushed by about one hundred and fifty men of the Fifth and Ninth Virginia Cavalries near King and Queen Court House. He was killed, and his command surrendered. Later in March the Fifth and Ninth Regiments were in King and Queen

County on the Peninsula, and were driven from their camp by a brigade of infantry and some cavalry from the Army of the James. The camp and considerable property were burned.

The late spring of 1864 found General Lee's army intrenched for eighteen or twenty miles along the Rappahannock from Barnett's to Morton's Ford. Below the latter small bodies of horsemen watched the fords; the main body of the cavalry lay along the river near Hamilton's Crossing below Fredericksburg, where forage was still abundant. There was little done by the Confederate cavalry in April, except to gather from its quarters of the winter toward where the spring campaign was to open north of their capital. The Federal cavalry had undergone the most important change of its career. It had acquired General Sheridan as a leader, and he had already submitted to General Meade the doctrine that the cavalry should be used to fight cavalry.

The crossing of the Rapidan on May 4th commenced the campaign of 1864 in Virginia. The Federal cavalry preceded this move, and the cavalry of the Army of Northern Virginia was concentrated on its right on the Catharpin Road. General Stuart now had under his command two divisions: that of Hampton composed of the brigades of Gordon, Young and Rosser, and that of Fitzhugh Lee containing the brigades of W. H. F. Lee, Lomax and Wickham. As late as the morning of the 5th, two of the brigades were just arriving from Hamilton's Crossing. At 8 o'clock A. M. that day Rosser's brigade met a brigade of Federal cavalry at Craig's Meeting House, and drove it back two miles to Todd's Tavern. Next day Hampton's division met Custer's command at the intersection of the Furnace and Brock Roads, and about the same time Fitzhugh Lee's division encountered that of Gregg at Todd's Tavern, in both of which engagements the advantage at the close lay with the Confederates. That afternoon, when General Meade was about to draw in his cavalry, it was again attacked by the Confederate horsemen, but they were repulsed. They were now working toward the left of the Federal cavalry. When the latter were drawn in from Todd's Tavern and the Brock Road in front of the

Furnaces they were closely followed by the Confederates. On the morning of the 7th Custer had an engagement with them at the Furnaces and drove them back toward Todd's Tavern. Here General Sheridan, with two divisions of cavalry, attacked those of Hampton and Fitzhugh Lee, and pushed them along the Spottsylvania Road and back upon the Shady Grove Church Road (Catharpin), the division of Fitzhugh Lee retiring along the Brock Road and Hampton withdrew along the Catharpin Road. They barricaded against the Federals, but their works were charged and taken. On the 8th, Wickham's brigade at Spottsylvania Court House, unable to hold its own against three times its number, was driven out by Wilson's division. But for the presence of Lee's division on the Brock Road the night of the 7th, the Federal Fifth Corps would have been in position at Spottsylvania by daylight of the 8th. Its march was preceded by Merritt's cavalry, who found Lee's men disputing every foot of the road. They had barricaded by felling trees across the road, and in the darkness Merritt was able to make no progress.

The historic interview between Meade and Sheridan, in which the latter, with a confidence justified by later events, announced that he could whip Stuart if he was allowed to do so, resulted in his getting the opportunity. He was ordered to proceed against the cavalry of the Army of North Virginia, and to finally, if his supplies became exhausted, touch Haxall's Landing on the James River, and communicate with the Army of the James. The Federals started on the 9th, and passing by the Confederate right, aimed for south of the North Anna River. The cavalry of the Army of Northern Virginia, soon alive to this movement in rear of Lee's army and toward the Confederate capital, under Stuart followed them across the Ny, Po, Ta, and North Anna Rivers, continually pressing their rear guard, but unable to bring the raiding column to a stand. The cavalry available for this duty were Fitzhugh Lee's division and Gordon's brigade, General Hampton with Rosser's and Chambliss' brigades remaining on Lee's left flank. The passage of the Ta was near Tarald's Mills, and Wickham's brigade attacked here the Fed-

eral rear guard under Davies, being, after several rattling charges on either side, eventually repulsed. On the 10th the same policy was pursued. There was a fight near Beaver Dam Station, the Federal rear guard being again attacked.

These annoyances did not stop the main body, Sheridan moving steadily on and leaving his rear guard to fight its own battles. Near Beaver Dam Station, however, General Stuart, with Wickham's and Lomax's brigades, under Fitzhugh Lee, left Gordon's brigade to harass the Federal rear, made a forced march southeast by way of Hanover Court House, and then on a parallel road, to get his force between Sheridan and Richmond. That evening a Federal brigade, detached to Ashland Station on the Fredericksburg Railroad, had a fight in the town of Ashland with the Second Virginia Cavalry. Next morning, the 11th, the Federals, who had the night before camped south of the South Anna River, were harassed from its north bank as they started, by Gordon's brigade. Fitzhugh Lee's division, marching on the parallel road, had reached the main road to Richmond, and now held Yellow Tavern at the crossroads, about six miles from the city. They had a strong position across the road, disputing the Federal advance in that direction, and threatening their flank if they tried to pass them further west. They dismounted behind temporary breastworks, except one regiment, the First Virginia, which had distinguished itself on the right flank at Gettysburg the year before, which was held as a mounted reserve. Lomax's brigade constituted the left and Wickham's brigade the right of the line. Two Federal brigades attacked. Their onslaught was desperately resisted. The Fifth Virginia had but three officers unhurt after this attack and the countercharge, and left the body of their colonel in the Federal lines. A third Federal brigade under Custer had been sent to come in on the Federal left beside the two mentioned. There he had found it necessary to dismount two regiments to drive the dismounted Southerners. This was successful, and was followed by a mounted charge from two more Federal regiments on that flank, which lost two Confederate guns, and drove back the right for a quarter of a mile before they could rally and re-form.

In this attack the Confederate dismounted troops were backed by a mounted charge of the First Virginia, led by the Plumed Cavalier himself. In the charge General Stuart received a mortal wound while doing the work of a captain or a major, or at most a colonel, and he was taken to Richmond and died next day. He had won his place in history, but his loss was incalculable to his cause. He received his death wound as he would no doubt have chosen it—in the joy of conflict, leading the fiery charge of his Virginians, defending the capital of his government, and his name will be a proud one to the American cavalryman of either North or South as long as the nation shall endure.

After Stuart's wound the entire Federal dismounted line advanced, and carried everything before it. The Confederates retired by way of Ashland to Mechanicsville, on the north side of the Chickahominy, and left Sheridan between them and Richmond. Next day the Federals were south of the Chickahominy, but finding it impracticable to go further in the direction of Fair Oaks, Sheridan sought to cross the river at Meadow Bridge to the north side. The division of Lee from Yellow Tavern had come there during the night of the 11th and were now at the bridge, in a strong position on a hill, with a skirmish line thrown forward dismounted, and artillery commanding the bridge. General Merritt was ordered to repair the bridge and drive the Confederates from their position.

It seemed to Fitzhugh Lee a chance to retrieve in part the misfortunes of the past few days. If he could detain the Federal cavalry on the south side of the Chickahominy until the infantry from Richmond, only a few miles away, could come up, the situation was a serious one for them, and Sheridan might be given a ruinous blow. Lee did all in his power to give the infantry this chance, but Merritt repaired the bridge, and crossing to the north side the Federal cavalry drove the Confederates from the position. They retired from that vicinity, and Sheridan and his force started down the north side of the river, the only further molestation for the time being an attack on their left flank by a Confederate cavalry detachment near the old scene of the battle of Gaines'

Mill. It was learned on the 17th that the Confederate cavalry were returning to their main army. Sheridan's raid, as far as contact with the Confederate cavalry was concerned, was now over. The latter had met the most signal loss in its history; had been drawn away from its army, and had retarded the new cavalry general of the North but little.

Probably due to his intention to use his cavalry in connection with his infantry maneuvers, and partly to the fact that upon Stuart's death there was no one man whose services lifted him far enough above his fellows to make him the undoubted heir to Stuart's cavalry corps command, General Lee had, on May 14th, ordered that "the three divisions of cavalry serving with the army will constitute separate commands, and will report directly to and receive orders from the Headquarters of the Army." This divisional organization continued to the end of the war, though at times the seniority of Hampton and Fitzhugh Lee practically made them commanders of the cavalry as a whole, and some Confederate writers speak of it as the Cavalry Corps. The three divisions referred to in General Lee's order were commanded by Hampton, Fitzhugh Lee and W. H. F. Lee; the division of the latter being made possible by the arrival of General M. C. Butler with a brigade of 4,000 men from South Carolina.

The Army of the Potomac began crossing the Pamunkey in the last week of May, preceded by its cavalry covering the crossings, and collisions with the Confederate Horse began again. On the 27th a troop of Confederate cavalry at Hanovertown Ford opposed Custer's crossing there, and half of it was captured. Gordon's brigade of W. H. F. Lee's division at Hanovertown met Custer there with an entire Federal division. Gordon made a gallant resistance, but was so outnumbered that his command was routed and driven to Hanover Court House, being pursued as far as Crump's Creek. The divisions of Hampton and Fitzhugh Lee were now near Hawes' Shop, where, on the 28th, the Federal division of Gregg, which had been ordered by Sheridan to determine the position of the Confederates, attacked them. The Federal division, when within a few hundred yards of Hawes' Shop, found the Confederate cavalry dismounted behind

breastworks of fence rails, etc. The position was an important one, being directly in front of the Army of the Potomac; and its later possession by the Federals disclosed the fact that the Army of Northern Virginia was moving by its right flank. The position was stubbornly held in a battle that lasted from morning until late in the evening. Gregg's division was reinforced by the brigade of Custer, which dismounted and charged the Confederate center, which was weak, and together with Gregg's division succeeded in driving the Confederates from the position, leaving the Federals in possession of the dead and wounded and the works. The other two brigades of the division which came up with Custer demonstrated with Gregg, but did not actively participate.

On May 30th Sheridan was sent to capture Cold Harbor, which was necessary to the Federal line of supply from the White House, and was held by Confederate cavalry and infantry. They had pushed their line to the Matadequin Creek, their front being parallel with the Pamunkey River and to the Federal line to the White House. There was a severe fight on the Matadequin when Sheridan advanced on the Old Church Road, in which Butler's South Carolina brigade, which was armed with rifles, bore the burden. The fight was very stubborn, but the Confederates were by superior numbers pushed back and gave way to Cold Harbor. This important point was defended behind breast-works of rails and logs on the Old Church side. The Federal cavalry moved against it on the 31st, and that afternoon it was taken, after a desperate defense by the dismounted cavalry and infantry by whom it was held. Notwithstanding the struggle he had to take it, Sheridan moved out of the place, but was ordered to reöccupy it and did so.

On the 1st of June Hampton, with Rosser's brigade, came up from the direction of Hanover Court House, and being joined by part of W. H. F. Lee's division from toward Richmond, interrupted a Federal cavalry brigade trying to destroy the railroad at Ashland Station. The Federals were driven out and pursued by Hampton until dark. Two days later Barringer's brigade of W. H. F. Lee's division was at-

tacked on the old battle ground of Hawes' Shop by a Federal division and driven back.

When the infantry relieved the Federal cavalry on June 1st, its main body proceeded down the north side of the Chickahominy River toward Bottom's Bridge, where the Confederate cavalry had preceded it and was now with its artillery holding the south bank of the river at that point. The Federal cavalry withdrew, however, without further collision between the two forces for the time being.

The Confederate cavalry now south of the Chickahominy was in such a position that when the projected movement of the Army of the Potomac to the James River took place, it could dispute the crossings of the river with them, and so delay them at the different fords that the infantry of the main army could be shifted to oppose the movement. This opportunity was thrown away when on June 8th, two divisions were set in motion in the direction of Gordonsville toward which the Federal cavalry had started on June 7th, on the Trevilian raid. Hampton at once set out for Gordonsville and Charlottesville with his own division, ordering Fitzhugh Lee to follow as soon as possible with his division. On the night of June 10th his division camped at Green Spring Valley, three miles northeast of Trevilian Station, on the Virginia Central Railroad; and Fitzhugh Lee's was near Louisa Court House, some six miles east of the station. During that night Hampton learned of Sheridan's location and determined to attack him next day at Clayton's Store, about midway between Trevilian Station and Carpenter's Ford. His division was to move by the station; that of Lee by direct road from Louisa Court House to the store. Hampton expected to prevent Sheridan reaching Gordonsville by passing his left. At daylight Hampton reached the station, moving towards Clayton's Store, Butler's and Young's brigades on the main road, and that of Rosser moving in the same direction by a road farther to the left. Fitzhugh Lee also marched for the store, but they were several miles apart, in a wooded country, and in the presence of an energetic and enterprising opponent. Hampton's advance was attacked by the division of Torbert before the

two Confederate commands united. Custer was ordered by Sheridan to make for Trevilian Station to attack the led horses and do such other work as opportunity might afford, and he passed between Hampton and Lee without molestation and reached the station. Hampton was driving Torbert in his front when he was suddenly attacked in rear from the direction of Trevilian. Rosser's brigade was sent against Carter's from the front and forced him back against Lee, who by this time was coming up. Led horses, wagons and prisoners, which had fallen into Custer's hands, were now recaptured, and with them Custer's headquarters, wagons and baggage. Torbert's two remaining brigades had dismounted and advanced against Hampton, and a gallant fight took place, but Hampton's division was finally driven from the field. Meanwhile Lee's division was defending itself on the Louisa Road against Gregg's strong division, but was forced back toward the court house.

Notwithstanding that the advantages of the day belonged to the Federals, Sheridan's progress toward his junction with Hunter had been stopped by Hampton's skeleton brigades. That night Hampton's division made its way toward Gordonsville, and Lee's made a detour to the west and joined him by morning. The next day one Federal division destroyed the railroad back toward Louisa Court House, while the other, under Torbert, reconnoitered in the direction of Gordonsville, where he was trying to secure a by-road over Mallory's Ford, as Sheridan's changed plans contemplated returning that way without further effort to join Hunter. Hampton was in position on the road which Torbert reconnoitered, and was attacked by him, the brunt falling at first on Hampton's left, where Butler's brigade was posted. Lee reinforced Butler with Wickham's brigade, while he took Lomax and struck the Federal left flank. The Federals were obliged to fall back about 3:30 o'clock P. M., in confusion. The fight, however, lasted until after 10 that night, Sheridan and Torbert taking the dismounted cavalry of Lomax for infantry. Torbert's dead and wounded were left in Hampton's possession.

The junction with Hunter, which had been General Grant's chief object in ordering the raid, and the successful accomplishment of which should have made untenable the position of the Army of Northern Virginia at Petersburg, had failed. Not only that, but it was evident that Sheridan's plans to march by Mallory's Crossroads which had already cost Torbert's division so dearly, would either have to be abandoned or there would be another battle on the 13th, with doubtful result. Sheridan's corps, therefore, retraced their steps that night over the route by which they came without trying conclusions in another battle, but at a great loss of time and distance. General Hampton's government made him a lieutenant general for the fighting of the 11th and 12th, and the cavalry of the Army of Northern Virginia very justly regarded the fight as one of the proudest achievements of the Confederate cavalry during the entire war.

They now made their way toward the main army, moving down the south side of the North Anna River. On June 21st, when the Federals crossed the Pamunkey, Hampton was on the west side of Black Creek, but went south of the Chickahominy. By the 23d Sheridan had escorted the trains from White House as far as the south bank of the Chickahominy, crossing at Jones' Bridge, having a picket post on the Long's Bridge Road. The Confederate advance coming down south of the river, Chambliss' brigade being in the lead, struck this picket post and drove it in. A reinforcement by infantry enabled the Federals to reëstablish the post, but through this contact the Confederate cavalry had learned that the Federal cavalry corps was south of the river.

On the 24th the road from Long's Bridge toward St. Mary's Church was taken by the Confederate cavalry to intercept the Federal line of march escorting the trains, but Sheridan had, in order to protect his right flank, sent Gregg's division out to St. Mary's Church, with orders to hold on until the trains should be past Charles City Court House. He intrenched in a strong position, but Hampton concentrated all his force against him except Lomax's brigade, which was sent to head the Federal column with the trains near Nance's Shop. The fight with Gregg was a stubborn

one. Late in the afternoon Hampton sent Fitzhugh Lee's division against the front of Gregg's command, while Chambliss' and Geary's brigades attacked its left flank. The fight continued until dark, and Gregg was routed and driven in confusion to within two miles of Charles City Court House. His resistance had, however, saved the trains, but Sheridan was obliged to abandon his plan to reach the pontoon crossing of the James River.

As these events were closing and Sheridan was nearing the James with the Federal trains, General James H. Wilson was trying to rejoin the left of the Army of the Potomac from a raid against the South Side and Danville Railroads. On the 27th part of W. H. F. Lee's division was moving south from Petersburg, near the Weldon Railroad, trying to head off Wilson. When Sheridan was known to have reached the crossing of the James River, Hampton and Fitzhugh Lee were ordered with their divisions to Drury's Bluff, where they arrived on the 26th of June, and next day were directed south also against Wilson, Hampton being sent to Stony Creek Depot, and Fitzhugh Lee following as far as Ream's Station. W. H. F. Lee had followed Wilson closely with his division and brought on an engagement with him at Nottaway Court House, and also attacked his rear at Staunton River. Wilson moved for Stony Creek Depot, where Hampton had preceded him and had arrived on the 28th, finding already there Chambliss' brigade. When Wilson reached the crossing of the Stony Creek and Dinwiddie Court House Roads, he was attacked by Hampton and fought until 10 o'clock that night. He now tried to evade the Confederate cavalry by moving west to the old stage road to Petersburg, and succeeded in withdrawing his first line, but his second was attacked on its left flank by Butler's and Rosser's brigades, while the remainder of Hampton's division assailed it from the front, and separated it for the time from the remainder of his command. Hampton followed Wilson for two miles, guessed his direction and tried to reach the Halifax Road to intercept him should he endeavor to cross the railroad south of Reams' Station, but Wilson moved too rapidly, and Hampton merely struck his rear guard.

When Kautz with a portion of Wilson's command reached Reams' Station on the morning of the 29th, he encountered Fitzhugh Lee's division intrenched there. Wilson's chances now looked desperate, and he destroyed his wagons and caissons and started on a long detour to the east to rejoin the main army. Fitzhugh Lee struck his flank as he passed him, threw McIntosh's brigade into confusion and demoralized Wilson's whole rear. Both Hampton and Lee followed him to the Blackwater, but Wilson had destroyed the bridge behind him and the pursuit ended. The June heat being very severe, his division lost heavily in animals, for which the destruction of the railroads he had raided were a doubtful compensation.

The cavalry had now been fighting almost continuously for two months with the Federal cavalry. That the *esprit* of the Confederate cavalry was diminishing and its strength waning, may be judged from the fact that the offensive was in almost every instance taken by the Federal cavalry. With the exception of Yellow Tavern almost all the fighting had been dismounted, the dense timber of eastern Virginia and the habit of barricading, making it almost impossible to use the saber there.

The day after the battle at Mallory's Cross Roads General Hampton had given permission to General Bradley T. Johnson, with the First Maryland Cavalry and some artillery, to make an expedition to the Potomac, and by suddenly raiding the United States Soldiers Home where President Lincoln was at the time living, attempt to carry off Mr. Lincoln and hurry him to Richmond. When in preparation, General Early came down the Shenandoah, and the expedition of Johnson became merged in that of Early on Washington. Early's cavalry consisted of a division under General Robert Ransom, containing the brigades of Jackson, Johnson, McCausland and Imboden. The attempt to capture Washington was abandoned when Early was in sight of the Capitol dome. Johnson's brigade marched and fought over a hundred hours in four days and a half, cut the wires between Washington and points north, and circled around Baltimore. The object of the expedition (to capture Washington and to liberate several thousand prisoners at Point Lookout, Maryland) had failed, and aside from destroying considerable property and causing great fright in Washington, little was accomplished, the expedition being audacious and showy rather than fruitful.

The dismounted cavalry of McCausland had taken part in the battle of Monocacy July 9th, crossing the river and attacking the Federal left flank. On his return by Winchester and Strasburg, Early was harassed by the Federal cavalry. Crook's division, which was following him on July 24th, was driven back by him to Harper's Ferry, subsequent to which Early sent McClausland's cavalry to Pennsylvania. He burned the town of Chambersburg and made good his escape to Strasburg. The principal result of this second expedition, however, was the determination of General Grant that the Shenandoah should no longer be used as an easy path to a Northern invasion, and he sent Sheridan there to lay it waste. Sheridan left for the Valley August 1st, and two cavalry divisions were sent to operate under him there.

The new command was styled the Army of the Shenandoah, and consisted, besides the cavalry, of two infantry corps in strength. The orders were to mass the command at Harper's Ferry, follow the raiders when possible, and destroy everything that could induce another Confederate raid to the Valley. Sheridan's opponent, Early, besides his infantry, now had with him the cavalry brigades of Vaughan, McCausland, Johnson and Imboden, soon after formed into a division under Lomax. For a number of weeks no important operations were engaged in by either general. There were skirmishes, maneuvering, retreats and advances, but no considerable battle.

On the 10th of August a reconnaissance made by Federal cavalry from Halltown was met by Confederate horsemen, but they were driven back to their infantry, and this performance was duplicated the following day. On August 13th Early was in position at Fisher's Hill, his lines extending clear across the valley, which is narrow at this point. On his left was Lomax with the brigade of Vaughan, McCausland and Johnson. When Sheridan was sent to the Shenandoah, General Lee very early in August had sent the division of

Fitzhugh Lee, as well as infantry, to reinforce Early. Various conflicting rumors had reached Sheridan of the departure and return of this division, but the confirmation of its arrival in the Shenandoah was received through a sharp fight on August 16th between Merritt's division and two of Fitzhugh Lee's brigades at the crossing of the river near Front Royal, in which the Federals were victorious. The next day Lee joined Early near Winchester. On the 25th of August Early made one more futile effort to terrorize the North, and sent Fitzhugh Lee's division to Williamsport, and moved with the remainder of his army to Kerneysville, but two days later his cavalry were holding the outposts of Leetown and Smithfield in front of his army.

There was an engagement near Leetown on the 28th, which, while not important in itself, well illustrates the now developed tendency of both the Confederate and Federal cavalry as regards weapons, and is also an example of the mounted charge in column of fours in country not suitable for cavalry off the roads. A brigade of Confederate cavalry was just out of Leetown, when a comparatively small body of Federals came on a reconnaissance. Both cavalry commanders put their commands to the mounted charge, the Federal with the saber and the Confederate with revolvers. As they neared each other the Confederate cavalry slackened speed to deliver pistol fire, and the Federals struck them with momentum undiminished, and sent them in wild flight and confusion. The pause of the Southern cavalry to fire insured its defeat, its horsemanship and its mount counting for nothing. The charge was made in columns of fours, the walls, fences and broken country making the road the only available terrain for charging. Lomax's brigade on September 3d, near Bunker Hill, charged two Federal regiments of Averell's cavalry squarely from the front, although they were armed with repeating carbines and were behind rail barricades. His attack crossed two fences, and yet he had but few men hurt. The Confederates, however, lost their wagons and beef cattle.

On the 18th Fitzhugh Lee was on the left of the Confederate line near Stephenson's Depot, the brigades of Lomax,

Johnson and Jackson being on the right between Winchester and Berryville. A few days earlier than this Sheridan, who had been hampered by orders from General Halleck to remain on the defensive, concluded the time for activity had arrived, one of Early's divisions having returned to Richmond. Accordingly, on September 19th, the Federal army was in motion at 3 o'clock in the morning. Wilson's cavalry division crossed the Opequan Creek, cleared a cañon through which the Berryville-Winchester Pike runs, and formed a line of battle in front of the Confederate right, and despite the efforts made to dislodge him, hung on until the arrival of the infantry. When they arrived, Wilson moved further to the left and covered the Federal flank. While the Federal infantry was advancing, three Federal cavalry commands converged upon Stephenson's Depot. Wilson's arrival in front of the Confederate right early in the morning had caused General Early to take Wickham's brigade of Lee's cavalry at Stephenson's Depot to secure a line of retreat, so that now that place was defended only by an infantry brigade and a part of the cavalry division. They were outnumbered by the Federal cavalry commands and driven toward Winchester. The country was suitable for cavalry action, and as they retreated, pressed in rear by Averell's cavalry, Merritt charged them in flank and broke the whole Confederate left. This reverse and the success of the Federal infantry on the right compelled the whole line to retire toward Winchester. The Confederate cavalry did brilliant work on the left, but was outnumbered, and the last body of it that rallied there was charged and driven.

When Averell was pressing the Confederate left, the brigade of Wickham, mentioned as having been sent to secure a line of retreat, was sent back to face him, which permitted Wilson, almost without opposition, to advance toward the Valley Pike, to prevent the Confederate retreat. This movement, however, did not succeed, and the beaten army passed on south in the darkness, its rear being covered and capture prevented by Munford's cavalry brigade. General Fitzhugh Lee was severely wounded in this battle. That night Early took position two miles south of Strasburg, at Fisher's Hill, where

the Valley is only four miles wide, and his line stretched across it, and was intrenched. The Lomax cavalry brigade, which was armed with rifles, was dismounted, and prolonged his line on the left, and was the first to give way. The strength of the position induced Sheridan to attempt another turning movement, which, on the 21st and 22d, was successful. Neither cavalry had any important part in this battle. Two Federal divisions had been sent up the Luray Valley, with a plan to cross the mountains and gain the Confederate rear in case Sheridan should drive them from Fisher's Hill. But Munford's brigade of the Fitzhugh Lee division, now commanded by Wickham, held Milford, with the road bridges destroyed, in a rough country, and the Federal cavalry could not pass him, though had they been able to carry out Sheridan's orders, Early's army should have been captured. As it was, they passed on up the Valley, moving via Port Republic to Brown's Gap, in the Blue Ridge. After passing Port Republic the night of the 24th, they were rejoined by the cavalry brigades of Lomax, Wickham and Payne, and reinforced by an infantry division.

There were numerous small engagements between the Confederate and Federal cavalry during and after Early's retreat, notably one at Luray on the 23d, in which the Confederates were worsted; at Waynesboro on the 26th, when Torbert was driven back to Staunton; and several in the vicinity of Mount Crawford and Mount Sidney about the last of the month of September.

General Fitzhugh Lee's successor in command of the division was General Rosser, who, with a cavalry brigade from Richmond, came heralded as the savior of the Valley, and of whom great things were expected. It was hoped, from his previous reputation, that the prestige of the Confederate cavalry, which had suffered in September, would be recovered. His arrival was marked by unusual activity on the part of his cavalry, and when, on October 6th, the Federals fell back down the Valley, devastating it as they went, they were harassed considerably by the Confederate mounted force. It was felt by them to such an extent that Sheridan gave his chief of cavalry an alternative of "giving Rosser a drubbing

next morning or getting whipped himself." That was on the 8th, and the battle of Tom's Brook, a pure cavalry battle, occurred on the 9th.

There was much reason why this fight should be a severe one. The Federal cavalry had a reputation to maintain, and the Confederates one to retrieve. The division of Lee had been largely recruited originally in the Valley, and to the desperation born of mortification and wounded pride at recent defeats was added revenge for devastated homes, among the most powerful motives which move soldiers to deeds of valor. Lomax had been following Merritt on the main pike down the Valley, and Rosser kept touch with Custer on the back road. On the 8th, the day before the battle, Rosser and his division engaged Custer nearly all day, and so persistent was he that the latter, unable to cope with him alone, had to have the assistance of Merritt's division from the main pike.

Tom's Brook was the last great cavalry combat in the Shenandoah. It was almost entirely a saber fight. It began in the early morning when Rosser with three brigades engaged Custer near the crossing of Tom's Brook. Almost simultaneously Lomax and Johnson were engaged by Merritt on the main pike. For two hours there were charges and countercharges. The contest was not yet decided, the Confederate success in the center being compensated for by the forcing back of their flanks. But in the close combat of cavalry with cavalry, the side whose weapons necessitate contact with the enemy, seeks touch with him for their use, and therein for such contests lies the superiority of saber over firearm. The fact that Lomax's cavalry had no sabers gave Merritt an advantage over him. The pressure on the Confederate flanks increased and they gave way and the line collapsed. The Federal line which extended from the back road to the pike charged along its whole length and the Confederate retreat became a stampede, and continued for twenty-six miles up the Shenandoah.

This was practically the finale for the Confederate cavalry in the Shenandoah Valley. It furnished them no more remounts, and no more forage for those already in service.

They lost at Tom's Brook their artillery and wagon trains, and in the face of the approaching winter the comforts accumulated in several years' service were sadly missed and never replaced.

Tom's Brook was one of the most brilliant cavalry battles ever seen on our continent and was decisive. The waning prestige and efficiency of the proud cavalry of the Army of Northern Virginia was thus confessed by General Early in his report of this battle:

"The fact is, the enemy's cavalry is so much superior to ours both in numbers and equipment, and the country is so favorable to the operations of cavalry that it is impossible for ours to compete with his. Lomax's cavalry are armed entirely with rifles, and have no sabers, and the consequence is they cannot fight on horseback, and in the open country they cannot successfully fight on foot against large bodies of cavalry."

After the battle of Tom's Brook there was a lull as far as cavalry operations were concerned. The 19th of October, however, again brought the clash of arms, and the battle of Cedar Creek, immortalized in Buchanan Read's poem, witnessed Federal reverses, the ride of Sheridan and the return of his men to victory. There was no idea on the part of the Federals in their cavalry lines on Cedar Creek that an advance by the Confederates was imminent. On the 18th reconnaissance failed to show anything of them. But at dawn of the 19th, Rosser attacked Custer at Copp's Hill. Lomax from the Luray Valley joined the Confederate right flank and made a determined effort to reach the Federal rear, slowly forcing back the Federal cavalry in his front, but being prevented by them all day from getting to his desired object. A part of Early's plan had been for Payne's cavalry brigade to cross the Shenandoah, march aroud Massanuttan Mountain, recross the river and capture Sheridan at Belle Grove House, but it never materialized. The cavalry of the Army of Northern Virginia was no longer what it had once been. A single brigade on the Federal right frustrated Rosser, and a division kept Lomax from striking the pike

between Middletown and Winchester, as he had been ordered to do.

The morning victory of Early was fruitless for want of an efficient cavalry to follow it up. Had such a cavalry been used on the Federal flank in the early morning Sheridan would have ridden into irretrievable rout. When he arrived on the field at 11 o'clock a charge drove the Confederate cavalry a mile to the shelter of its infantry supports. It only took three of Custer's regiments to hold the Confederate cavalry in check in front, while he charged Early's exposed flank and sent thousands of his soldiers in wild flight beyond Cedar Creek, to such low ebb had the fighting power of the Confederate cavalry come. It joined in the flight of its brothers of the infantry and artillery, and when the day was done the broken fragments of Lomax's cavalry were chased to the fords of Shenandoah. For four days the Confederate cavalry traveled in haste before its aggressive antagonist. The Federal advance came up with Rosser at Fisher's Hall, but he declined combat, and was pursued on through Woodstock to Edinburg.

Early's army assembled at New Market. By the second week in November he was again active and crossed north of Cedar Creek on reconnaissance. On the 12th Lomax was at Nineveh, and Rosser was on the middle and back roads north of the creek, but both were defeated and driven in demoralized retreat south of Cedar Creek. On the 29th of November, Rosser surprised New Creek and took it mounted, making some important captures. In December, Jackson and his cavalry division were forced to fall back from Madison Court House, but joined the division of McCausland at Liberty Mills, and the whole, under the unlucky Lomax, were then defeated by the Federal chief of cavalry Torbert, and driven south of the Rapidan. Rosser and Payne succeeded in surprising Custer's division in Rockingham County, attacking him at early dawn and driving him out of his camps.

In consequence of the Federal movement to the north of the James, to deceive Lee in the last week in July, he had transferred all his cavalry to the same side of the river but one division. Within a week the infantry of Kershaw and

the cavalry of Fitzhugh Lee were on their way to the Shenandoah to reinforce Early. To prevent further force being sent there, and if possible to cause the recall of that already sent, the Federals made a demonstration against Richmond. Some of Lee's infantry and the cavalry of Hampton and W. H. F. Lee were sent to meet this movement, leaving Dearing's brigade the only cavalry in Petersburg. Gregg's Federal division had been left behind when the others followed Sheridan to the Valley, and took part in these demonstrations, meeting the Confederate cavalry at White's Tavern on the Charles City Road and defeating them, the gallant Chambliss being killed. That same afternoon, however, a rally of the Confederate cavalry drove Gregg and the infantry division of Miles back to and across Deep Creek. Two days later when Warren moved against the Weldon Railroad at Globe Tavern, the only cavalry near there to oppose him was the lone brigade of Dearing, but on the 21st Hampton's division, now commanded temporarily by Butler, was sent back to Petersburg from north of the James.

The Weldon Railroad was an important line of supply to the Confederates, and in the efforts of A. P. Hill on August 24th and 25th to prevent its destruction, the troops of Hampton and W. H. F. Lee bore an important part. There was little more cavalry action near Richmond for the month, but when the movements against Lee's flanks were taking place in the last week in September the cavalry again found employment. On the 29th the two divisions and the Dearing brigade were at Petersburg with the infantry under Hill, while on the same day the brigade of Geary, which was north of the James, was engaged on the New Market Road. Late in October in the further movement against the Confederate flanks, the two gallant divisions and the Dearing brigade were on the right flank at Petersburg. On the 27th, Hampton at the Boydton Crossing of Hatcher's Run attacked Hancock's left and rear, and contributed much to the withdrawal of the Federal troops to their original position on the 28th. Gregg was sent to Hancock's left and was fiercely attacked by Hampton's five brigades, but managed to hold on until dark.

Active operations now closed here. Hampton was placed on duty in the South, and his division under Butler was allowed to return to South Carolina to obtain fresh horses and fill up its ranks. In the Valley the cavalry went into winter quarters near Staunton, with the exception of detachments at New Market and Three Top Mountain. The cavalry of both sides was drifting southward to take part in the stirring final scenes of the next spring. The winter weather closed operations for the year.

The year 1864 saw the battle flags of the cavalry of the Army of Northern Virginia many times dragged in defeat. Their great leader had gone down before the black-eyed general from the West, and the laurels for the year were unmistakably won by the Federal. They could no longer stand before the troopers of the North. It was not a question of bravery; of any superiority of North over South, man to man; of any waning of their love for the Cause, the memory of which, a generation after, is still dear to the men who rode and fought behind the guidons of Stuart. Hampton and the two Lees. It was simply poverty against the limitless resources of the North: tired, hungry troopers and worn out and dying horses, against well-fed men and good remounts; worthless Confederate currency against gold and greenbacks; devastated homes against Northern farms untouched by war; six hundred thousand against two million men-at-arms; starvation versus plenty; a weakened group of States, with blockaded harbors giving way before the imperial North, the most powerful nation on the globe, with ports open to all the wide world. There is no wonder that the Southern strength was waning, only that it had lasted so long.

1865.

The winter of 1864–65 was one of unusual severity. The mercury many times went below zero, and snow fell in Virginia to the depth of several inches. The Confederates were threadbare and ragged, and the food was poor and scarce, consisting mainly of corn bread made from the coarsest meal. There was scarcely any meat, their Subsistence Department importing a little from abroad. There was for them no

coffee, tea or sugar, except in their hospitals, and little there. Rosser, in January, showed some activity, and on the 11th captured Beverly, having previously crossed Great North Mountain and taken New Creek, with some prisoners and guns. By February his men had been permitted to scatter to their homes, on account of scarcity of food and forage in the Valley, subject to call when needed. Lomax's men were at Millboro, west of Staunton, where some supplies could still be had, while the two brigades of Fitzhugh Lee's division were sent to Petersburg.

February witnessed Sheridan's cavalry starting south to take part in the final grapple near the Confederate capital. On the 1st of March Rosser, who heard of Sheridan's march southward, called together five or six hundred of his men and tried, by burning the bridges over the Middle Fork of the Shenandoah at Mount Crawford, to delay him, but was driven back to Kline's Mills. Not knowing Sheridan's objective, and thinking to protect Lynchburg, Early rallied his infantry and cavalry, and sent Lomax to Pond Gap to harass him if he turned toward Lynchburg, and ordered his infantry and Rosser's cavalry to Waynesboro, to wait the development of Sheridan's intentions. When the Federal cavalry reached there a gallant stand was made by the Confederates, but it was the beginning of the end, and the entire command surrendered, except General Rosser and a few others, who made good their escape to the Valley, and beyond the Blue Ridge.

Sheridan's cavalry now joined the Army of the Potomac, and all the cavalry of the Army of Northern Virginia, tattered, discouraged, worn out, and many of them dismounted, gathered around their standards for the final struggle before their capital. General Lee had always been opposed to the policy which dictated the holding of certain places regardless of their military importance, and possibly had his ideas prevailed, the war might have been prolonged and the Army of Northern Virginia have made good its escape to the south and west, but true to the wishes of the Confederate President, Richmond was held until it was no longer tenable, and escape was impossible.

When Gordon captured Fort Stedman in March, the cavalry was assigned the task of cutting the telegraph wires and of destroying the pontoon bridges in the Appomattox River. On March 28th the division of Fitzhugh Lee was on the extreme Confederate left, when the commanding general learned that Sheridan was on the Federal left, and guessed that he was about to move against the railroads below Richmond. Fitzhugh Lee with his division was directed to move at once to Five Forks and assume command of all cavalry there, as well as of the infantry supports, and to attack Sheridan in that vicinity. When on the 29th the latter was marching by Dinwiddie Court House against the Danville and South Side Railroads, he encountered at Malone's Crossing of Rowanty Creek the cavalry of W. H. F. Lee and Rosser. That night Fitzhugh Lee arrived at Sutherland Station, and early next morning marched to Five Forks by the most direct road and on toward Dinwiddie Court House. He also encountered Sheridan's cavalry. That evening at Five Forks Rosser and W. H. F. Lee joined him, and Pickett arrived with his infantry, and being the senior took command of the whole.

The cavalry next morning moved again toward Dinwiddie, and met Devin's Federal cavalry brigade, which was coming in the direction of Five Forks. Munford with Fitzhugh Lee's division was left to keep contact with Devin in front, while the divisions of W. H. F. Lee and Rosser moved by way of Little Five Forks, intending to cross and attack Sheridan's left. When W. H. F. Lee crossed, it was in the face of severe fighting, and he was soon driven back with heavy loss. Munford had meanwhile forced back the brigade in his front, and Pickett's infantry interposing, Devin's brigade was isolated and retired toward the Boydton Road. W. H. F. Lee now crossed Chamberlin's Run and formed the right of Pickett's force, and Munford the left. Pickett faced about and met Sheridan's attack in front of the court house, and the battle lasted until dark.

At night it was determined to withdraw to Five Forks, and accordingly Rosser and W. H. F. Lee withdrew at 4 o'clock in the morning, and Munford followed at daylight. General Lee now directed Pickett to hold Five Forks, and he accordingly next morning intrenched along the White Oak Road,

the cavalry of W. H. F. Lee being on the right, that of Munford on the left, dismounted, and Rosser guarding the trains on the north side of Hatcher's Run. The cavalry on the right was attacked by Custer. One of the brigades was dismounted, fighting with the infantry, but with the other W. H. F. Lee advanced to meet Custer, and a brilliant encounter took place, in which Lee maintained his position on the Confederate right. When Pickett was forced into a new position, he directed W. H. F. Lee to withdraw from the field toward the South Side Railroad, covering his dismounted brigade, which he did in good order, though closely pressed by Custer's division. Munford was driven across the ford early in the fight, but mounted and took his division to the Confederate right, from where he was sent north of Hatcher's Run to join Fitzhugh Lee, who was notified of the battle too late to come to the south side. All of the cavalry on the north side now withdrew to the South Side Railroad, where the infantry from the main army joined them to cover the retreat of Pickett's now disorganized command, and to guard that approach to Petersburg. From here they were withdrawn on the 30th, however.

On the 2d of April there was again a hot fight of cavalry at Hatcher's Run. General Lee, now seeing the utter hopelessness of longer defense of the Confederate capital, notified his President that it must be abandoned, and made for Amelia Court House, reaching it on the 5th. His intention was to cross the Appomattox at Farmville and destroy the bridges, and make good his escape toward Lynchburg. As he withdrew on the 2d Fitzhugh Lee, guarding the rear, fought a spirited engagement at the crossing of Namozine Creek. On the 3d he again made a stand at Deep Creek, which halted the Federal cavalry for that night. At Payneville on the 5th Geary's cavalry brigade, guarding the wagon trains, was driven off by the Federal cavalry, and the headquarters wagons of both Robert E. and Fitzhugh Lee were destroyed. The Federal brigade was, however, chased off by Rosser and Munford, under Fitzhugh Lee.

At High Bridge a small Federal cavalry regiment made such a gallant stand against the two divisions of Rosser and Munford that General Lee concluded that his retreat southward was cut off by a large force, and by the time the mistake was discovered the Army of the James had closed up, and he made his detour by Appomattox Court House. General Dearing was killed at the head of his brigade at the High Bridge fight. On the 7th, when Longstreet crossed the Appomattox and marched on Lynchburg, Fitzhugh Lee guarded his rear, crossing the river at Farmville and leaving some force there. That afternoon Rosser and Munford captured the Federal General J. I Gregg. On the 8th the cavalry, all under Fitzhugh Lee, were moved to the front near Appomattox. A conference decided that they and Gordon's infantry should attack Sheridan, who was now in their front, at daylight next morning, and if nothing but cavalry was developed they were to cut a way for the troops behind: but if infantry was encountered General Lee was to be notified.

At dawn Gordon's infantry was formed in line of battle for the last time, just west of Appomattox, the cavalry on his right, the division of W. H. F. Lee next the infantry, Rosser in the center and Munford on the right—a mounted force now dwindled to about twenty-four hundred men. The attack was made at sunrise; but all the world knows that Sheridan's cavalry was withdrawn to the flanks, like the drawing of curtains on a lesser stage, revealing the solid ranks of infantry behind, that General Lee was notified, and four years of fratricidal war were ended. Fitzhugh Lee, seeing the end had come, marched his cavalry toward Lynchburg, where his command surrendered shortly after.

ARMS, EQUIPMENT AND MOUNT.

At first the cavalry of the Army of Northern Virginia had generally the saber and revolver, very few of them carrying carbines, though towards the last the sabers were almost entirely done away with, according to General S. D. Lee, and more and more dependence placed on the carbine or rifle. Some of the more wealthy of the Virginia counties armed their quota of cavalry with pistols when mustered into service, but whole regiments were destitute. Breech-loading

carbines, were procured in limited quantities, never more than enough to arm more than three or four troops in a regiment. The deficiency was generally made up with Enfield rifles. Many Confederate cavalrymen were glad to get even a muzzle-loading double-barreled shot gun, as late as 1862. They carried percussion caps in the pockets of their clothing, and buckshot cartridges in small haversacks of cloth. The gun was steadied by a leather socket attached to the right stirrup leather. The United States cavalry were furnished with the Colt's Army Pistol, and nearly all the cavalry of the Army of Northern Virginia eventually supplied itself with the same arm through capture. In the Gettysburg campaign they were generally armed with the saber and revolver. General Munford describes their first sabers as resembling a grass scythe blade with a leather scabbard. The belt for the saber ran over the shoulder. The question of arms was at all times a serious one.

At first the Confederate cavalry had to use what saddles they could get, no uniform pattern being issued. Many started with the old English round tree saddles, in use on the plantations before the war, and sore backs multiplied with great rapidity. To this saddle they stitched rings for coat and blanket straps. After a while the government furnished an unsightly saddle, which disregarded the comfort of the rider but saved the horse's back. The Confederate trooper who secured a McClellan saddle considered himself lucky, that being by far the best saddle used by them. These were obtained through the fortune of war.

Stuart in his operations had a regular supply train, and his men were furnished with tents. His columns were followed by vehicle transportation. For his longest raids his supplies were limited to what could be carried on the horse, and the ambulances were the only vehicles that accompanied his columns. Horseshoes, nails and forges were difficult to obtain. In the Gettysburg campaign the Federals found that Stuart's men had stripped the country of horseshoes along the route. It is said that it was not an uncommon sight to see a cavalryman leading his lame horse along

while from his saddle dangled the hoofs of a dead horse which he had cut off for the shoes.

At the commencement of the war the Confederate government felt unable to provide mounts for all the cavalry that offered themselves for service. Many mounted companies were rejected. A contract was made with those who were accepted, that the soldier should own and supply his mount. They were mustered in at a fair valuation, and the government was to furnish feed, shoes and blacksmiths, and pay the owner forty cents per day for his horse. If the horse was killed in action the owner was paid the assessed valuation at the time of muster-in. If captured, wounded or otherwise disabled than by killing, the owner bore the loss and furnished another mount on the same conditions, or was transferred to another branch of the service. This kept the cavalry mounted, but at a cost to its efficiency and effective strength through absenteeism that more than balanced what the government saved. After every campaign it was necessary to furlough men in large numbers to recuperate or replace their mounts. A journey home for this purpose, even in Virginia, meant thirty to sixty days. Men who overstayed such passes could not be disciplined, for such delays were unavoidable, and this led to abuses of the furlough, and laxity of discipline resulted. With the cavalry from the other States, South and North Carolina and Georgia, the evil increased in proportion to the distance from the theatre of cavalry action.

The devastation of the Valley of the Shenandoah in 1864 was brought home to the Confederacy more through its cavalry than in any other way, that being the region where very much of the Virginia cavalry was recruited, and from whence it had drawn its remounts. Every method was tried to lessen the evil of absenteeism. Recruiting camps were established for the purpose, but with little avail. The dismounted men were gathered in camps and special officers appointed for them; but there could be no *esprit* to such a body of men. Every man looked and longed for the time when he might be mounted and returned to his troop. "The penitentiary could not be more loathsome to him than

his present condition, and yet even this was better than to give up all hope and consent to a transfer to the infantry or artillery." (H. B. McClellan.)

The want of proper arms and equipment placed the South at a disadvantage which can hardly be overestimated, but the Federal Quartermaster General pays this tribute to the enterprise of the Southern troops:

"The Confederate cavalry are our best customers: they are either taking or stealing our horses by the thousands, for they are not accounted for."

General Munford says:

"When the war ended there was not a first-class cavalryman in our service who was not fully equipped with saber, pistol, carbine and horse equipments, all of which had been issued by Uncle Sam."

METHODS

Although the finest type of the Confederate cavalry was that of the Army of Northern Virginia, there was a partisan character which distinguished it from the beginning; a tendency to individualism, the outcroppings of the cavalier spirit transmitted from ancestors who rode behind Rupert in the cause of a Stuart king. From the first this branch attracted to it the young men of the landowning class; men from the highest rank of Southern society, who appreciated the importance of obedience, and yielded it as readily as they did their lives; men who had ridden from childhood in a country where communication between neighbors and neighborhoods was usually on horseback. Its troopers were ambitious and eager for distinction, and their devotion to the cause for which they fought made it possible to dispense with a very rigid discipline. They were gentlemen riders, with the pride of race and arrogance that characterizes the masters of a subject people. This was the type of cavalry that, under the lead of Stuart, achieved the successes of the first years of the rebellion. As the early enthusiasm waned and the country became more and more impoverished by the war, and it became more difficult to keep the cavalry recruited by the means to which

circumstances limited them, the force took on even more of a partisan character, and proved that it lacked the cohesion to withstand the disintegrating processes of war.

Few cavalry officers will hold a more distinguished place in history than General James E. B. Stuart. He had been an officer of the regular United States Cavalry, and the cavalry he led were organized, and as far as possible equipped, on the regular model. The improvements in firearms, even at that date, had been so numerous that a material change in cavalry tactics was necessitated. "Ignoring the cavalry traditions of the Old World, and seeking the most ready means to meet the end in view, he originated a new method of using mounted troops, and may be said to be the father of the cavalry tactics of the present day." (Colonel Wagner.) For its formations the cavalry of the Army of Northern Virginia used the double rank. The rank entire system was practiced in some regiments until it proved unadapted to their needs.

From the time when Stuart was so necessary to Johnston, before first Bull Run, until he met his death wound in battle, he proved himself a master of outpost duty. "From the very beginning of the war the enemy had shown more wisdom respecting his cavalry than we. Instead of wasting its strength by a policy of disintegration, he, at an early day, had organized his cavalry into compact masses, and plainly made it a favorite." (General Sheridan.) "Though never an entirely independent command, the cavalry was isolated from the first and trained in outpost work, sometimes to the neglect of its proper cavalry instruction. This course was, perhaps, necessary, but it impaired its efficiency when called upon to meet the Federal cavalry mounted." (General G. B. Davis.)

In these duties, as well as in its raids, much of its success is to be attributed to its scouts; and here again appears the advantage of its personnel. Keen and intelligent, quite generally familiar with the country in which it operated, they carried out their duties with a skill to which ordinary troopers could not have attained. General Fitzhugh Lee used a permanent force of twenty-five scouts, which preceded his command in uniform and well mounted. They were specially

selected for daring, intelligence, truthfulness, and knowledge of the country. They hovered around the Federals and within their lines, seeing things for themselves, and reporting all movements. They reported directly to the chief, and were not under subordinate officers.

The raid by cavalry had its origin in the War of Secession. Stuart was its great exemplar; he cut the pattern and set the mould. His boldest and most rapid raids were made with bodies of about two thousand men. His cavalry marched in as concentrated a form as possible, to be at his disposal at once when wanted. On Northern soil he detailed about a third of his men during the Chambersburg raid to seize horses and other property of United States citizens subject to capture, holding the remainder ready for action. From the people of Maryland nothing was allowed to be taken. Receipts were given to non-combatants when property was taken in order that the seizure might later appear as a claim against the Federal government. Individual plundering was at all times prohibited in the most stringent manner. Public functionaries, such as postmasters, mayors and sheriffs, were taken prisoner for hostages. Horses were not changed systematically during a raid, but the captured stock was led at the rear of the column, and when horses gave out under their riders they were replaced from those animals. His marches were very long and very rapid. In the long march on the Chambersburg raid the column was kept at a trot all night. Artillery teams were changed three or four times during the night. Naturally constant effort was made to deceive the Federals as to the direction of the marches. Telegraph wires were cut (operators on Stuart's staff tapped them for information), and false reports were circulated. Information, the destruction of stores, railroads and communications, and damage to the morale of their opponent were the principal results accomplished by these raids. Success is seldom very severely criticised, but when one thinks of the difficulty which attended the keeping of a well instructed, well armed body of cavalry in the field; of how to the impecunious Confederacy every horse was precious, and that their cavalry once lost could not ever again be replaced, it may well be questioned

if the comparatively petty captures made, the excitement produced in the North, or the information gained, was a compensation for the risk of capture or annihilation while on Northern soil. The best work of either cavalry was done in conjunction with the operations of its main army. For such great services the strength and efficiency of men and horses should be treasured and cherished.

The bivouacs of the cavalry of the Army of Northern Virginia were novelties in castrametation. The horses were not picketed in straight lines, but were tied to bushes and limbs of trees, and foraged on saplings and undergrowth.

The Confederates were the first to adopt dismounted fighting for cavalry, their opponents being compelled to follow their lead, and eventually beating them with their own system, combined with mounted action. Much of the country over which the Army of Northern Virginia fought was unsuited to the mounted action of cavalry, and consisted of a succession of strong defensive positions, streams, wooded hills, and thick growth. From the first its cavalry were quick to take advantage of positions for use dismounted, against which it was impossible for the Northern cavalry to contend mounted with any show of success. Troops would dismount, leaving horseholders, and would form skirmish lines, the line being sometimes reinforced to perhaps a man to the yard, but never heavier. Here was the true principle of extended order fighting, which has followed the breech-loader and the magazine firearm, and is the approved method of the soldier of to-day. They had no tools to make intrenchments, but used fence rails, logs, stones, and other natural obstacles, and hugged the ground when necessary. There were sometimes a few axes, but rarely anything better.

On occasion dismounted fighting was in combination with the mounted action of another part of the force, as at Aldie in June, 1863. Sometimes it was the force of circumstances, as when Lomax's cavalry in the Shenandoah Valley, in the autumn of 1864, were armed with nothing but rifles. They could not fight on horseback. Again, as at Poolesville in 1862, when one of W. H. F. Lee's squadrons charged the Federal cavalry, drove it from a crest back upon infantry, and

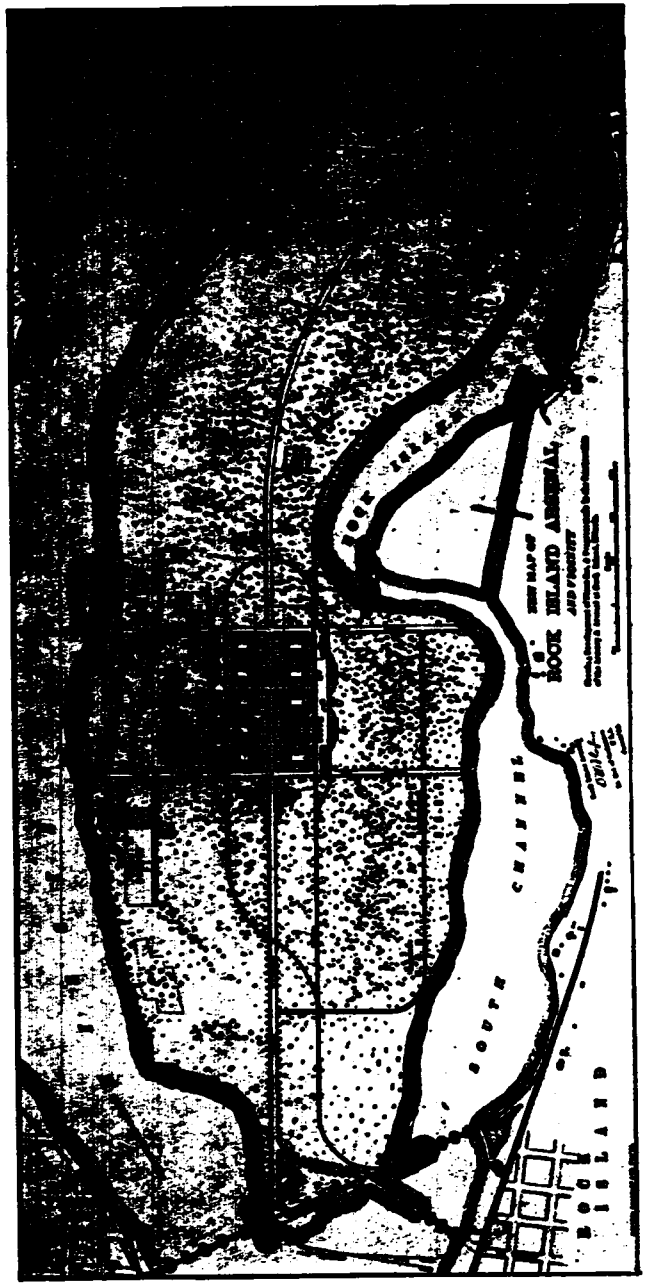
then dismounting, held the crest against that infantry until the artillery came up, showing its adaptability to either kind of fighting.

Nevertheless, while the cavalry of the Army of Northern Virginia was excellent at dismounted action, raiding and outpost reconnaissance, it clashed boldly with the opposing cavalry when opportunity offered. To this the fields of Gettysburg, Brandy Station, Todd's Tavern, Yellow Tavern, Barbee's Cross Roads, the Shenandoah Valley and many another bears witness. There was a constant tendency, however, to use revolvers against the Federal sabers. "Sabers were scarce, and finally were almost done away with in the Confederate cavalry." (General S. D. Lee.) It was the Confederate experience, says the same officer, that the saber was timid before the revolver, and that in many cases the irregularities of the ground compelled the use of the revolver instead of the saber, and yet it should seem that the same cause would have operated on both sides. This predilection for the pistol probably rose from the fact that most Southern men had a knowledge of the use of the pistol when the war began, and they naturally confided in the weapon with which they were familiar. And it is believed that this militated against their mounted efficiency. "They were in no case employed en masse on the battlefield except against other cavalry." (General Fitzhugh Lee.) "The tactical versatility of the cavalry on both sides is shown by the combat at Brandy Station in June, 1863, where a cavalry charge was repulsed by cavalry mounted; an attack by cavalry dismounted against cavalry dismounted and behind cover was checked by sharpshooters in front and aided by mounted charges on the flanks of the assailants; a mounted charge with the saber against dismounted cavalry using fire action and supported by a mounted detachment was successfully made, and two opposing brigades of cavalry met in direct charge with the saber." (Colonel Wagner.)

The American cavalryman, as exemplified on both sides in the War of Secession, has been the standard toward which all cavalry has been trained for a generation, with perhaps too much leaning to the dismounted side of his usefulness.

For while much was due to dismounted fighting; while it was complementary to his mounted action, making him the most self-reliant mounted soldier the world has seen, the cavalry on either side progressed in efficiency in proportion to its willingness and ability to engage mounted; that force being most frequently and uniformly successful, and finally victorious, which was most skillfully handled as a mounted command.

No American can read the story of the cavalry of the Army of Northern Virginia from that July day in 1861, when tales of the Black Horse Cavalry struck terror into the hearts of the Federal recruits at Bull Run, to that April morning at Appomattox, four years later, without feeling proud of his race and country. More gallant cavalry than that in both armies never bestrode horse, nor charged, saber in hand, from the time of Hannibal's Numidian Horse to the days when the cavalry of France stabled their mounts in twenty European capitals. Never was there more pertinacious or fierce fighting done, nor ever terrible casualties more unflinchingly endured. Brave and brilliant; sturdy, strong and steadfast; the best of South, North, East and West; their happy country, over which floats the flag with the ever-increasing number of stars, shall never lack for defenders in her day of danger while song and story shall recite to distant generations the heroic deeds of their ancestors.



ROCK ISLAND ARSENAL.*

By Lieut. Col. STANHOPE E. BLUNT, Ord. Dept., U. S. Army.

General Thomas J. Rodman.

THE beautiful island in the Mississippi River lying opposite the cities of Davenport, Iowa, and Rock Island and Moline, Illinois, was first acquired by the government through treaty with the Indians in 1804, but was not definitely occupied until in the year following the subsequent war with Great Britain, when the military post of Fort Armstrong was established and maintained for twenty years; it gained subsequent renown through the service there of

*The recent establishment at Rock Island Arsenal of a plant for manufacture of the new magazine rifle, model 1903, in addition to the fabrication at Springfield Armory, has so increased its importance, and particularly its relation with the cavalry and infantry branches of the army that it was thought a brief account of the Arsenal would prove of interest, and Colonel Blunt, its commanding officer since March, 1897, consented to contribute.

The illustrations accompanying the paper were kindly loaned the Journal by Mr. B. F. Tillinghast, of Davenport, Iowa, author of "Rock Island Arsenal in Peace and War."

Taylor, Lincoln, Davis and Scott—three Presidents, and the other a candidate for that office.

The fort played its part in the Blackhawk War, and the island and its vicinity still treasure recollections of the noted Indian warrior, who with his tribe often visited it for hunting and fishing and for their council meetings.

During the next two decades the island was several times the subject of official reports recommending its selection for the site of a proposed Western arsenal, but it was not until July 11, 1862, that Congress passed the act authorizing the establishment of the Arsenal and providing the first funds for beginning the necessary buildings. A year later a storehouse was erected (of which, however, not much use can now be made), but little could be accomplished towards the completion of the Arsenal, as the central part of the island was for several years occupied as a military prison, where over 12,000 Confederate soldiers were from time to time confined.

In 1865 General Thomas J. Rodman was assigned to the command, and followed in 1871 by General Daniel W. Flagler, who remained commandant until 1886. To these two officers is mainly due the general plan of the Arsenal as it exists to-day, with nearly all its principal buildings; their conception of the disposition and arrangement of the ten great shops, with the various subsidiary buildings, was an immense advance over the stereotyped plan of all Arsenal construction of preceding years, and in subsequent developments, in response to great demands upon the Arsenal's resources, has proved most admirably adapted for the purpose for which designed.

The island, containing nearly 1,000 acres, is irregular in shape, about two and one-half miles long and three-fourths of a mile across at its widest part. It rises in the center where the shops are located to a height of about twenty feet above the river. It is beautifully diversified with wood and cultivated lawn, and with its twenty-one miles of excellent roads, provides an attractive pleasure ground for the residents of the neighboring cities, as well as the scene of operation for active work by many hundreds of mechanics.

FORT ARMSTRONG.
CONSTRUCTED 1817. EVACUATED MAY 4, 1836.

The main channel of the Mississippi River passes between the island and the Iowa shore, a much narrower branch separating it from the Illinois bank. Across this smaller stream, a short distance above the shops, a masonry dam has been constructed producing, in consequence of the reach of rapids opposite and above the island, a water power of ample capacity, having a head of from seven and one-half to eleven feet, according to the stage of the river, and on the dam, operated by twenty turbines, have been installed three alternating current generators of 1,650 kilowat total capacity, with the accompanying exciters, switchboard, etc., required for their operation. The power thus generated is transmitted by wires placed in tunnels of sufficient size for the comfortable passage of workmen, to over one hundred motors on the ceilings of the neighboring shops, or for the larger machines, directly on the machines themselves.

At present nearly 3,000 horse power is thus provided, which can be increased, if it should ever prove necessary, by utilizing penstocks on the dam not now occupied, and installing the corresponding additional electrical machinery.

None of the navy yards or other arsenals possess this combination of ample water power and electrical transmission, and the development of the power plant to its present really magnificent condition, permitting the greatest economy, with also the greatest facility and convenience of operation, is one of the principal distinguishing features of the Rock Island Arsenal.

The shops comprise ten stone buildings sixty feet wide, built around three sides of a rectangular central court, with fronts 210 feet and wings 300 feet long; eight of the shops are of four stories, the other two of only one, but providing in all over thirty acres of floor space. Seven of these buildings are now occupied by machinery, the other three by the raw material for manufacture and by finished stores. There are also two large storehouses and numerous other small buildings for boilers for the heating plant and for lumber, coal, oil, etc., for officers' quarters, soldiers' barracks, and for the many other necessities of a large government manufacturing establishment.

In the shops over two thousand machines of a great variety are disposed, with the shafting for their operation and the necessary benches, and the other numerous appliances requisite for their occupancy by workmen.

The island is connected with the three neighboring cities by bridges built and owned by the government and maintained and guarded by the Arsenal, and by its own track with the railways that reach them. A trolley line is operated in

MAIN ENTRANCE TO ARSENAL.

connection with the system of the cities to bring to the arsenal its workmen, none of whom reside on the island.

The garrison consists of a detachment of one hundred men, and the post is now officered and operations of its shops directed by a lieutenant-colonel and three captains of the Ordnance Department.

The total cost of the arsenal from its establishment to August 1, 1903, including the erection of the permanent buildings, the acquisition, development and later improvement of the water power, the large bridge across the Mississ-

ippi, and the smaller ones to the Illinois shore, and the purchase and installation of the machinery in the shops, is best shown in the following table:

COST OF BUILDINGS, WATER POWER, MACHINERY, ETC., AT ROCK ISLAND ARSENAL FROM ITS ESTABLISHMENT TO AUGUST 1, 1903.

Commanding Officers.	Period.	Construction, Repair and Preservation of Buildings, Roads, Reservs, Etc.	Construction, Repair and Preservation of Bridges.	Rock Island Water Power.	Machinery and Shop Fixtures.	Total.
Gen. C. P. Kingsbury	1863-65	$ 231,364 72	.....	.....	.....	$ 231,364 72
Gen. T. J. Rodman	1865-71	1,355,455 62	$ 6,664 22	$ 440,506 26	.....	2,302,626 80
Gen. D. W. Flagler	1871-83	4,127,675 24	160,894 74	691,911 47	$ 92,000 00	4,982,481 45
Col. T. G. Baylor	1883-89	201,200 00	96,250 00	322,000 00	44,000 00	663,450 00
Col. J. M. Whittemore	1889-92	69,000 00	182,318 48	101,000 00	25,000 00	377,318 48
Gen. A. R. Buffington	1892-97	47,350 00	315,125 50	67,500 00	47,500 00	477,375 50
Lt. Col. S. E. Blunt	1897-03	161,985 10	26,119 61	252,556 00	874,586 60	1,325,147 31
Total		$6,703,980 68	$797,372 66	$1,775,473 82	$1,083,086 60	$10,359,793 76

This table exemplifies in the expenditure for machinery during the last few years the great development of the Arsenal during and subsequent to the recent war with Spain. Prior to that time less than one and one-half of the large shops was occupied by machinery and used in manufacturing operations, and only between four and five hundred men, with a monthly pay roll of about $22,000, were employed. The appropriations made by Congress had not been sufficient to more than meet the current requirements of the army, and no adequate reserve of finished stores or of material for their production had therefore been provided.

The first necessity of the Arsenal, under the great demands at once made upon it in the spring of 1898, was for machinery and for material, and then for additional employees; but by July nearly three thousand men, with a pay roll monthly of over $175,000, were daily turning out about 6,000 sets of a part of the infantry equipment and nearly that amount of the remaining portion, besides many hundred sets of cavalry and horse equipments, with a large amount of artillery harness, gun carriages, both for field and siege service, limbers, caissons, and the numerous implements, spare parts, and other varied product incident thereto.

These facts, while interesting in themselves, are mainly now of value in proving beyond question what the Arsenal could accomplish in a future war, for which it is now much better equipped than even at the close of its busiest season five years ago. In the intervening period the machinery has been rearranged and disposed as in the emergency was not then possible in the manner then decided to be most advantageous. A great amount of additional machinery has also been procured, including many automatic and special machines best adapted to the Arsenal manufactures, and which

TYPICAL OF THE EIGHT REGULAR SHOPS.

are capable of turning out in hours, in fact almost in minutes, what formerly by other methods required days for their production, and at a reduction in cost almost equivalent to that in time.

The Arsenal upon the scale now operated provides the soldiers' ordnance equipment (except arms, and will also soon make them) for an army of 60,000 men, and is besides constantly adding to the reserve supply. By merely taking on additional employees it could, without delay, increase its output to meet the demands of an army of half a million men, and by adding additional machinery, for which necessary space and power has been provided and its disposition arranged for, and also the employees for its operation, this output could be still further immensely increased.

Besides the saddle in all its parts, beginning with the lumber used in the saddle tree, the bridle, saddle bags, carbine scabbard, halter, horse brush, cartridge box, saber belt, and many other leather articles included under the general designation of infantry, cavalry and horse equipment, are also made. The haversack, canteen, cup, meat can, knife, fork and spoon, of duck and other material, which constitute the soldier's more personal equipment, and of metal, the bits, spurs, picket pin, etc, which he also uses, are included in the manufactures.

Many sets of artillery harness are annually made, and also the numerous parts and general supplies pertaining thereto.

The Arsenal is now making six-inch barbette carriages for seacoast forts, and has recently commenced the manufacture of a large number of the new three-inch field gun carriages, model 1902, with the accompanying limbers, caissons, battery wagons, and the tools, implements, etc., pertaining to their use. This of itself is a most important work, requiring the services of a number of the best mechanics, and would alone be deemed elsewhere a sufficient task for many an establishment, though at Rock Island it comprises as stated only a portion of the manufacturing work.

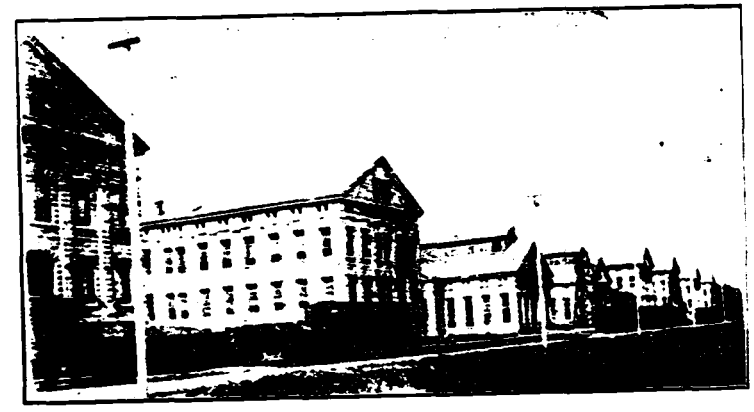
For the past ten years all the 3.2-inch field gun carriages, limbers and caissons, all the 5-inch gun carriages, all the 7-inch howitzer carriages and all the siege limbers made for the army and national guard, have been produced at the Arsenal, and a considerable amount of spare parts and parts for repairs are still constantly being manufactured.

The Arsenal also makes the wooden targets of different designs and all the paper targets, steel silhouette frames, and pasters used in target practice, as well as the insignia indicating the soldier's classification in marksmanship, and the various insignia on saddle cloths, rosettes on bridles, and similar ornamental jeweler's work.

Several years ago Congress made a preliminary appropriation for the necessary machinery for manufacture of small arms at the arsenal, following it at the next session

with a sufficient sum to permit the installation of a plant that should turn out about 250 finished rifles per day.

The complete establishment of the plant required a material increase in the power provided and also its transmission to the new armory; it also included the completion of three of the large shops, with elevators, a steam heating plant, lavatory conveniences, work benches for employees, rooms for foremen and inspectors, and the introduction of the many minor but essential appliances requisite for economical and efficient operation, including even tunnels connecting the



SOUTH ROW OF SHOPS. REAR VIEW.

basement floors of the different shops, which afford passage for the heating pipes, fuel oil pipes, electric power and lighting wires, and for small trolley cars for transportation between buildings of the various components of the rifles in the different stages of their manufacture.

Over 1,000 machines were finally installed nearly a year ago, belted to the shafting, and as much prepared for operation as was possible pending a final conclusion as to the model of arm to be manufactured. Upon this decision depended details of the "fixtures" used on the milling machines, profiling machines, etc., for holding securely the different parts during fabrication, and also the form of the automatic screw and other similar machines that turn, almost without super-

vision, screws and other small parts to the shape and size desired.

Late in June of this year information was received that the "U. S. magazine rifle, model 1903," had been adopted, accompanied by instructions to complete all final details of the plant.

The Chief of Ordnance intends that all parts of the new arm made at Rock Island shall not only be interchangeable among rifles of arsenal manufacture, but also with those made at the Springfield armory. This requires manifestly a single standard in gauges, models, etc., and that the two establishments may operate in absolute harmony, the fixtures, dies, jigs, tools, gauges, models, etc., required, not only at Springfield, but also at Rock Island, are now being prepared at the former place.

For their completion several months yet will be needed, and then several more before a working force can be assembled, organized and properly instructed, so that no considerable output of small arms at the Arsenal can be anticipated before, at the earliest, the middle of next year.

It has been decided by the Chief of Ordnance to finally operate the small arms plant at the rate of 125 guns per day, about one-half of its full capacity, but as the work is new to the vicinity and entirely dissimilar to the general product of the neighboring cities, education of workmen and development of the varied operations must commence with the most elementary details, producing at first a very limited product, with but slow subsequent increase in output.

Besides its manufactures the Arsenal is also the distributing point to all parts in the Middle West for the product of other arsenals and of the private establishments from which government purchases. Many stores are also turned in from the field for repairs and reissue, thereby increasing the shipments and receipts, which, during the last fiscal year, amounted to about ten million pounds. As these shipments did not include such articles as heavy seacoast guns, but instead, with some artillery carriages and material, mainly the smaller

stores, comprising arms and equipment, the number of transactions included in this total can be inferred.

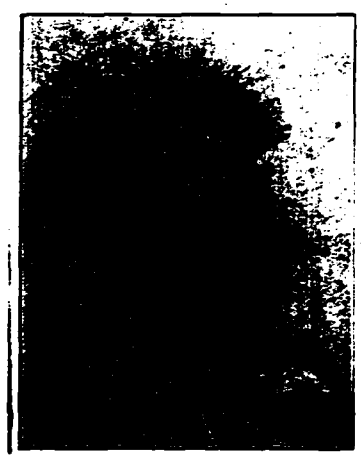
The Arsenal railway, with its numerous sidings, permits loading of cars directly from storehouse doors, greatly facilitating and expediting this work.

Operation of the Arsenal shops upon the scale now required for manufacture of gun carriages, equipments, etc., employs at present about 1,500 men, at a monthly charge for wages of

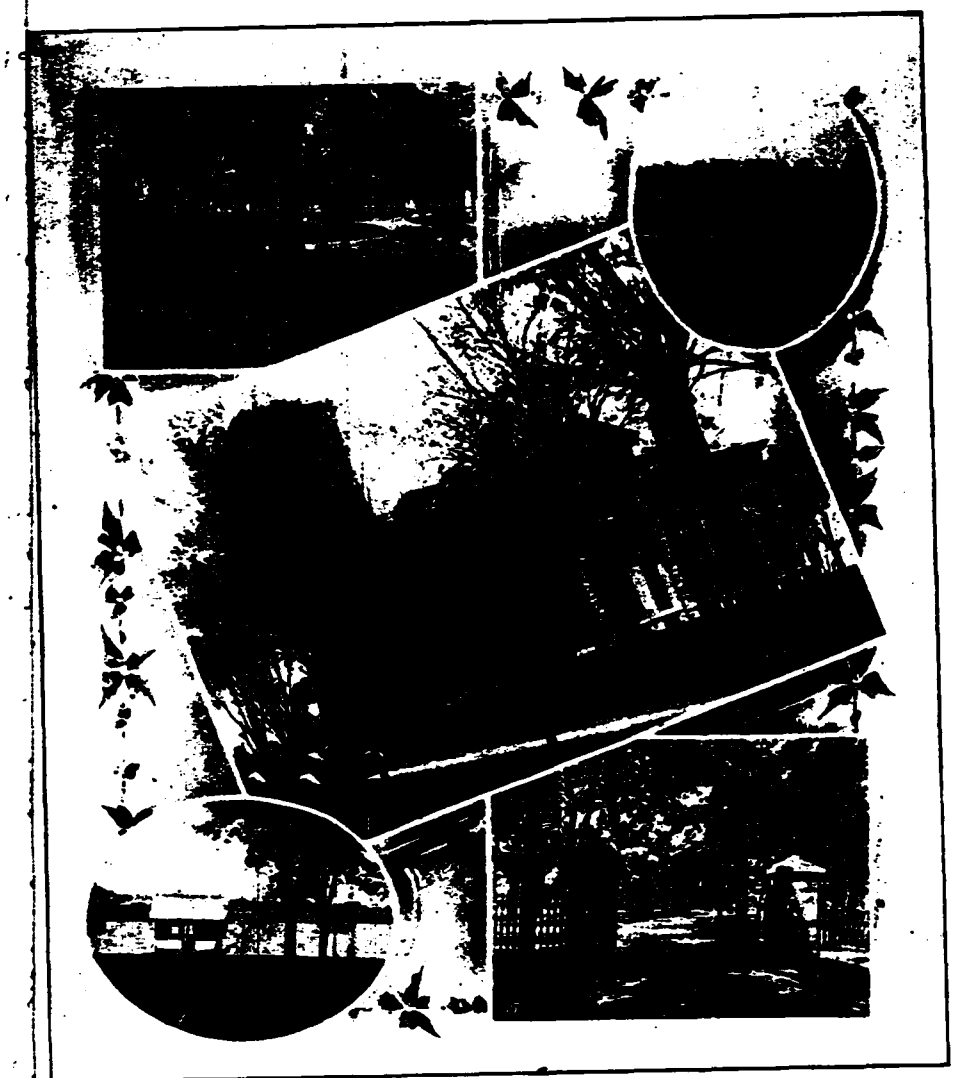
WATER POWER DAM, FROM BELOW.

from $80,000 to $85,000: when the small arms work is added about 2,000 men in all will be needed, or a force nearly equal to what will then be working at all the other manufacturing arsenals combined, making the Arsenal in the magnitude of its operation, as well as in the variety of its product, the most important of the Ordnance Department. If in peace times the Arsenal can in this manner demonstrate its worth to the government, its further resources and possibilities, as briefly summarized in this article, indicate that during any extended war it would be of almost inestimable value. Senator Allison, to whose faith and interest in the Arsenal must be largely

ascribed the generous appropriations granted during many years past for its construction and development, is quoted as saying that "Rock Island Arsenal, during the few months of the late war with Spain, more than returned in advantage to the country the great cost of its construction;" and unquestionably in a war of any magnitude and duration this cost would again be repaid many fold.



BLACK HAWK.



COMMANDANTS HOUSE AND GROUNDS.

1. The Residence
2. The Shaded Lawn.
3. The Garden and Greenhouse.
4. Summer House on River Bank.
5. Gateway.

EXTRACT FROM PRELIMINARY DRAFT OF PROVISIONAL FIELD SERVICE REGULATIONS, U. S. ARMY.

MARCHES.

1. The principal work of troops in the field consists in marching. Battles come as occasional incidents in a campaign, but marches are of daily occurrence. Marching forms the basis of all operations, and success depends, in a large measure, upon its reliable execution. The mere fact of the punctual arrival, at designated points, of bodies of troops in good condition for battle, may be of decisive importance.

2. Marches are executed in accordance with rules which vary with the military situation and distance from the enemy. They may be classified as follows:

(*a*) ***Ordinary marches***, made on occasions when proximity of an enemy is out of the question, such as changes of station by marching in time of peace, marches to or from landings or railroad stations, marches of concentration at great distance from the front, etc.

(*b*) ***Marches in campaign***, made in the theater of war, when contact with an enemy is possible or probable.

(*c*) ***Marches into action***, preparatory to or during deployment, with a view to an immediate attack or the occupation of a defensive position, the enemy having been located.

(*d*) ***Forced marches.*** Whenever unusual exertions are demanded of troops on the march in order to hasten their arrival, the result is a "forced march." In such cases the number and duration of the halts are diminished; the pace, especially of mounted troops, may be accelerated; the rests are reduced to the time necessary for cooking or feeding and the indispensable repose of the troops, and the movement continues, day and night, until destination is reached.

The term, "forced marches," is also applied to a succession of marches of more than ordinary length.

(*e*) *Night marches.* Heavy fog, severe storms or blizzards, may limit the range of vision and bring about conditions similar to the absence of daylight, which makes night marches difficult.

(*f*) *Practice marches*, which are made with a view to exercising and instructing a command, or of shaking it down for field service. With mounted troops and pack trains it is especially desirable that the backs of animals be hardened before entering an arduous campaign. They afford an excellent opportunity for inspection of the field equipment, and contribute materially to the health and discipline of a command during periods of prolonged inactivity.

3. Unseasoned troops suffer severely on the march. The ranks of the infantry are depleted by the sick and footsore; the efficiency of the cavalry for mounted work is impaired and eventually destroyed by the prevalence of sore backs, and the horses and mules of field artillery and trains suffer with contused shoulders and go lame. Advantage must, therefore, be taken of every opportunity to accustom the troops to marching and to gradually bring the feet and muscles of the men and the backs or shoulders of animals into condition permitting severe and prolonged exertion.

4. The most important factors in maintaining and enhancing the marching efficiency of troops are strict discipline on the march and in camp, good food properly prepared and served at suitable hours, avoidance of excesses in eating and drinking, hygienic clothing, and care of the feet of the men and of the hoofs and backs of animals.

Intestinal disorders of young soldiers are due as much to the manner of eating and drinking as to the nature of the food consumed. In the tropics special care of the person and moderation in the indulgence of appetite are essential to the preservation of fitness for work.

Subordinate officers will, therefore, have the men and animals of their units under constant observation and make frequent inspections and inquiries with a view to immediate

application of the remedies that may be suitable at halts or in camp.

5. It is the duty of every commander on the march to be continually on the alert for opportunities—within the limits dictated by the military situation and regard for the discipline and health of the command—to ease the hardships of the troops. All unnecessary exertions take away from the reserve strength of men and animals and to that extent impair the fighting efficiency of the command.

ELEMENTS COMPOSING COLUMNS.

6. Columns on the march are composed of the troops, their light and regimental trains, the ammunition columns, the provision and forage columns, and of other parks, trains and depots, depending upon the size of the force.

Bodies of cavalry of considerable size should not form part of the same column with foot troops, except in clearly necessary cases. The difference in the rate of marching is very tiresome to cavalry and tends to produce sore backs.

7. The led horses and the prescribed vehicles or pack animals constitute the train of the troops. It is divided into the *light train*, which is required by the troops during an action, and the *regimental train*, which is not utilized until the command goes into camp or bivouac.

8. The rations, forage and material of war consumed by the troops are replaced by drawing from supply trains. The ammunition columns, one for each of the three divisions and one for the corps troops, are in charge of trained officers and men and are attached to the corps artillery.

The provision columns, horse depots, etc., generally remain at a safe distance in rear and form a distinct column, or move in a succession of separate columns.

ORDER OF MARCH.

9. Protection for columns on the march is provided by the cavalry, the advance guards, flank guards and rear guards assigned to that duty.

The other elements of the column march in the order demanded by the tactical situation.

10. The artillery, as a rule, should be well up towards the head of the column, so that its entrance into action may be expedited. However, for reasons of security, it should not form the leading element of the column; the arrival of the infantry, also, must not be delayed by too large a mass of artillery near the head.

In the march of a corps on a single road the batteries of the leading division which are not with the advance guard, would ordinarily be well placed behind the leading regiment of the main body; the corps artillery in rear of the leading division, and the batteries of the other divisions in rear of their leading brigades.

If all the batteries of the first division be in the advance guard, then the corps artillery may be pushed up nearer to the head of the column. In a strategical pursuit, when there is good opportunity for its employment, for example, in forcing a crossing or to intercept the enemy's march, the bulk of the artillery may be placed near the head of the main body. On the other hand, while marching through long defiles or dense forests, and on night marches, it might be relegated to the tail of the column. In smaller commands similar principles apply, except that columns not larger than a brigade seldom have artillery with the advance guard.

11. The order of brigades in the division, regiments in the brigade, battalions or squadrons in the regiment, and companies, troops or batteries in the battalion, squadron or group, should change in a column on the march from day to day, the unit at the head of the column one day taking its place at the rear the next day, and so on.

The commanding officer will make such changes in this system as he may deem necessary, in order to avoid fatigue, or for other reasons.

12. Every body of troops is accompanied by its light train, which marches at the rear of the unit to which it belongs. The regimental train is assembled and marches under the orders of a quartermaster in rear of the column, *arranged in the order of march of the troops.*

When contact with the enemy is not unlikely, the regimental trains are collected in masses which march at a suit-

able distance in rear of the command, or in advance in case of retreat.

In a division the ambulance companies and field hospitals march in rear of that unit, whether marching alone or in the corps.

In a corps, the ambulance companies, field hospitals, bridge train, field telegraph and balloon train march at the end of the main body, ahead of the rear guard.

13. The different units of the column, in the trains as well as in the troops, are separated at the start by distances prescribed by regulations or by the commander. These distances are temporarily increased or diminished according to circumstances, thus facilitating uniform progress without checks, but with a continual tendency to *gradual* resumption of normal distances.

FORMATION OF THE COLUMNS.

14. When columns of troops are to be placed on the road their departure will, as a rule, not be preceded by a general assembly and formation of the command.

When the troops occupy quarters, camps or bivouacs at some distance from the road to be followed, the column is formed by the successive arrival of the elements at an *initial point*. The commander fixes the initial point after considering the position of the troops and the roads by which they can join the column; as a rule it will be located in the direction of the proposed march. He also prescribes the hour at which the elements shall pass the initial point, and, if necessary, the routes to be followed in reaching it. He may designate special initial points for bodies of troops who would be spared needless detours thereby.

The commanders of subordinate units examine the route to be followed, calculate the time required, and fix the start of their commands accordingly. They may designate intermediate initial points. In each case the initial point should be of easy access, consequently it should not be placed at the exit of a defile, village, or forest.

When the troops are located along or near the road to be followed, the column is formed by starting the large units at

a suitable time. The commander prescribes the hour of departure for the principal elements, and subordinate commanders issue corresponding instructions to the fractions under their orders.

When troops march in parallel columns, sections of the country may be assigned in which the roads and resources shall be reserved to their exclusive use.

15. On the march the troops will, as far as practicable, keep to the right side of the road, leaving the left free for circulation. When the roads are narrow, space should still be left for single mounted men to pass freely up or down the column. When the roads are soft with mud or deep with sand it may be advisable to divide the column longitudinally, thus permitting men and animals to pick their way with better footing and leaving the middle of the road clear. The suffering from heat and dust may also be materially reduced by this method. But, whatever the widening of the column thus produced, increase of length of the road space occupied by each unit should not be permitted, as this would lead to straggling and undue length of the column.

16. Infantry will usually march in column of fours—column of twos when necessary; cavalry in column of fours on good roads or when compact formation is desirable, otherwise in column of twos; artillery in single column of carriages (column of sections). On trails, troops will have to march in column of files or troopers, often with increased distances between individuals. In marching across country the commander will order such formation as may be advantageous, taking into consideration the tactical requirements of the case, the constant object being to expedite the movement and prevent undue elongation of the column.

PREPARATION FOR A MARCH.

17. As soon as orders for a march are received the commander of the column studies the best maps available and endeavors to gain all the information obtainable concerning the country and the roads by which he is to march, and investigates the possibilities of communicating with parallel columns. When necessary he secures well informed inhabi-

tants of the country to serve as guides. Pioneer detachments under a commissioned officer are sent out to precede the column for the purpose of removing obstacles and preparing the way for the troops.

18. When practicable an officer is sent ahead to make arrangements for camp sites, grazing, fuel and water; and when necessary, supplies of forage and rations are deposited along the route or secured from the inhabitants in advance.

19. The commanding officer will assure himself, through reports from subordinate commanders and staff officers and personal observation, that the men of the command are in fit condition for the march; that they are provided with good arms, suitable equipment and ample ammunition; that animals are properly shod and the train provided with spare parts; that suitable means are provided for the care of the sick, and that the reserve supplies of all kinds are sufficient for ordinary emergencies.

THE START.

20. When practicable, the march should begin in the morning, after the animals have been fed and the men have had their breakfasts. The canteens should be filled with water or weak coffee or tea, and when the prompt arrival of the wagons is at all doubtful, the men should carry one cooked meal in their haversacks or saddle bags The fires are put out, latrines filled, and the camp policed before departure.

21. The hour for the start depends upon circumstances. The military situation, the length of the march and the state of the weather may require an early start, especially in midsummer and in the tropics. In ordinary cases a later start is of benefit to the troops; animals and young men rest well in the early morning hours. Therefore, as a rule, foot troops should not start before daylight; mounted troops about an hour later. If grazing is depended upon, this is especially advisable for mounted troops, as animals eat more freely in the morning.

Ample time should be left, after a seasonable reveille, for the men to breakfast, animals to be fed, and the wagons or mules packed. Every duty of the camp, on a march at a

distance from the enemy, should be performed according to calls sounded under the direction of the commanding officer. Reveille and stables should take place at an hour designated the evening before.

The signals for striking camp and putting the command on the road, such as *the general, boots and saddles*, etc., should be ordered by the commanding officer. No signal should be sounded until the duties pertaining to the preceding one have been completed. Undue haste leads to confusion, ill-temper and badly conducted preparation, which may affect the tone of the command during the whole day. After *the general* has sounded, one or more officers of each organization should superintend the preparation.

22. Troops should never be permitted to start before the designated hour. In small commands on an ordinary march, when difficult conditions of the road are anticipated, it may be desirable to permit the wagon train to start before the troops. This is especially applicable to mounted commands, which may thus secure time for grazing and still easily overtake the train before arrival in camp.

Commanding officers, of whatever rank, are enjoined not to increase the fatigue of the troops by prolonged waiting under arms before the start.

The departure of an element of the column should never be delayed. If the commander is not present at the head of his troops at the proper time, the officer next in rank starts them off, for otherwise the prescribed plan would be destroyed.

THE RATE AND LENGTH OF MARCHES.

23. The rate of progress of a mixed command is regulated by that of the foot troops. It varies with the nature of the country, the condition of the roads, the season of the year, the state of the weather, the length of the march, the size of the command, and the moral and physical condition of the troops. It is of great importance that a uniform rate be maintained throughout the column. The officer who sets the pace at the head of the column should bear in mind that the units in rear are at a disadvantage, and that an irregular

pace tends to produce alternate checking and hurrying, which is destructive of the condition and temper of the troops. When a change in the pace is to be made, warning should be sent to subordinate commanders.

24. For infantry, the rate prescribed at drill is three and four-tenths miles per hour; on the road the maximum to be counted on while marching is three miles per hour; including halts, two and one-half miles per hour. Sandy, muddy or slippery roads, great heat and dust, strong head winds and storms, or broken country, reduce the rate of progress. When it is necessary to climb hills, or to wade through swamps or across submerged fields, a very liberal allowance must be made in time calculations. The rate for infantry columns, under average conditions, may be assumed at two and one-fourth to two and one-half miles per hour. Thus, for a march of fifteen miles a period of six to seven hours is necessary.

25. For cavalry the usual marching gait is the walk. Although small commands can be trained to make nearly four miles an hour under favorable conditions, the rate for forces larger than a squadron will be about three and three-quarters miles per hour. Allowing for halts, the rate would be three and one-third to three and one-half miles per hour. Thus a march of fifteen miles at a walk would require four and one-half hours. When the weather, the roads and the horses present favorable conditions, the marching rate should be about five miles per hour after the first halt, alternating the walk and trot, and occasionally dismounting and leading for short distances. Level ground is utilized for the trot.

26. In ascending or descending steep slopes, cavalry, artillery, and men riding on wagons who are able to walk, will be required to dismount. In cold weather, or when men are tired of riding, this is a measure of relief which should be applied when desirable.

The gait should be slow enough to enable all the horses to keep up without undue exertion. When the walk at the head of the column is too fast, the troopers in rear are forced to trot every minute or two in order to preserve their distance; a fast trot makes a gallop necessary at the tail of the column, the evil in each case increasing with the length of the column. Such methods destroy the uniformity of the march and are extremely fatiguing to both men and horses; they lead to the ruin of cavalry commands, even on ordinary marches in time of peace.

27. The periods of trot alternating with the walk should not, as a rule, exceed ten to fifteen minutes in duration; too frequent changes of gait also are undesirable.

In order to facilitate taking advantage of level stretches of ground for trotting, especially in undulating country, liberal latitude as to distances should be allowed to commanders of subordinate units on ordinary marches, or at considerable distance from the enemy.

28. For field artillery the habitual gait is the walk, three and one-half to three and three-fourths miles per hour. On rapid marches the slow trot alternates with the walk. Horse artillery adopts the rate of the cavalry.

The rate of wagon trains varies with the class of draft animals, the size of the load, the length of the columns, and the condition of the roads. While large mules drawing light loads on good roads can do nearly four miles an hour, in long columns a rate of two miles, and in smaller commands two and one-half miles per hour, including halts, is all that can be expected under favorable conditions.

29. The length of the average march for infantry and for mixed commands consisting partly of foot troops, is fifteen miles per day, with a day of rest at least once a week. Small commands of seasoned infantry marching on good roads in cool weather can cover twenty miles per day, but in extensive operations involving large bodies of troops the average rate of progress will not exceed ten miles per day. Field artillery marches fifteen to twenty miles a day; cavalry, after men and horses are hardened, twenty-five miles a day; wagon trains about the same as infantry.

ROAD SPACES.

30. The *normal* distances, *in the clear*, between units en route marches, should be the same as those prescribed in drill regulations for troops marching at "attention." A

change in the normal distances will be ordered by the commanding officer when the circumstances justify such action.

For approximate calculations we assume two men per yard for foot troops; one man per yard for mounted troops; and twenty yards for each gun, caisson or wagon. The road spaces, including distances, will be about as follows:

Company	40 yards
Battalion	200 yards
Battalion with regimental train	275 yards
Regiment	650 yards
Regiment with regimental train	900 yards
Troop	100 yards
Squadron	450 yards
Squadron with regimental train	600 yards
Regiment (cavalry)	1,300 yards
Regiment with regimental train	1,800 yards
Battery	350 yards
Battery with regimental train	400 yards
Infantry brigade	1,950 yards
Infantry brigade with regimental trains	2,550 yards
Infantry division (part of corps)	7,300 yards
Infantry division with all trains	10,000 yards
Army corps with all its auxiliary troops and trains, about	30 miles
Cavalry division complete, about	10 miles

These distances are somewhat in excess of the requirements of drill regulations. On the march, after a command is straightened out on the road, a certain amount of elongation always takes place. This will vary with the condition and nature of the roads, the state of the weather, the size of the command, the experience, discipline, spirit and degree of fatigue of the troops. In calculating the length of a column further allowance must therefore be made in accordance with circumstances—sometimes as much as twenty-five per cent. An increased distance between units at the start will diminish subsequent elongation.

DETAILS OF A MARCH.

31. As soon as the head of the column takes the road after leaving camp the commander orders the route step (route order for cavalry and artillery). After marching half to three-quarters of an hour, the troops are halted for fifteen minutes to allow the men to relieve themselves and to adjust

their clothing and accouterments. In small commands it will be possible to exercise judgment in selecting the place for the first halt; it would be undesirable to stop the command in the streets of a village or other place which would defeat one of the objects of the halt.

After the first rest there should be a halt of ten minutes every hour, that is, the troops march fifty minutes and then halt ten. This is not intended to be a rigid rule, but may be modified according to circumstances. In very hot weather, for example, it may be necessary to make the halts longer and more frequent.

As a rule, troops prefer to finish their day's work as soon as possible. In good weather, with favorable temperature, long halts will not be desirable for marches of less than about fifteen miles for infantry or twenty-five miles for cavalry. When the day's march is to be prolonged, so that it will run well into the afternoon, a halt of about one hour, near meal time, will often be of advantage. Staff officers or mounted men should be sent ahead to find a suitable place for this halt; wood, water, grass, dry ground and shade are desirable features. Notification as to the proposed length of the halt should be circulated. Arms are stacked and equipments removed; the cavalry dismount and loosen cinchas.

32. In commands of a size up to a regiment, and in wagon trains of less than a mile in length, the halt may be simultaneous, the signal from the head being promptly repeated. The heads of units halt, the elements thereof close up, mounted troops and drivers dismount, and men are permitted to fall out if necessary.

In longer columns it will be necessary to make arrangements so that the march of organizations shall not be impeded by halts of those preceding them. This may be done by causing the infantry and cavalry, with their light train, to leave the road clear while resting, so that the units may, to a certain extent, overlap; or the watches of adjutants may be made to agree before starting, and the regiments, squadrons and batteries all halt and start off again at prescribed moments. The artillery and trains remain on the road.

33. In the cavalry the hourly halts are of shorter duration—five minutes—and advantage is taken of the opportunity to examine the horses' feet, adjust saddles and tighten cinchas if necessary. In the field artillery the halts are from five to ten minutes; the harness is adjusted, girths tightened, etc.

34. In ascending or descending slopes, crossing streams or other obstacles, or passing through defiles requiring a reduction of front, every precaution should be taken to prevent interruption of the steady progress of the troops in rear. If the distances between elements are not sufficient, they should be allowed to overlap; streams and similar obstacles should be crossed at several places at the same time; and while passing through short defiles the pace should be accelerated and the exit cleared at once. In case of delay in crossing an obstacle the head of each company, troop or battery will slacken its pace or halt until all have passed; a faster pace, if necessary, will then be taken up by the unit in a body.

The commander of the column should be constantly informed by the leader of the advance guard, or by staff officers designated for that purpose, of near features of the road likely to delay the march, with indication of remedies available.

35. No man shall leave the ranks without permission of the company or higher commander. If the absence be for a few minutes only, the man will leave his arms and equipments with the company; if he needs medical attention he is sent, if necessary, assisted, to the surgeon with a pass showing his name, company and regiment. The surgeon returns the pass, stating disposition made of the man, who may be admitted to the ambulance, permitted to ride on a wagon of the train, or simply to fall out and rejoin at the end of the day's march, coming in with the rear guard.

The horse and equipments of a mounted soldier who is admitted to the ambulance are taken back to the troop by the noncommissioned officer who accompanied him.

36. A police or provost guard, under an officer, marches at the rear of the column of troops in case there is no regular rear guard, or when it is too far away to be effective for police

purposes. An assistant surgeon with necessary equipment and transportation should form part of this guard.

It is the duty of all officers and noncommissioned officers to prevent straggling. All enlisted men found away from their organizations without authority will be arrested; they will be returned to their commands at a favorable opportunity, with a statement as to the circumstances of their apprehension. Towns and villages through which the column has passed, and if necessary the country along the road, will be searched by patrols. All persons, whether soldiers, camp followers or inhabitants, found pillaging, marauding or committing crimes will be arrested, to be dealt with according to the rules and customs of war.

The guard also takes charge of prisoners captured from the enemy and sent to the rear.

37. At route step the company commander goes where his presence may be necessary; his usual place is at the head of the company, but he should frequently allow it to march past him in order to observe the condition of the men. When more than one officer is present with a troop or company, one of them will be required to march at the rear of the organization.

The commanding officer of a larger unit informs himself from time to time, especially after passing obstacles, by personal observation or by means of staff officers, of the state of progress of the subordinate units in rear and of the condition of his command.

When a cause of delay, for example a damaged bridge, is met with, the commanders of units in the column and of troops farther to the rear should be notified of the minimum length of the delay; the troops then conduct themselves as they would at halts.

38. In the cavalry constant vigilance is necessary to see that the men ride properly. Lounging in the saddle and spurring or fretting of horses to make them canter should be promptly followed by punishment.

If the horse apparently refuses to trot, the rider may be required to fold his arms while the horse is being led, or he

may be changed to another horse, or moved to a place near the head of the troop.

The appearance of the troops should be uniform. Necessary changes in the clothing should be anticipated by an order.

39. One of the greatest sources of hardship for troops on a march, especially for infantry, is hot weather. The best way to counteract its effect and prevent heat stroke is found in the liberal use of drinking water. Men who perspire a great deal must have water to replenish the system.

The excessive drinking of water, however, is injurious; its consumption is largely a matter of personal habit. Under ordinary conditions a canteen of water should last a man a day. Many men do not drink at all during the marching hours. All soldiers should be trained to an economical use of water, and to keeping a small reserve until an opportunity comes to replenish the supply. Officers should set a good example in this respect.

This training is of special value when water is scarce or is known to be infected with harmful bacteria. When marching through country in which cholera is prevalent, such restraint becomes imperative.

It is the duty of commanding officers to afford frequent opportunities for drinking good water and replenishing canteens, but it should be done by order, not by straggling from the command. A medical officer near the head of the column may be called upon to decide whether water is fit to drink. In certain cases the advance guard may require the inhabitants to place water in vessels along the line of march for the convenient use of the troops. On long marches through country deficient in water or infected with cholera, it will be necessary to carry along a supply in wagons.

40. The watering of cavalry horses on the march depends largely on the facilities available. In hot weather, or if nothing is known about the water supply of the country over which the day's march is to made, water call should be sounded shortly before leaving camp and every horse allowed to drink. Good opportunities for watering on the road should not be neglected, as this is of great benefit in hot weather and on severe marches.

In order to avoid delay, as many troops as possible must water at the same time. As the head of the main body approaches a suitable stream or other body of water, a guide from the advance guard should be ready to show the best routes of access thereto and of return to the road, fences being cut or taken down for that purpose, if necessary.

Horses must be watered quietly and without confusion. The manner in which this duty is performed is often a good test of the discipline of a mounted command and of the efficiency of its officers.

The animals of artillery and wagon trains may be watered from buckets or by outspanning and riding or leading to water. With large commands this requires so much time that it usually is limited to occasions when troops are in camp—before departure and after arrival—or when they are making a long halt.

41. While marching through high grass or snow the unit at the head of the column which is breaking the road should frequently be relieved.

42. In midsummer and in semi-tropical or tropical regions it will often be better to start quite early in order to avoid the heat of the middle of the day. When a rather long march is to be made under such conditions the command might rest for three or four hours during the hottest part of the day and then finish the march in the evening.

The nature of the means of transportation may be such that "nooning" will be unavoidable. As a general proposition, however, it is very undesirable to arrive at a strange place after nightfall or even late in the afternoon.

Halts should not be made in or near towns or villages unless it is necessary to secure water or supplies. In such cases the men will be kept in the column, details being sent to procure whatever may be necessary.

43. When a band accompanies the troops it may under favorable conditions be required to play at the long halts. While marching through garrisons the command should be called to attention and the band of field music required to

play a march. Similar action may be prescribed while the command marches through a town.

44. As the column approaches destination all the arrangements should be complete for putting the command into camp without delay or confusion. The staff officers who preceded the column to locate a camp return to meet their commanding officer and then act as guides to conduct fractions of the command to designated grounds. In case the troops are to march into a garrison or camp already occupied, notice of the arrival of the column is conveyed in advance to the commanding officer, and he is consulted as to camping or housing of the command. When troops are to occupy buildings in a town the distribution and assignment should be worked out in advance of their arrival.

As soon as a command arrives at the place where it is to camp, guards are placed over the water, the portions selected for drinking or cooking water, for watering of animals, and for bathing and washing being designated.

Latrines should be dug as soon as tools can be had, restricted localities being assigned in the meantime. Details are made to secure wood and water. No man is allowed to leave camp without authority.

45. A column of troops on the march should not, under ordinary circumstances, be cut by another. If the heads of two columns should meet, at a distance from the enemy, the senior would have the right of way; if near the enemy, the senior would have the responsibility of determining what measures should be taken, considering the orders received from higher authority.

A column which finds another halted may pass on, provided its commander be the senior, or in case the other commander does not desire to avail himself of his privilege immediately.

In each case the column which advances first is followed by its light train; the other trains wait for the other column with its light train to pass, but precede the regimental trains of the latter.

46. As a rule, no honors are rendered by troops when on a march, in the trenches, or on advance guard or outpost

duty. Individual officers and soldiers salute only when they have business with commissioned superiors, or are addressed by them.

SPECIAL REGULATIONS.

(a) Ordinary Marches.

47. On marches of this nature, all danger from an enemy being precluded, the principal object is to facilitate the movement and diminish the hardships of the troops.

Ample notice should be given so that troops may make preparations without haste.

The formation of long columns and the combination of troops of different arms of the service in the same column, are to be avoided if practicable.

The distances between the elements of a column may be materially increased so as to afford greater freedom of movement. In very hot weather and on dusty roads the command may thus be divided into fractions no longer than a company.

The regimental train may be permitted to follow immediately in rear of the regiment to which it belongs, and the supply columns may be placed so as to facilitate issues.

At the end of the day's march the camps are established along the road, having regard for facilities for wood, water and grazing.

Lateral movements are thus avoided and the elements may resume the march almost simultaneously next day.

In case of small mixed commands marching over bad roads, the cavalry and artillery may be required to make a much later start so as not to cut up the soft road; in going through high vegetation or snow they might be in the lead to break the way.

(b) Marches in Campaign.

48. Tactical considerations are of commanding importance. The columns are closed up and the impedimenta sent to the rear. The troops march in the order indicated by their relative importance in the impending action.

In exceptional cases it may be practicable on broad highways for cavalry and infantry to march in double columns of fours, artillery and trains in double columns of carriages.

The readiness of troops for deployment is increased by utilizing all the roads leading in the direction of the front. When the ground is favorable the troops should march across country or along the roads, leaving the latter free for artillery and trains.

The regimental trains are assembled and march at a prescribed distance in rear of the column.

The supply columns are kept one or two days' march in rear of the troops.

49. Communication with other columns should be maintained, cavalry patrols or cyclists being utilized for this purpose. Occasionally a staff officer with orderlies may be sent to march with adjoining columns.

At long halts, changes may be made in the arrangement of the troops to facilitate deployment or participation in the engagement of adjoining forces.

Bugle calls are sounded only when absolutely necessary; when a quiet start is to be made they will be omitted entirely.

On a march through insurgent regions, precautions must be taken for the safety of stragglers or of men left behind.

50. When wagons break down or are stalled, the load is transferred to other wagons and the road cleared as soon as practicable. Baggage of the headquarters office and telegraph material should be pushed forward, other wagons being unloaded for that purpose if absolutely necessary.

51. When contact with the enemy seems probable, the commanding officer joins the advance guard, notifies the second in command, and gives the necessary instructions for the main body, leaving part of his staff behind, if needed.

52. When an action begins, the police guard and the rear guard hasten to join the command. Men who have been arrested are taken along into the fight.

53. Whenever necessary, well informed inhabitants of the country will be impressed to act as guides.

(c) *March Into Action.*

54. When there is prospect of immediate contact with the enemy, every other consideration gives way to the possibility of bringing the available forces into action promptly. For this reason the troops should be concentrated as much as possible and be well in hand.

In the section of country assigned to each corps, the troops assume a formation resembling a line of columns; every road and trail is utilized, and additional lines of advance across country are determined by reconnaissance and marked out by staff officers and orderlies, reserving the main roads for artillery.

It will often be necessary to march through forests or jungles; in this case the greatest precautions will be required to maintain communication and prevent columns from going astray.

The regimental trains are left at or sent to a place in rear to await orders, depending upon the course of events.

The ammunition columns and the ambulance companies and field hospitals are pushed forward in the direction of positions promising to be suitable; their location will be fixed by higher authority at the proper time.

(d) *Forced Marches.*

55. Forced marches should be resorted to in unavoidable cases only, for they increase the sick list.

When urgency requires that the arrival of troops be hastened, the uninterrupted march of the infantry must be favored as much as possible. They are assigned to the best part of the main roads, and their progress must not be impeded by vehicles or mounted men.

In large commands and for long distances, increase of pace is seldom of value.

The duration of a forced march can, as a rule, not be prolonged beyond thirty-six hours. In addition to the usual hourly halts several periods of at least three hours are required to enable the troops to eat and sleep.

The maximum for a day's march of infantry and trains may be assumed at twenty-eight to thirty miles; a repetition

of this performance on the next day cannot be counted upon unless conditions are quite favorable.

56. Cavalry can not only cover short distances at a relatively rapid rate, but can also double the length of its usual daily march for several days in case of emergency. A rate of fifty miles in twenty-four hours can be maintained for three or four days. Under favorable conditions a single march of one hundred miles can be accomplished in twenty-four to thirty hours.

The manner of making forced marches depends upon the total distance and other circumstances. If the distance be not more than one hundred miles the usual hourly halts are made for the first four or five hours; in addition, long halts of two hours are made at the end of the first and second thirds of the march, during which the horses should be unsaddled and permitted to roll and feed or lie down.

If the total distance be about 150 miles the forced march should commence at a rate of not more than fifty miles per day. For distances greater than 200 miles the marches should be reduced to forty, and even thirty miles per day. As the size of the command increases the difficulties of the problem rapidly become greater, and the distances which can daily be covered without injury diminish. The condition of the command upon arrival will depend upon the fitness of horses and men at the start, the distance to be marched, the state of the weather and the roads, but especially upon the good judgment and resourcefulness of the commanding officer.

The results above indicated can be accomplished only when the horses are in proper condition at the start. As forced marches are usually made in emergencies which can not be foreseen, and as time will therefore not be available to harden the horses for the occasion, it should be the constant endeavor of troop commanders to keep the horses, men and equipment in as good condition as possible for any emergency that may arise.

(*e*) *Night Marches.*

57. In southern latitudes and in very hot weather it may be desirable to make the whole, or at least a very large part, of a march at night. In order to attack an enemy at night, or, as is oftener the case, to place the troops in a favorable position for an attack at dawn, night marches will frequently be resorted to. An emergency may require the beginning of a march at any hour of the night; on the other hand forced marches may extend into or through the night.

Bright moonlight and good roads present favorable conditions for a night march. A waning moon is of advantage in case of marches beginning very early in the morning. When practically the whole night is utilized for marching the hardships of the troops are materially increased. All officers and non-commissioned officers must make increased exertions to maintain good order in the column.

It is of the utmost importance that the command remain on the right road and that contact between the units composing the columns be not lost. As far as practicable, arrangements should be made in the afternoon before the march which will assist the officers in maintaining the proper direction at night. The best guides available should be secured and placed at different points in the column. The rate of marching is reduced, the units are closed up, and company commanders are held responsible that touch with the preceding unit is maintained. At turning points in the road men are left behind to show the new direction. Field musicians may be distributed along the column to insure prompt repetition of signals.

In going through a town special caution is necessary to avoid going astray at the many turns in the streets. The advance guard may cause lights to be placed in the windows or lanterns to be hung out along the route. In wagon trains the lamps may have to be lit on very dark nights and the drivers may be required to walk to keep them awake. A wagonmaster or noncommissioned officer with a lantern should precede the leading wagon by about twenty-five yards.

On long night marches it will be difficult to keep the men awake; efforts should therefore be made to prevent them from sitting or lying down.

When the march is to be a secret one additional precautions are necessary. The command will in many cases have to leave the roads and progress will be slow, as the troops are obliged to feel their way. Absolute silence must prevail in the column; mouthpieces of bugles are removed and tin cups and other articles of equipment must be wrapped or secured so as to prevent rattling. The men will not be permitted to smoke. Villages and farm houses should be avoided on account of the warning given by dogs.

(*f*) *Practice Marches.*

The arrangements for a practice march should conform to the conditions it is intended to simulate. Whether it is simply to accustom the soldier to marching, or to instruct him in field duties, he should be required to carry the full field equipment. The means of transportation for the command, the personal baggage for officers, and the tentage should be kept within the prescribed limits.

Marches of instruction are often made by troops proceeding from their garrisons to autumn maneuvers. Familiarity with difficulties of all kinds in a march in time of peace will enable officers and men to overcome them with greater facility in time of war when their authority is enlarged and many restrictions are of necessity eliminated.

Crossing of Bridges, Fords, Swamps, and Frozen Bodies of Water.

59. Before attempting to cross with bodies of troops, careful examination should be made of fords, boggy places, bridges of doubtful character, or of the ice, as the case may be.

Roads leading through swamps or quicksands, or across streams with treacherous bottoms, should have their limits marked by stakes or bushes, or warnings may be placed at the dangerous spots only. At night lanters should be hung from the stakes and a fire built at the landing or a lantern displayed there.

The crossing of a military bridge must not begin until the engineer officer in charge announces that the bridge is open for use. His instructions as to methods to be pursued must be strictly observed.

Infantry will cross in column of fours or column of twos; cavalry in column of twos, artillery and wagon trains in single file of carriages. Mounted soldiers and men on wagons will dismount, except those on wheel horses; animals are led with the men on the outside of the column.

Drivers must keep in the middle of the roadway.

Foot troops will march at a quick gait, but without keeping step.

An officer at the entrance stops the column at that point as soon as he observes a check on the bridge.

If a horse falls into the water he is turned loose.

Every unit, as soon as it has passed the bridge, must clear the exit. This is done by taking up a quicker step and by turning the heads of units off in different directions as they leave the bridge. Before cavalry and artillery halt to remount they must leave the main road leading from the bridge entirely free for the use of the troops that follow them.

A mounted officer is stationed at the entrance of the bridge to see that the troops take up the proper formation about one hundred yards before going on the bridge, and that they follow each other without loss of time.

60. When practicable, fords should be passed first by infantry, then by artillery and trains, and finally by cavalry.

Shallow fords may be crossed without changing formation, except to increase intervals and distances slightly.

When the current is strong and the water deep, the troops should cross on as broad a front as possible, the men marching abreast and holding each other's hands. They should not look at the water, but at the opposite shore.

Fords that are at all difficult will cause much delay to long columns unless the troops can cross at several places. Additional fords should be looked for in spite of denial of their existence by inhabitants. The crossing of many ani-

mals and wagons may deepen a ford and render it impassable. New places thus become valuable.

In small commands, or when ample time is available, the men may be required to remove their shoes and lower garments in order to cross streams the bottom of which is of a nature not to injure their feet. In other cases, the shoes may be put on again to protect the feet while crossing. The same applies to landings from boats when the beach is covered with sharp rocks or shell fish.

The depth of a ford with rapid current should not exceed four feet for cavalry, three feet for infantry, and two and one-half feet for artillery and wagons. In sluggish water this may be increased six inches for infantry and cavalry and three inches for artillery.

61. Ice about three inches thick will bear small groups of men; four and one-half to seven inches, cavalry and light guns; eight to twelve inches, heavy guns. The formation of troops would vary according to the thickness and solidity of the ice.

Crossing of Streams in Ferries.

62. When an engineer officer is in charge of the means of transfer, his instructions should be followed; in other cases consideration should be shown to the persons operating the ferry, and their methods interfered with as little as possible.

The men enter a ponton or barge singly at the bow, and gradually move towards the stern; larger vessels may be entered in column of twos. They occupy the places assigned to them so that the handling of the boat may not be interfered with. In small boats, when the water is rough, they will be required to sit down; when there is danger, they should remove their equipments.

Horses are led on to the ferry one at a time. When there is room for a single row only, they alternate heads and tails; in two rows, they face inward.

Guns, caissons and wagons are loaded by hand; the teams are sent on the same vessel if practicable.

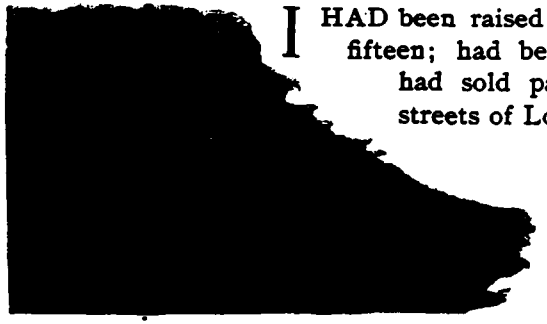
Unloading also is from the bow, in good order, without crowding. Men sitting down should not rise before their turn comes.

When rafts are used, special precautions are necessary. The center of the raft is first occupied, and then the load uniformly distributed. Unloading is carried out in inverse order, the center of the load being the last to leave.

The crossing of beef cattle on boats or rafts is dangerous on account of uncontrollable crowding. It will in most cases be better to swim them.

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

By P. G. LOWE.



I HAD been raised on a farm until fifteen; had been newsboy and had sold papers about the streets of Lowell, Mass.; had been three years a sailor, including a whaling voyage, and had learned the daguerreotype business in the gallery of Mr. Plumb on Washington Street, Boston, and had become a first class operator. I was a persistent reader of voyages, travels, campaigns, explorations and history, and novels such as Marryat's, Cooper's, Scott's, etc., and the spirit of adventure was so strong that I determined to enlist in the mounted service, which was sure to place me on the great plains of the West, among Indians, buffaloes, and other big game, and the mountaineers and trappers of whom I had read so much. Fremont's Narrative of 1843–4, and Captain Bonneville's Adventures gave the finishing touches to my inclination. It seemed to me that five years in this kind of field would round out my education, so to speak, and if I lived would then be ready to settle down to something permanently.

Having determined upon this course, I presented myself at the recruiting office in Boston, giving my occupation as a

farmer. The recruiting officer, Major Sibley, of the Second Dragoons, thought that I was not twenty-one, and by my general appearance not a farmer—did not look like one, and did not dress like a young man just off the farm. I told him that I was born on the 29th of September, 1828, hence, this being the 16th of October, 1849, I had a safe margin of eighteen days. The Major assured me this was probably the least funny business I would ever attempt: "And, mark me, young man," said he, "if you take this step you will regret it only once, and that will be from the time you become acquainted with your position until you get out of it; and another thing, a large percentage of men never return to their friends. If you have no friends you ought to have, and if for any reason you want to hide yourself from the world, try something from which you can free yourself if you so desire. You may come back to-morrow."

I was not pleased at the thought of forcing myself into trouble in spite of the admonition given me. I spent an anxious night, but brushed all aside in the morning, and assured the Major that I hoped he would accept me. By way of recommending myself, informed him that I was not only a farmer, but had been three years at sea, giving him something of my seafaring experience. He admitted that a man who could stand all of that might have some show as a soldier, and I was accepted.

My descriptive roll said twenty-one years, five feet eleven inches high, dark complexion, dark brown hair, gray eyes, weight one hundred and seventy-five pounds, and in perfect health.

I gave a large trunk full of clothes to the recruiting sergeant, who was just my size, and in return had the tailor fit for me two complete suits of fatigue uniform and an overcoat. I retained a large valise, with its contents, books and all, with which I would not part until compelled to do so. I was, therefore, well clothed, and had about one hundred and twenty-five dollars in money, which no one suspected. It proved a great convenience to be able to buy something good to eat for myself and one or two modest greenhorns who had

not learned to quench thirst, subdue hunger, and otherwise obliterate their misery with whiskey.

Unlike the recruits of to-day, the fact that a man would get drunk was no bar to his enlistment, and his moral character was of little interest. Once enlisted, the proper authorities would attend to the rest. Being physically all right, his habits cut little figure. Family trouble, disappointment in love, riots and personal difficulties, making one amenable to the law, often caused men to enlist who proved to be the best of soldiers. In my troop there were men isolating themselves from society for all sorts of reasons. A man drunk would not be enlisted; but however tough looking, if he were sober at the time of presenting himself, and physically able, he would pass. Uniformity of size was not considered. In my troop one man weighed one hundred pounds and was five feet four, while several were above six feet and weighed from two hundred to two hundred and twenty-five pounds. Endurance was the test; all else was waived.

A few days after enlisting I was sent, with fifteen others, via New York (where as many more joined us) to Carlisle Barracks, Pa., then a school for mounted service recruits—First and Second Dragoons and Mounted Rifles—all of which were stationed at various points in the Indian Territory, Texas, New Mexico, and on the Pacific Coast.

At Carlisle there were two troops—A and B. I was assigned to A. Colonel Philip St. George Cooke commanded the post; Lieutenant D. H. Hastings was adjutant. There were several West Point graduates—brevet second lieutenants—who were waiting assignment or an opportunity to join the regiment to which already assigned. All of the non-

commissioned officers were Mexican War veterans, and also at Carlisle because of their supposed special fitness to discipline recruits.

It fell to my lot to drill under Lieutenant Beverly Robinson, late major-general in the Confederate army. He was, to my fancy, a splendid man: gentle, firm, persistent, never seeming to lose patience, yet never yielding to anything short of the most perfect performance possible of the movement undertaken. Carbine and saber drill came in the forenoon, on foot, and mounted drill in the afternoon. As a boy, I had good horses to ride. The prediction that I would sooner or later have my neck broken, was believed by most of the careful mothers in my neighborhood, and youngsters were forbidden to ride with that "Lowe boy." This is about the way all boys with energy enough to enjoy life are looked upon.

A № 1 Man in a № 4 Suit.

Horses were kept for use in drilling, and among them a beautiful bay, apparently gentle, bright eyes, long thin neck, fine head, high withers, fine sinewy legs, and standing out by himself as a perfect picture of a horse. I chose him when we came to drill, and he was assigned to me. The man in charge of the stable said that he would run away, and had thrown several men, but I thought this an attempt to frighten a recruit. Commencing with mounting bareback, then with saddles and crossed stirrups, and going through the evolutions at a walk, in a few days quite a squad, perhaps twenty, had advanced so that they were, while still riding with crossed stirrups, drilled at a trot, and then at a gentle gallop. At the command "gallop" my horse, in spite of all I could do, ran across the parade ground, and out towards the town. I could turn him, but could not check his speed. Here and there I went, turning at pleasure,

but failing to check him. Finally I turned toward a plank fence, thinking I might stop him there, but the fence did not bother him a bit—over he went, and with scarcely a heart beat, kept on, going over the fence, and then off like the wind. At last I got headed towards the squad, standing at rest, ran into it and stopped. Lieutenant Robinson had sent the non-commissioned officers to look for me, but they could scarcely keep in sight. An order was issued forbidding the use of this horse ("Murat") by any of the recruits. Of course everybody at the post talked about it, and a witty Irishman wrote a parody on "John Gilpin's Ride," in which the recruit and his steed were shown up in a humorous style.

The following Sunday, having invited two friends—Wagner and O'Shea—to breakfast with me at the "Little Brick House" just out of the post, we had agreed to go direct from the parade ground when dismissed from inspection. We took no breakfast at mess except a cup of coffee, and saved our appetites for the feast. I had arranged with the man who kept the place to have fried chicken and necessary accompaniments. We looked forward to our ten o'clock breakfast with pleasant anticipations. Wagner was a Kentuckian, about thirty-three years of age and well educated. He had met with business reverses in Louisville, and after going to New York to straighten out his affairs met with so much discouragement he concluded to enlist. He wanted to hide himself from all his friends and have time to think, as he said, without restraint. O'Shea was about twenty-five, coming to New York immediately after the Irish riots of 1848. Finding himself among strangers, without money, and believing the army was the place for him, enlisted. I never knew a handsomer man or more perfect gentleman.

The parade over, we went to breakfast. I sat at the end of the table with my two friends on either side. The breakfast was before us and I about to serve, when in came a noisy band of ruffians, swearing and making themselves generally disagreeable. The leader, or chief bully, six feet two inches high—a giant weighing two hundred and twenty-five pounds—came straight to our table and said: "Here, b'ys, is a foine lay out; here, Tom, take a leg; here,

Jimmy, take a wing; here, Slathery, take the breast that ye're so fond of," as he proceeded to take in his dirty fingers the parts named and pass them to his friends. Not a word was spoken by our party, but about the time the dish was nearly empty, seeing my astonished look, the bully said to me, in a sneering sort of tone, "Ye're a foine child, sure." Then I sprang to my feet, drew my saber and went for him with all the venom and fury of which I was possessed, cut and thrust.

The fact that the saber had a dull edge, as all sabers had at that time, accounts for his not being killed. His companions tried to save him, and two of them received scars on account of it. My two friends drew their sabers and vowed to kill any one who interfered, and I pounded the howling wretch until he lay prostrate, begging for his life, and I was exhausted. From that day to this I have never ceased to be thankful that I did not kill the poor unfortunate creature, and in my thankfulness he was fully forgiven. A file of the guard came at "double quick." "The recruits are killing each other," was the cry. The officer of the day, Lieutenant Fields, came just as the guard was about to take all hands to the guard house. Lieutenant Fields took things coolly. The first move was to send "Big Mit," as he was called, to the hospital, covered from head to foot with cuts and bruises. It took all of his

party of ruffians, half drunk as they were, to carry him off. A file of the guard went along, and when "Mit" was deposited in the hospital his friends were confined in the guard house. Wagner and the man who kept the place explained the affair to Lieutenant Fields, who directed us to stay and get our breakfast and then report to First Sergeant Smart; the sergeant of the guard was to take charge of us until that time, but not to take us to the guard house without further orders. We were too much wrought up to enjoy breakfast, and I told the Lieutenant (the first words I had spoken during the whole affair) that we would go now. Under guard we went, and the story was told in full and written down. The ruffians were also interviewed and did not deny the outrage, but said they had not intended to have any trouble, which was doubtless true, for the same gang had terrorized everybody that came in their way. Every new batch of recruits must be hazed and bulldozed; to resist was to be knocked down, kicked, and adorned with a black eye. These three innocent-looking fellows were the first real snags they had struck. The doctor reported "Mit" not necessarily dangerously wounded, but that he was badly bruised about the head, hands and arms. The adjutant was present with Lieutenant Fields, and wrote a report of the affair. When the whole matter was explained to the commanding officer, the guard was withdrawn from Wagner, O'Shea and myself, and that ended the matter so far as we were concerned.

But I was getting too much notoriety, and it troubled me. I had no taste for the sort of heroism growing out of brawls and fights. I had never made intimates easily, and now I shrank from the curiosity seekers who wanted to interview the recruit "who pounded the life out of 'Mit' with his saber."

At Carlisle quite a number of the best behaved men were retained to do regular duty, as in a company. They were called "the permanent party." Of course they were liable to be sent away to join some troop in one of the mounted regiments. A large percentage of them were made "lance" non-commissioned officers—corporals or sergeants. Some men served there for years. The chances seemed good for all

of us to stay all winter, in which case a large garrison would accumulate. I grew depressed at this prospect. But finally an order came to send seventy-four men to Fort Leavenworth for the First Dragoons—sixteen for K, then at Fort Leavenworth, thirty-four for F, then at Fort Scott, one hundred and twenty miles south of Fort Leavenworth, and twenty-four for B, three hundred miles west of Fort Leavenworth, at Fort Kearney.

It was the rule at Carlisle to send off all the troublesome characters with each batch going to join troops. This was probably the last chance to unload this class before spring, and a dozen or more of them were booked, including my friend "Big Mit" and his gang. Lieutenant Fields was to go in command of the seventy-four. "Mit" came from the hospital, head bandaged and right hand in a sling. His comrades fell in from the guard house. When the roll was called I found myself, "Big Mit" and one of his comrades of the same name (a smaller but more vicious man) in B Troop. I was not pleased, but said nothing. Wagner, to whom I had become attached (a man so superior that daily association with him was a positive pleasure and a great advantage to me), was assigned to K and O'Shea to B Troop.

We went from Carlisle to Harrisburg by rail, thence by canal boat to a point in the Alleghenies where a railroad ran over the mountain, the motive power being a stationary engine on top of it. We marched from where we left the canal boat, over the mountains to St.

Johnsberg on the other side, and there took canal boat to Pittsburg, thence by steamboat to St. Louis, where we transferred to another boat, the *Haidee*, to go up the Missouri River. This, we all hoped, would be our last change, and in a week we should land at Fort Leavenworth.

Not far above St. Louis, after several days of hard struggle with the ice, our boat was frozen in at Portland, Missouri; and now we were told that the way the country roads then ran, we were three hundred miles from Fort Leavenworth. The country was covered with snow and ice. For two weeks we had been on canal and steamboat, with no exercise, and were in no condition to march. From Portland to Fulton was nineteen miles, over rough hills, with no place between the two towns to stop, so that we must walk all of that distance the first day. A couple of wagons were hired to haul our baggage. A few men rode in the wagons. "Mit" was recovering from his injuries rapidly, but he rode. Wagner and I arrived at Fulton at dark, but many did not get in until very late. The icy roads had exhausted me. The long one-story hotel had a long dining-room table with plenty to eat—a whole prairie chicken for each man—but not a mouthful could I eat. I doubled my blanket, spread it on the floor in one corner, took off my shoes and lay down with all my clothes on, including overcoat. I was too fearfully weary to rest well on the hard oak floor, but was astonished at my improved condition in the morning. I really enjoyed the breakfast.

The second day, from Fulton to Millersburg, was twelve miles. Snow fell all day, but the roads were better, weather milder, and we did not suffer so much. We were scattered about the little village, myself and half a dozen others at a comfortable brick house with good fireplaces. I asked the good lady for hot water and some towels, and after a delightful bath, put on clean clothes, ate a good 4 o'clock dinner, and slept in a good bed, where every time I woke I could see the bright fire. O, how I enjoyed that night! In the morning my troubles had vanished; but how I did hate to leave this good home to launch out again on the ice and snow. But there was no more trouble from this point to

the end of the journey. I was sometimes cold, and endured many inconveniences, but never complained, and was never tired after the second day. Wagner, O'Shea and I nearly always closed the day's journey ahead of the others. If we wanted a lunch we bought it. We could buy a pair of home-made woolen socks at almost any farm house, and not a day passed that I did not give one or more pairs to some sufferer.

I do not remember all of our route through the grand old State of Missouri, nor every stopping place. Some of them were Fulton, Millersburg, Boonville, Columbia, Marshall, Lexington, Hambrights, Independence and Westport.

At Grinter's Ferry crossing of the Kaw River, the old ferryman and his wife lived on the south side. He was an old soldier and fond of talking, and while we waited until all caught up, he explained that the Military Road that we had come into between the ferry and Westport, ran south to Fort Scott, about one hundred miles, and thence to Fort Gibson and other points south, and after crossing the ferry ran west of north twenty-two miles to Fort Leavenworth.

We crossed the ferry towards evening, and Mr. Mundy, government blacksmith for the Delaware Indians, furnished us a good supper. And what a managing housekeeper Mrs. Mundy must have been. Seventy-five hungry men were furnished a supper they could never forget, and not one failed to have plenty. To this day I remember how delicious the biscuits were, and then we had honey with them; and the venison, ham and coffee! Just think of it! A lot of rough fellows meeting such a feast. I felt sorry for Mrs. Mundy, but there seemed no end to her supplies. Isaac Mundy and

his wife were born in Virginia and married there. He was a great hunter; accidentally shot himself, and was buried with masonic honors at White Church, in Wyandotte County, Kansas, February 27, 1858. At the request of the Indians he was buried at the foot of the grave of Chief Ketchum. Mrs. Mundy raised a good family of seven children—four daughters and three sons. All except one married and raised families, and they are among the best and most prosperous people of Platte County, Mo. Mrs. Mundy is living with her daughter and son-in-law, Hon. Lot W. Ringo, of Weston. She is nearly ninety years old.

The Mundys accommodated all that they could in the house, and a lot of us occupied an old storeroom boarded up and down, wide cracks in sides and floor. We shivered, and did not sleep. It was the 24th of December and cold, with plenty of snow on the ground—certainly a dreary Christmas Eve—and a hard freezing night. At midnight we came out and huddled around a big fire until breakfast. Some of the men had kept it burning all night. The breakfast was a duplicate of the supper, and the Indian girl who waited on me at both meals, wearing a clean calico dress, looked charming.

This was expected to be our last meal until we reached Fort Leavenworth, but we heard such good accounts of the fort that there was no complaint, and the prospect of any kind of a home kept all in a good humor.

Interesting incidents of this trip by rail, by canal boat, by steamboats, and on foot, were numerous, and the opportunity to study human nature excellent. I had a hundred dollars on leaving Carlisle, and do not think there were twenty-five dollars more with the whole party, except what Corporal Wood and Lieutenant Fields had. A few who had been at Carlisle some time and had been paid off, possessed a dollar or two, and as a canteen could be filled with whiskey for twenty-five cents, there was enough to make a good deal of noise and get up a fight once in a while. It was fortunate that there was no more money among the tough element (about twenty), who made all the trouble, did nearly all of the

complaining, and caused all of the complaints from citizens along the road.

As I look back after long years of experience, I think that no young officer could have managed better than did Lieutenant Fields, with the assistance of Corporal Wood. He had graduated the previous June from West Point and reported at Carlisle in the fall, hence this was his first "campaign," and I venture to say that throughout his active Indian campaigns in Texas and elsewhere, his experience as a general in the Confederate army, and in the service of the Khedive of Egypt after the Civil War, he never had a more trying trip than this. Throughout all of it he showed the utmost good judgment and common sense, with which he was abundantly blessed. Corporal Wood had been a pork packer in Louisville, where he failed in business. He enlisted in the First Dragoons, and served through the Mexican War. He had but six months to serve, and wanting to be discharged as far West as possible, was sent out with us. He was a fine clerk, understood government accounts, and was fully competent to act as commissary and quartermaster for our detachment. It was all plain sailing on canal boats and steamboats, where he managed to give us fairly good meals for the small government allowance, and no man had just cause to complain. He was a determined, lion-hearted man, who would brook no nonsense, and on two occasions settled rows and insolent complaints with a club, the moral effect of which was to insure quiet, peace and fairly good order. He was that peculiar type of man who would have commanded as completely as a private as he would as a captain. While gentle and soft of voice, no man could be intimate with him without his consent.

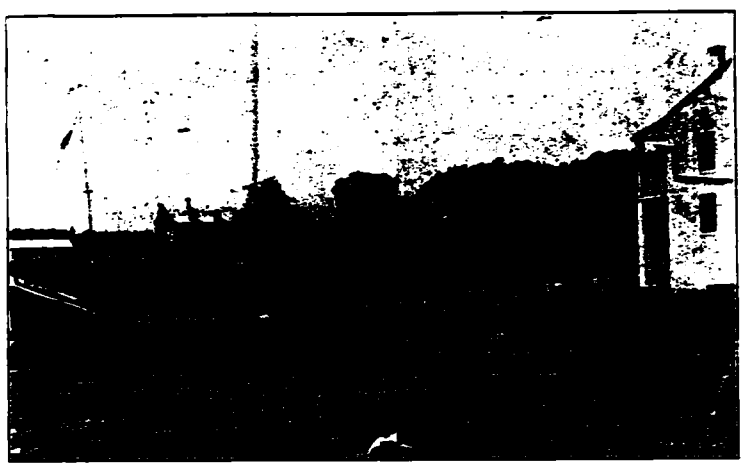
When we took the steamer at St. Louis, Lieutenant Fields said to Wood: "Well, barring accidents, Corporal, we should have little trouble from here to Fort Leavenworth." When

we became frozen up at Portland a hard problem was before him. The whole face of the country was covered with snow and ice. As the miserable roads then ran, the distance was estimated to be about three hundred miles to Fort Leavenworth, country thinly settled and towns wide apart. We must be on the road about twenty days, and how was he to subsist us? Corporal Wood had saved his money during his four and a half years' service, mostly as clerk, and now revealed to Fields the fact that he had considerable, and it was settled that he should furnish the command necessary subsistence, arrange for Lieutenant Fields to give vouchers wherever they would be acceptable, and pay his own money when necessary, taking proper vouchers for his own protection. He bought a cheap horse, rode ahead each day and made arrangements in town or village or on plantation to feed us—dinner at the end of the day's march, and breakfast, and to furnish the best lodging practicable. We had an abundance of everything that the country through which we passed afforded. Our sleeping accommodations were necessarily poor in some places, on plantations where there was not room in the houses, but the people throughout the journey were very kind, and none of us would have gone hungry if there had been no pay in it. After our arrival at Fort Leavenworth, Wood told me that his vouchers were all paid.

Lieutenant Fields bought a fine horse as we came by Cincinnati, but seldom rode him, nearly always giving a ride to some weary straggler. Some men were always riding in the wagon; probably half of them rode more or less during the trip, and it was noticeable that, while a few rode for want of good shoes, the tough gang, from temporary illness, caused by whisky, did the most of the riding, while the fellows who made no noise, walked without complaining. Of course the non-commissioned officers were "lance," made for the trip, chief among them being the acting first sergeant. He had been at Carlisle some time; was believed to have been a deserter from the British army in Canada; at any rate he had been a British soldier, and was an all around brute—big, burly and noisy. He was quite efficient among toughs, but could be induced to "let up" for a bottle of whisky. However, I

had escaped his special notice, in my quiet way, and had nothing to complain of, but was glad he was going to K instead of B Troop.

And now, on this beautiful Christmas Day, about 8 o'clock, we left the ferry, our kind host and his family, on our last day's march—twenty-two miles to Fort Leavenworth. Up over the Wyandotte hills, past a few Indian cabins, out upon the prairie by the military road; and except that it was sloppy, caused by the melting snow in the afternoon, marching was good. We had been cautioned not to stroll on ahead, as we had heretofore been permitted to do, but to keep near together so as to march into the garrison in good order. Edward Brydon was our trumpeter—and perfection in his line—an Irishman by birth, printer by trade, now entering upon his third enlistment, and returning to Troop B, from which he had been twice honorably discharged. He had tried to live out of the army, but his good nature and convivial habits brought him back. He was loyal to his troop, had served under Captain E. V. Sumner, then lieutenant colonel, commanding Fort Leavenworth, and thought him a great captain; did not know the present captain, and did not expect to find many of his old friends in



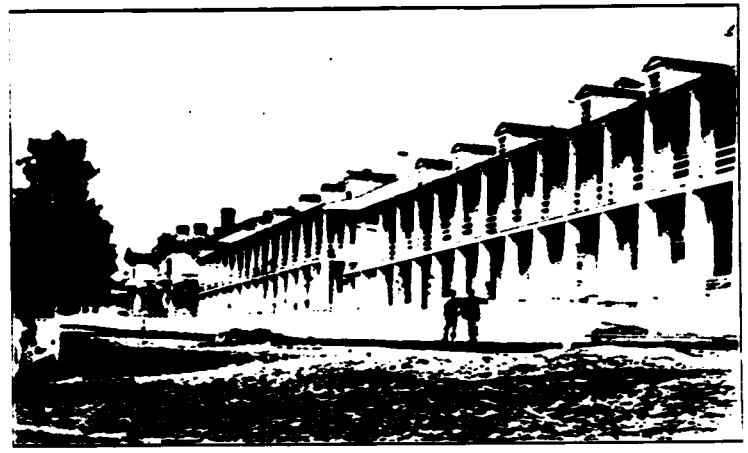
SUMNER PLACE, LOOKING NORTHWEST (1865).

the troop. I liked "Old Ned," as he was called; always kind and intelligent. He assured me that B was the best troop in the service. I had occasion to do him a few little favors on the trip, which he never forgot, and as we walked along together that day he pointed out the lay of the country, the location of Indian tribes—the Shawnees south of the Kaw River where we crossed, the Wyandottes in the forks of the Kaw and Missouri, the Delawares west of the Wyandottes, the little band of Muncies just below the Fort where is now Mount Muncie Cemetery and the Soldiers Home, and the Kickapoos west of the Fort in Salt Creek Valley. Pilot Knob, standing out a hundred and fifty feet above the plain, five miles south of the Fort, was in sight early in the day, but it took us a long time to get east of it. Six miles south of the post, on high ground, stood a one-room log cabin, and in the door, completely filling it from side to side and top to bottom, like a picture in a frame, stood a big Delaware Indian woman. She smilingly scanned the ranks for some one she knew, when Brydon said: "By the holy horn spoons, there's Indian Mary!" and he went up and shook hands with her. She had from time to time been a servant in some of the officers families, had grown old in the service, and was well liked.

And now the flag at the Fort was plainly in sight. We crossed Five Mile Creek (in measuring the military road from Fort Leavenworth the starting point was the flag staff and the creeks and landmarks were spoken of as so many miles from that point), then Three Mile, and up the hill to what is now the head of Broadway, Leavenworth, and on across Two Mile Creek and up the long grade to the top of the hill, where the flag was near, little more than a mile away, and the buildings plainly in view. Our journey was nearly ended. Half a mile before reaching the post we heard a bugle sounding retreat and Brydon joined in, the ranks were closed up, the roll called, and we marched in good order in front of the commanding officer's quarters, halted, faced the quarters and stood at attention, while Colonel Sumner heard the roll called and saw the names checked off. The men for B Troop stood on the right, Brydon on the extreme right,

and the Colonel recognized him, shook hands, and said: "Well, Brydon, you are back again." "Yes, Colonel." "Couldn't keep out?" queried the Colonel. "No, Colonel, I had to come back." "Well," said the Colonel, "I am glad you returned to your old troop."

We were not detained long: marched down to the brick quarters occupied by K Troop and filed into the dining room for supper. On a table bread and boiled pork were cut in slices, a big kettle of coffee was there, and each man passed



DRAGOON QUARTERS OF 1849.

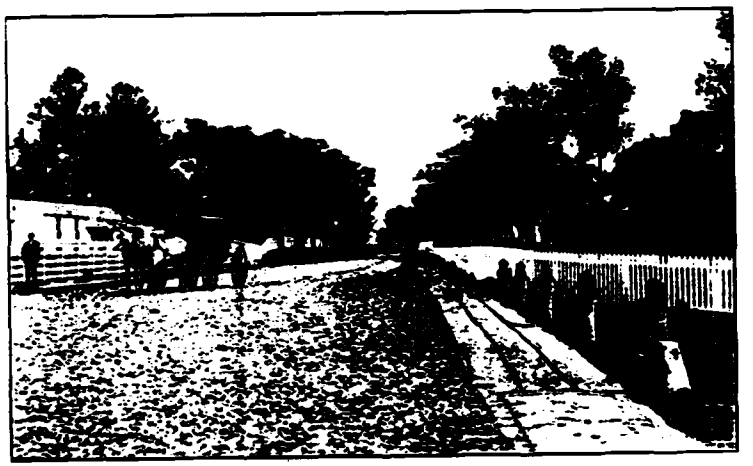
his tin cup, which was filled. All of us stood and received our rations, fell back as soon as supplied, and ate our supper—not half as much nutriment as we needed. The British deserter had been supplied with whiskey since his arrival, and he officiated in handing each man his ration, taking a slice of pork, putting it on a slice of bread and handing it to the nearest man.

We were assigned to the brick quarters south of K Troop, where we found a detachment of six men of I Troop, First Dragoons, just in from Riado, New Mexico, with the mail. Wood had reported our approach early in the afternoon, and with these men had our bed sacks filled and the squad room

warm. We had to thank the first sergeant of K Troop for our miserable supper. He was making company funds; soon after he deserted with horse and equipments and most of the funds. Little more than a year later, when a corporal, with two comrades who had suffered with me, I was sent to Platte City after this man, the commanding officer having heard that he had been seen there. Sure enough, we found him, and after a brief struggle, brought him back riding behind one of the men, and placed him in the guard house. I told him that nothing paid better than common humanity and decency, and that but for our miserable reception at the end of a three hundred mile march in cold winter, we might not have felt it incumbent upon us to invade a man's house to capture him. Our duty hardly justified the trouble and risk we took. I am sorry to say that he made his escape from the guard house before he was tried and drummed out, which he surely would have been.

A dozen overcoats had disappeared from as many unfortunates since we left Carlisle—all sold for a mere song, to get money to buy whiskey, and this in the face of the cold the losers were exposed to. One mile above the fort, on the opposite side of the Missouri River, was a place called "Whiskey Point," where anything could be sold or traded for whiskey, and an enterprising pilot interested a few of the new arrivals, and a couple more overcoats were gone, and a man each from B, F and K Troops found themselves in the guard house at daylight. The next day transportation was furnished and the detachment for F Troop started for Fort Scott, 120 miles south. The detachment for K Troop had found their places on arrival. And now it was settled that the detachment for B Troop would remain until spring. The detachment of six men of I Troop would also remain until spring. And strange as it may appear, I remember the names of these men fifty-four years later. Jones, a lance sergeant; Privates Talbot, Worrel, McKenzie, Fox and Byrns. Except Byrns, these men had all passed through the Mexican War, and I may as well tell of their end now. Worrel died on a farm in Leavenworth County, Kansas, about 1880; he had served ten years. McKenzie

and Fox were killed by Indians. Jones and Talbot were discharged at Riado, New Mexico. Byrns, who was then (1849) twenty-one years of age, was afterwards killed in the battle of the Wilderness while colonel of a volunteer regiment and commanding a brigade in the Union army. He served in all the grades of non-commissioned officer, was badly wounded in 1854 in New Mexico by Indians, and secured his commission as second lieutenant in the regular army at the commencement of the Civil War. An Irishman by birth,



SCOTT AVENUE, LOOKING SOUTH.

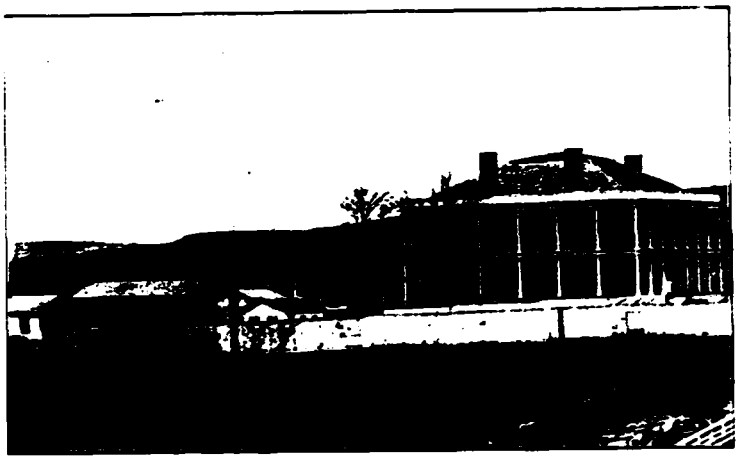
well educated, and my warm and constant friend from our first meeting to the time of his death.

And now the two detachments were thrown together—B and I—with Sergeant Jones in charge and Lieutenant Fields the detachment commander, and under their management our quarters were made comfortable, and our own mess and food properly prepared. We were paid off in January, 1850, to end of December, 1849—$8.00 per month, with $1.00 retained each month. A couple of dollars from each man to buy extras for the mess did wonders. Hucksters from Missouri brought vegetables, and we fared fairly well. Three months we had ahead of us before we could cross the plains to

join our troop. Lieutenant Fields or Sergeant Jones drilled us on foot twice a day. We had to do our share of guard and other duty, but had no horses to care for. I took great pride in saber exercise, and practiced much with small swords made of tough hickory with Miller, Byrns, O'Shea and others. Miller was an Englishman, who had seen better days, and enlisted in New York because he was absolutely hungry—"too proud to beg and too honest to steal"—a teacher by profession and master of several languages. O'Shea was a graduate of Dublin College, and a better all around man I never met. He was the champion boxer, and that was a leading branch of our exercises. Rules of good behavior were strict and well observed. I never had more congenial companionship, and that kept us alive and fairly happy. We made the best of everything, and did no growling; found some good books in the post library and did much reading. In fact, I was getting along quite contentedly, until one Saturday I had cleaned up carbine, saber, belts, etc., for Sunday morning inspection, and left them in my "rack." When I came up from supper I found in their place very dirty equipments. At first I thought it a joke, and glanced around quietly. Byrns was lying on his bunk, and told me that he saw "Big Mit" take my "kit" and put his in place of it. I took mine from his rack, and was in the act of adjusting it, when he came in, rushed at me like a roaring maniac, and raised his carbine to strike. In less time than it takes to tell it, we were at it furiously. Men came rushing up from supper; word passed that the men of the "detachment," as it was called, were killing each other, and a file of the guard was called; but Jones came first, and made a detail to carry off "Mit." Lieutenant Fields came with the officer of the day, and Byrns told the story in good shape. When they left, Lieutenant Fields said to the officer of the day: "I think that brute will leave the young fellow alone hereafter."

A month later "Mit" returned to the squad room and I went over to him and said: "Well, how are you?" He replied, "Sure I'm sore, and will be for some time." "Well," said I, "I am sorry for you and hope you will soon be well again." After an embarrassing pause I said, "And now

'Mit' how does it stand between us? Are we to live in peace, or have I to look out for you and be ready to kill you some day—I want to know just what to expect?" "Sure," said he, "don't be too hard on me: sure, only that I was drunk I would have no trouble wid ye." "Well," said I, "you are sure to get drunk again: I expect that: but it won't be any excuse for crossing me; you have had two chances with me, and I don't want to stand guard over myself all the time: I hold no malice toward you; don't care anything about the



FIRST PERMANENT HOSPITAL, LATER HANCOCK HALL.

past, but what of to-morrow or some other day when you feel like breaking some fellow's neck—am I to be the victim? I want it settled." "Sure," said he, "I like ye first rate, and ye'll find me yer friend all the time." "All right," said I, "let's shake," and we did. From that time on he tried to be kind to me.

Leaving out of our squad a few who could find nothing in life worth living unless able to procure whiskey, we had a remarkably good set of men, some scholars, some good singers and quite a smattering of theatrical talent, out of which was organized a so-called Thespian Society. Warren Kimball, Rogers, Glennon, Miller, O'Shea, Hill, "Little" Duffy and

others made up the actors, and gave a performance once a week during February and March in our dining room. A little assistance came from "K," but the "detachment" contained more genius in that line than the balance of the Post. All officers and ladies at the Post came to the performances.

"K" Troop was commanded by Captain and Brevet Major Caleb Carlton, a fine officer and strict disciplinarian; he had a good troop and fine non-commissioned officers. How he happened to have a thief and all around tough for a first sergeant I never knew. When this sergeant deserted he was succeeded by a fine man, and my friend Wagner was made corporal. Two years later he was made first sergeant, and soon after a relative died in Baltimore, leaving him a large fortune, and the Secretary of War discharged him so that he might look after it. On his return from New Mexico, on his way East, he spent one night with me at Fort Leavenworth, where I had become first sergeant of B Troop.

FORT LEAVENWORTH AS I SAW IT IN 1849.

At the corner of what is now Kearney Avenue and Sumner Place, the south end on Kearney Avenue and west front on Sumner Place, stood a two-story brick building with wide front porches above and below, used as dragoon quarters—the building that our detachment occupied. Immediately north of this, fronting the same way, was a similar building—"K" troop quarters.* Running east from the southeast corner of first mentioned building was a stone wall with portholes looking south. A two-story block house stood a little south of the east end of the wall. Southeast of the block house, about where the chapel now stands, was the sutler's store, kept by Colonel Hiram Rich. There is a marked contrast between an old-time army sutler's store and a church, especially if both be *first-class*. South of the store was the parsonage, in those days occupied by Chaplain Kerr. The house was of logs, and still stands, with several additions, and all covered like a frame house. A little west of the parsonage, across what is now Scott Avenue, was the residence of Colonel Rich. Southeast of that was the home of the veteran Ordnance Sergeant Fleming.

*These two buildings were the first permanent structures of the Post occupied by troops, and were built in the early '40's. Later they were used as the headquarters for the Department of the Missouri, where Sheridan, Hancock and Pope commanded. In 1881 the buildings were vacated by the headquarters and fitted up for quarters for student officers for the Infantry and Cavalry School, established the same year. Two years ago these buildings were torn down, and the site has been chosen for the Administration Building of the Post, which is to be erected at an early day.—[EDITOR.]

At the northeast corner of what is now Sumner Place stood a one-story and basement building fronting west, used

FIRST PERMANENT OFFICERS' QUARTERS (NORTH SIDE).

as officers quarters. It is still standing, with another story added. On the opposite corner, north side, fronting south on Sumner Place and parade ground, was another building used as officers' quarters, since rebuilt and much enlarged. West of that was the best building at the Post, then the commanding officer's quarters, very much the same as it now is, though enlarged and improved from time to time. The last three buildings referred to, and the logs in the parsonage, and the wall, are all that is left of the Post of 1849. Between the commanding officer's quarters and the northwest corner of what is now Sumner Place, fronting south toward

the parade ground, were four or five buildings used as officers' quarters. West of the parade ground, on what is now a part of McClellan Avenue, fronting east, were four or five one-story and basement buildings generally used as quarters for soldiers' families or citizen employees.

Between the first above mentioned brick building and south end of west row of buildings stood a row of log stables —six, I think—main entrance in end fronting south on what is now Kearney Avenue, which was then a thoroughfare from the steamboat landing west out on to the plains. Each stable was about 36x100 feet. Immediately north of these stables, south of the middle of the parade ground, was a magazine, mostly underground, over which a sentinel was always posted.

I have mentioned all of the buildings around the parade ground as it then was, and all south of the stone wall. West of the line of stables and south end of west line of buildings stood "Bedlam"—correctly named—a large two-story frame, with front and back porches and stone basement. It was the quarters of unmarried officers, with an officers' mess attached. (A lieutenant in those days would be content with one room, and all of his furniture would not be worth twenty-five dollars.) 'Twas here they fought their battles o'er, from West Point and the girls they left behind them, through the swamps of Florida, the wilds of Texas, over the great plains, the mountains, on the Pacific Slope and the fields of Mexico. 'Twas here they met after tedious campaigns, recounted their triumphs, disappointments and hardships; through heat, cold, hunger and disease—and now the feast, if not always of reason, at least the flow of soul—and other things.

Southeast of "Bedlam" about one hundred yards stood the guard house, an unmerciful dungeon, stone basement and heavy log superstructure. Southwest of the guard house and south of "Bedlam" stood the hospital, built of brick, with porches all around, and quite comfortable. On the ridge, about where the riding school now is, was a block house similar to the one heretofore mentioned. Where the hop room now is stood a one-story stone building, used as commissary and quartermaster storerooms and offices, about one hundred feet on what is now McPherson Avenue by about fifty feet

on what is now Scott Avenue. A little northwest of this a two-story stone building, now embraced in the Military Prison, was built in 1850 and used as quartermaster's stores and offices. Still farther north, covering the ground beyond the buildings now composing the south front of the Military Prison, were a few homes of employees, the wagon, blacksmith, carpenter, saddler, and other shops and quartermaster's stables and corrals. Also scattered here and there were a few small houses; at the steamboat landing a warehouse. The flagstaff and sundial stood just south of the west end of the present hop room. There was generally a sentinel posted there, and it was said that a sergeant of the guard regulated his watch by the dial on his rounds with the midnight relief.

This is as correct an account as I can give from memory of Fort Leavenworth fifty-four years ago.

[*To be Continued.*]

THE NEED OF PRACTICAL WORK FOR OUR CAVALRY, ESPECIALLY IN SMALL BODIES.

By Captain H. S. HAWKINS, U. S. Cavalry, A. C. S.

IN writing this paper I am fully aware of the fact that the ideas expressed herein are not entirely new or original. But though practiced by some cavalry officers, they are not practiced by all, and not enough by any. The fact is, we do not practice them except in a very limited way, and we always allow something to interfere with such practice, as if anything could be more important.

Almost every soldier of experience will admit that one of the most important duties of cavalry in war to-day is to operate in small bodies. The cavalry screen, reconnaissance, harassing a retreating enemy—all of these duties require a dispersion of the cavalry forces. And we may then say that cavalry will in war perform its *most* important duty in small bodies. The use of cavalry in large bodies will generally be to get to points quickly, and then dismounting to hold them until infantry can arrive, or perhaps to attack important points before large forces of the enemy's infantry can arrive to defend them.

But pitched battles in large force will fall mainly upon our infantry brothers. The use of cavalry for such purpose (except against cavalry, or in pursuit of a retreating army, or in defense of its own retreating forces) will be a waste of a body of men especially trained for other purposes and not easily replaced.

Starting then with the supposition that our future commanders are going to understand the use of the various arms of the service, we come to the point of this discussion.

Our cavalry is trained to fight mounted in compact bodies or dispersed as foragers, and dismounted as infantry. All

very well; but let us see if this is properly done. Nine-tenths of our drill consists of the various exercises in normal order on a level drill ground. Extended order drill in this normal order is almost the only practice we get in fighting formation. Now the mounted skirmish line, with exactly four feet between troopers and perfect alignment, is seldom seen in actual fighting. In the first place the ground, unless it be as level as a drill ground, would not permit it. The same observations apply to most other formations, mounted or dismounted. The skirmish line may start off all right, but soon men lose their alignment and interval in attempting to shoot and to seek cover. And if the country is particularly broken, small groups of men will be found clustered together here and there, the line bearing small resemblance to the normal order, and if unused to this sort of thing, right here is where demoralization is liable to set in.

The normal formation on the drill ground is, of course, necessary in teaching new men, but it should not be carried on to the exclusion of more important work. A troop of cavalry might be drilled for years until it could, on the drill ground, rapidly form as skirmishers and preserve correct intervals and perfect alignment. But suppose its first fight occurs in rough country and the men become scattered, sometimes in groups, sometimes a single trooper out of touch with his comrades. That troop has never had such training or has had it so seldom that the effect is not appreciable: the men think everything is going wrong and become demoralized, and the troop would appear without organization, and would resemble a lot of untrained recruits with no head or leadership.

What troop commander taking part in some fight or maneuver or well planned field exercise, has not observed, on finding his troop in such position, that the men are hard to control, do not obey promptly, become excited, bunch together and are hard to straighten out again? The troop may be an old one, too. The drill has always been precise and orderly, and it expects the fighting to be likewise. Things are not running smoothly. There is a lot of loud shouting and loud swearing, and the troop commander won-

ders why, with a well disciplined troop, things did not go better.

The fault is with our system of drilling forever in a manner totally different from the way a real fight is conducted. It is proper to drill occasionally in the normal order prescribed in the drill book, for the purpose of discipline and to teach the men how to get into the various formations, but let it be only occasional.

A troop of cavalry best fitted for fighting purposes to-day is one that can become apparently disorganized, scattered, with no evident military control, and yet be at the same time perfectly controlled, able to move in any direction or to assemble quickly and quietly into compact formation, at the will of the commander. A civilian not versed in military affairs might watch it and say that he was surprised at the disorder, that he expected to see lines in military precision and order instead of a lot of men each apparently fighting for himself and controlling his own movements. And he might go away with the impression that any body of men could fight in that way, and that there is no use for regulars after all.

But right in that apparent confusion and disorder the troop might be showing its best drill and discipline. When the Cossacks were worrying Napoleon and defeating his cavalry, starving his army, wearing out his infantry, who ever thought for a moment that they were a confused, disorderly, untrained body of men? And yet they always fought in a dispersed and apparently confused order. Our North American Indians fought in much the same way, and yet were at times very perfectly handled.

Now I do not argue that a troop of cavalry should always fight in this manner, but there will occur many times when it will be obliged to do so to accomplish its full duty, and a troop trained to move with parade ground precision only will become absolutely out of hand, disordered, demoralized and an easy prey for an enemy with more practical training.

What, then, is the proper method to pursue in drilling our cavalry for fighting? Our drill book is not entirely at fault. It prescribes extended order drill in rough country, but we do not pay enough attention to that. It prescribes

other practical training, but it is not made emphatic enough. All the precision prescribed in it is necessary for the young soldier, and at times for the old one. Parades and reviews are splendid training in teaching steadiness, quiet control of horses, and discipline. In adopting a new method we should not throw away what is good in the old. A formal review would be a good thing every evening of the week.

But what about the drill hour? Instead of spending week after week drilling in close and extended order, troop and squadron drill on a level plain, there should be but one day in each week devoted to these formal exercises. I mean, of course, after the troop and squadron are fairly well drilled in their respective schools. A regiment being newly organized might have to spend a longer time at these drills, but an old regiment need spend but a couple of weeks of each drill season in such training. It is our present practice to spend nearly the whole season in a monotonous repetition of these drills. Great skill in marching in line and wheeling by fours may have been necessary once, but it is not now. Parades and reviews should, after the opening drills of the season, suffice for all close order drill. Extended order drill on the drill-ground should be included in that preliminary two weeks. After that every thing should be devoted to teaching the men to fight.

Keep up the parades and reviews all the year round, weather permitting, no matter what kind of instruction is being carried on during the day. Have them every evening, if possible, for the steadiness, discipline and pride of the command. But the drill hours of the day should be devoted to some form of maneuver against either a represented or an imaginary enemy. The imaginary enemy should come first.

When drilling his troop against an imaginary enemy, the captain should take them over all sorts of ground, make his movements extremely rapid, as if he were hovering on the flanks of a hostile army; teach his men to become dispersed through hills and woods, and to quickly re-form at signal or command, or at some rendezvous; teach them to mount and dismount quickly in any kind of confusion due to rough or timbered country. In other words, train them so that confusion

does not scare them. Make them perfect in the tactics of what Europeans call "irregular troops."

He should not let them believe that they are going to dismount every time they are fired upon. There is a little tendency in our cavalry to make every occasion one for dismounting to fight on foot, even though the best policy might be a bold mounted attack. Our ability to fight on foot is no doubt what makes our cavalry so formidable; but we should be careful not to drift too far and become mounted infantry only. Our prowess in mounted combat should be carefully nursed. This does not refer necessarily to shock tactics. Shock tactics in small forces may, and undoubtedly will, be used to some extent. I do not believe that they are obsolete by any means. But there are other methods of fighting mounted. The Cossacks and Sioux Indians did not use shock tactics, and they fought mounted very successfully. There is, of course, an element of shock tactics in all mounted combats, but the regular boot to boot charge is not the only way or the most important way in which our cavalry should be taught to fight while mounted. The skillful use of firearms by mounted troopers is capable of making our cavalry most formidable and elusive opponents. But I might say in passing that to accomplish this our cavalry officers should be not only taught but required to ride better and with more fearlessness than a great many of them do Requiring our troopers to be bold riders will do little good if poor horsemen are to lead them. In this connection, Captain T. B. Mott's suggestions as to riding schools are excellent.

After all this drill against an imaginary enemy, the troop should engage frequently in maneuvers against other troops of the garrison.

Now there is a prevailing sentiment against so-called sham battles. Some commanding officers refuse to permit them on the ground that they do more harm than good, convey false impressions, are ridiculous and farcical, and that the result or outcome is always a matter of unsettled contention. All this is true if these so-called sham battles or maneuvers are not properly conducted. In an affair of this kind troops should never be permitted to come to the point

where men are standing up firing at each other at absurdly short range, each side refusing to allow that it has been worsted. Nor should the result of the maneuver be the main thing looked for. It makes no difference who gets the best of it; and the whole point is lost if that is made the important lesson. Nine times out of ten the result in actual war would be wholly different. A troop of cavalry which is worsted learns just as much, and perhaps more, than the victorious side. An officer whose command is worsted learns not to make the same mistakes again. Let us not bother, therefore, with that question.

The real value of the maneuver of the small scale, necessary at our small posts, is not to find out who can come out on top, but the experience officers get in handling their men under excitement and off the drill ground: teaching their men to be orderly and quiet and to obey promptly while in apparent confusion in any kind of almost impassible country; handling their men while under excitement themselves. In other words, just a drill in what was explained in the first part of this paper. Having an actual opponent makes things move quicker, causes more excitement, and thereby lets the officer know what the result of his former teaching has been. In addition, more interest is taken in seeking cover, taking advantage of accidents of the ground, etc.

Carefully planned maneuvers are of more value than anything else we do, and more time should be devoted to them than to anything else. Lazy commanders will not have them because they are too much trouble to think up. Almost all officers are willing enough to take part in them if they are thought out by somebody else. If maneuvers are ordered by the department commander, a lazy commanding officer will go out, and without giving any thought or study to the matter, have the genuine sham battle that has provoked such unfavorable criticism in the service.

But even when they are carefully planned beforehand, a great many officers taking part pooh-pooh at them and make fun of the whole performance, failing utterly to see the real benefit that occurs, even if conditions are not exactly like war.

What difference does it make if some absurd mistakes are made or if conditions are somewhat unwarlike? The men get the training that comes with being handled under excitement, and perhaps those mistakes will not be committed next time. We do not want these mistakes to occur in war, and we had better make them in our maneuvers rather than wait for war to develop them.

Now, remembering that methods of fighting for small bodies are what are being considered, a troop of cavalry should be trained so that it could, if necessary, retire before an enemy in apparent confusion, dispersed, melted away, and yet be not at all demoralized or disordered. And it should be able to assemble with ease and lightning speed when desired.

If a troop is not practiced in these things, it might, while performing its part of the duties of the cavalry screen, or in harassing an enemy, or in reconnaissance, become by a sudden attack of superior forces, scattered and thereby utterly demoralized and routed. And yet to scatter might have been even desirable in order to deceive the enemy into believing the troop whipped and done for, with the purpose of coming back at him before he could realize it while he was carelessly withdrawing or pursuing his way, believing all opposition gone.

The advantages of such training are infinite in number. And they should appeal especially to cavalry troop officers. As before stated, the cavalry will in war operate most often in small bodies. While officers of the other branches of the service will be fighting in large commands, the cavalryman will be out by himself in command of a squadron, troop or detachment, the whole responsibility upon him. For this reason the art of maneuvering in small bodies should be especially courted by the cavalry.

Every post can have these maneuvers, from a one troop post up. And they should have them, not only on one or two red letter days of the year, but three or four times a week during the drill season. The necessity for training men in horsemanship, and what is termed by enlisted men "monkey drill," should not interfere with the more important practice in minor tactics. Horsemanship should be taught in riding halls during the winter months. At posts where there are no riding halls, horsemanship must, of course, be taught after good weather commences, but it should not be allowed to interfere with the practical work just discussed. In time of war recruits learn what they know of horsemanship by hard knocks as they go along. The ideal way, as every cavalry officer knows, is for recruits to be trained in horsemanship before joining their troops. But I am taking things as we find them, and certainly the training in horsemanship should not interfere with the practical field work more than one day of the week.

The term "small bodies," as here used, applies to any body of cavalry, from a squad to a squadron.

The yearly practice march, which most troops of cavalry are required to take, is a very excellent training; and it could be made, at most Western posts at any rate, much more instructive and valuable. At present a practice march is planned to some point two or three hundred miles away from the post. The troops march along the road, have a little advance guard drill, go into camp every evening and break camp every morning. And that is about all there is to it. Perhaps one or two problems in minor tactics will be undertaken in the course of the march, but the ordinary day has very little of interest for the soldier unless it be the scenery.

There is of course considerable for the young soldier to learn about marching and making and breaking of camp. Every one knows what a difference there is in this respect between a trained and an untrained troop. But it does not take long to impart this instruction; and as the marching and making and breaking of camp are absolutely necessary in the field, no matter what other instruction may be engaged in, the troops would be obliged to learn these things whether or no.

It is not necessary to go so far from the post unless it be to reach a good maneuvering ground. Ordinarily, the country for twenty miles in all directions should be mapped, and the practice march confined to those limits. A soldier learns

just as much about making camp five miles from the post as he does two hundred miles away.

The object of the practice march should be, not only to give this instruction, but to have maneuvers on a more extended scale than the daily maneuvers at the post had been. One part of the garrison should be opposed to the other, so that the march would resemble one taken in actual war. Innumerable problems could be devised. And if every one worked hard, and did not expect perfection at the very outset, splendid training could be given. If this had been preceded by the instruction urged above, great proficiency would be attained; and were these troops to go to the annual maneuvers at Fort Riley, or elsewhere, they would not have to learn there things they should already know.

As an example of a problem for this practice march, suppose a post garrisoned by four troops of cavalry. If it were not for the pernicious system of keeping general prisoners at posts for the troops to guard, nearly all of these troopers could be obtained for the march. We will suppose, however, that as many as possible were secured in each troop. We want to practice something that will teach us the way to avoid being tricked and taken unawares, as the English were by the Boers.

To have out one's advance guard does not always prevent one from being found unprepared, especially if the command is so large as to make it impossible to command the whole by voice. Lord Methuen, when surprised and captured by the Boers, had posted his advance and rear guards, but he was attacked so suddenly that he had not time to make arrangements to meet the attack; and as he could not reach his entire command with his voice, no one received any orders, and as a result, no one did anything until too late. He had evidently failed to give instructions beforehand to his subordinate commanders as to their movements in an emergency of this kind.

We want to learn how to make attacks of this nature and how to prepare ourselves so that we shall always be ready to meet them.

We have maps of the surrounding country for twenty miles in all directions.

Let then, one troop, A, supplied with a map and a pack train, loaded with from six to ten days' rations, start out one day in advance of the others. Let the officer in command be given an itinerary of the marches and camping places to be taken by the three troop command, B. He is to know just where B is to camp each evening. In other words, A is with smaller forces, fighting in his own country, and by the help of the inhabitants, knows at all times the location of his enemy. This advantage was held by the Boers in South Africa and by the Filipinos in the Philippines.

B, on the contrary, has superior forces, but being in an enemy's country, can get no information from the inhabitants. He knows nothing of A's whereabouts except from what his own scouts and patrols may tell him. B has a certain route to pursue and certain places where he must camp. A can go anywhere.

A's object will be to delay B as much as possible, to ambush him and defeat him if he has the opportunity, and to attack him as many times as he can with safety to himself. He can attack B by night or day, and in order to make the problem interesting must be bold and energetic. In short, his mission is to prevent B from arriving at his final destination on the day scheduled. His troop should be prepared to scatter like Indians, if hard pressed, and to assemble at some rendezvous.

B must be prepared to brush away A without more delay than possible, must arrange to meet any sudden attack or charge, and must outpost his command without undue fatigue to his men. He must attempt to arrive at his final destination on the day set.

An umpire should accompany each side. No matter what the result of any one encounter, the maneuver should be continued for the whole period of the march. If A should suddenly attack B, and B should be slow in making disposition to meet the attack, the decision should be given A without permitting the affair to go any further. If A should make an unexpected mounted charge, he should stop half way and the umpires should decide the issue by noticing B's movements and the rapidity with which he made them.

The umpire's decision would perhaps not have been the outcome in actual war, but it is the best we can do and accomplishes our purpose.

The sham fighting should never be allowed to go so far as to become ridiculous or of no instructive value.

It is not necessary to go further into detail of such a maneuver. The training in scouting and fighting, meeting sudden attack, etc., is apparent.

Thus the troops engaged in the practice march would have not only instruction in marching and camping, but also in fighting and the cavalryman's special duty, scouting.

The value of maneuvers is being recognized, as shown by the existence of the annual maneuvers at Fort Riley. But in maneuvers of that kind a troop cannot get the instruction needed and possible at its post. When it goes to Riley it should have had all the instruction urged in this paper.

To sum it all up, the order of instruction should be about two weeks drill (at the beginning of the season) on the drill ground in the school of the squad, troop and squadron. After that, only one day of each week devoted to these drills and to horsemanship. The rest of the time should be spent, first, by the troop and squadron for a week or two against an imaginary enemy, and then everything devoted to maneuvers with a represented enemy.

In considering the possibility of putting such a vigorous scheme of training into operation, I am fully aware of the difficulties and obstacles to be overcome. Our enlisted men are called upon for so much fatigue duty that the possibility of devoting a whole or even a half day three or four times a week to this training may be doubted by many. Its practicability may thus be assailed, but I firmly believe that it could be done.

At the start, discouraging requests from the quartermaster for details and an unwillingness on his part to let extra duty men participate would perhaps deter many commanding officers and troop commanders from proceeding any further. But the only thing to do is to get as many men out as we can, and make the best of it. Then by continually striving to systematize the quartermaster's work and not allowing it to assume too great a comparative importance, two or three whole days of each week can certainly be secured. These, with one or two other half days, would accomplish our purpose.

A whole day devoted to fatigue work would be better and accomplish more than three or four days of one or two hours work per day. Instead of breaking into a soldier's time by demanding an hour's fatigue here and there, practically destroying the whole day for anything else, it would be better to give up the whole day to fatigue, and have the next day free from any such duty.

I believe that all that is necessary to make us find a way to have three or four days per week devoted to maneuvers is a burning realization in the minds of officers of the great necessity for them.

Evolutions in compact bodies are no longer of prime importance: and that which should distinguish regular soldiers from all hastily organized bodies of troops is their practical knowledge of how to fight, and while doing so how to maintain their discipline and amenability to control.

If any officer is satisfied in his mind with our present system of drilling or training, and that means the training he is himself receiving, it would be well for him to study the Boer War.

We cannot claim much superiority, if any, to the English, who are, after all, our brothers. We hope and like to believe that we would not, if opposed to the Boers, have been outwitted, outscouted and outfought, man for man, as were the English. Yet we can not be sure, and there is excuse for the suspicion that the mortification that was the Englishman's might have been ours.

We claim that we know more about scouting than the English. Perhaps we do: but as our country becomes more and more thickly settled, that knowledge will speedily disappear, and if we do not train our soldiers in the practical side of their profession, it will vanish altogether.

The Indian service, which made such men of our cavalrymen a few years ago, is past and gone, and we must make

something fill the place, even though it may be artificial warfare.

Is it possible, then, that we are going to allow our branch of the service to become stale and degenerate, relying on our instinctive knowledge of war? Are we going to wait until we are forced by disasters to change our methods? Does any one think that it is not within our power to institute the proper system?

Surely, intelligent officers must agree as to the importance of rousing ourselves to action. It means work, and lots of it, but it is splendid, healthy, manly work, that no cavalryman worthy of the name should fear.

We must not be dismayed by obstacles. We must press forward, with the determination to practice war constantly, and thus become, what we undoubtedly would be, the finest cavalry in the world.

THE AMERICAN CAVALRYMAN.

By Major C. G. AYRES, Eighth Cavalry.

NOW that "the air is full of war and rumors of wars," and the tactics to be employed by the different armies being discussed, I should like to call attention to a few facts. For some reason, not understood, the military men of the United States have turned their attention to Europe in search of military knowledge, to be used in this country by American soldiers.

European tactics and discipline are not applicable to Americans. They will not fight after the European plan. They are too original and self-assertive to follow in the footsteps of any other nation. On the contrary, for more than two hundred years the world has adopted American methods both on land and sea.

Since the Puritans landed from the *Mayflower* until now the *extended order* has been their own particular way of fighting. All their fighting on this continent against the Indian has been in extended order, lying behind stumps, rocks or any other convenient cover, and in the American Civil War, when the European systems failed, the American soldier improvised a system of his own, and succeeded—notably Forrest in the use of cavalry.

The power of the rifle has been developed by the American. In point of fact it is the American weapon, as is the "six-shooter." We all know what occurred at Lexington, Massachusetts, one hundred years ago, when the American minuteman with his rifle, in extended order, behind logs, fences or other cover, forced the best troops of Europe (the British Grenadiers, infantry) to retire. We see the result of this at Austerlitz, when Napoleon, for the first time, had his troops fire from the shoulder, and to aim in the American manner at individual soldiers of the enemy. The great sol-

dier was so astonished at the repulse of England's splendid veterans by an American "rabble," so-called, who, behind cotton bales *for cover*, at New Orleans (present tactics), with their favorite rifle picked off the enemy coolly and deliberately, until they were completely cowed by the cool, murderous fire.

As stated, the Emperor Napoleon was so impressed that it was his purpose to form battalions of riflemen taught to use the rifle as the Americans did. All Europe has been working on that plan, until to-day European armies, armed with rifles, whose power they learned from the Americans, lying behind any convenient cover, as the Americans *have always done* for hundreds of years, fight their battles. No nation in the world produced riflemen a hundred years ago who could load the old flint-lock while running at full speed, and then fire and continue to either advance or retreat as the case required.

It was the wonderful skill in the use of the rifle, acquired *first by the Americans*, which has *forced* the world to adopt the American method of fighting, the extended order so-called (in plain English, the American skirmish line), adopted by them hundreds of years ago, and modified by other nations to suit the conditions which surrounded them.

The expression, *forced*, is used above to express exactly what has resulted. At Lexington, Mass., during the Revolution the British soldier marched against the despised American "rabble," and found it behind logs in extended order, and the world learned from the above mentioned rabble that if they expected to live long enough to fight at all, they must do it in extended order, and the heavy columns gave way to the line, which is growing more mobile every day.

The power of the rifle was developed by Americans, as was the "six-shooter," and as the range and accuracy increased, the world learned that to fight in the old European style was little better than suicide, so they adopted the American's style of fighting, along with his rifle. As arms become more deadly and accurate, cover in fighting becomes more and more essential. Why Americans go to Europe for their tactics and other ideas, is hard to understand. Our forefathers

taught the world how to fight with the rifle in extended order, and at Jena Napoleon's Tirailleur skirmishers, patterned after the American skirmisher, repulsed the celebrated Prussian Grenadiers.

From the above it will be seen that by going to Europe we simply bring back our own ideas modified to European uses, and of but little use to Americans.

During the American Civil War the theory of fighting cavalry was entirely changed, as well as its use when off the actual field of battle. European cavalry learned a great lesson from the American cavalrymen—Forrest, Stuart, Morgan, Sheridan and others. The cavalry of America had never been developed before, and for that reason its role on this continent was not understood. There were no large bodies of cavalry until Hooker organized the cavalry corps of the Army of the Potomac. Up to that time it was used as headquarters guards, orderlies, strikers, and the like, as it was in the War with Spain.

The American cavalry has been pronounced by the highest European authority the *finest light cavalry in the world*. Thus it will be seen that the Americans have shown the world how to use both infantry and cavalry, and as they have revolutionized the navies of the world several times, the author does not see why Americans, of all people, should go to Europe for military ideas. The institutions of our land make the Americans the most warlike (not quarrelsome) people in the world, and the next time they go to war they will again show the world something new in the soldier's line. Of necessity this must be. Everything in America is new. New people, with new ideas; new country, new ideas of government, and the energy engendered in developing the resources develops the American aggressiveness, and when the fighting begins this soon becomes combative.

Most everything in Europe is finished: there still remain a few thories to be turned over, and *that* will be done when the democratic ideas of the Americans become a little more deeply sunk in the minds of the masses of the people. The king business is a little behind the times, which lesson the Americans have also taught the Europeans. The Americans

commenced the lesson, Napoleon found it "a good thing" and passed it along, and to-day the democratic idea running loose in Europe makes it a trifle uncertain for the king business to know "where it is at."

Everything new in the world, of importance, is bound to come from this country, for the Americans are doing something new all the time. They are forced to, to meet the conditions constantly arising. This may apply to Russia* some day, but the rest of Europe is old and finished—little new. People go to new countries to find new adventures, and adventure makes men warlike, amongst other things, develops their faculties, mental and physical, and for that reason the American is by nature the *modern soldier*. The soldier of a modern country, *up to date in his ideas.*

Perhaps in the future Russia will play the same part in Europe (is playing it now) when she has more school houses. The modern soldier of the best type must be from a school house, preliminary to his military training.

If the people of China ever get training of these modern times *they* may give trouble.

For the reasons stated, it is not seen why Americans should go to Europe for military ideas. If they will study the operations of their own armies under their own famous leaders for the past hundred years, they will learn all that can be learned theoretically of the science of war, as it applies or will apply to them for many years to come.

From the papers it would appear that more men would have been hurt the other day in Greece if there had been a few American riflemen on one side or the other. Turkey and Greece are not modern in their methods. Of course soldiers get *experience* from any troops. It is a fine thing for professional soldiers to watch the operations of *any* large bodies of troops, and the government is wise in sending some to Europe, for the younger men of our army have never seen large forces operate, and there is a great advantage to be derived from having officers *get used* to seeing large bodies in action.

*Since this was written (April, 1897) Russia's day has dawned with the finishing of her great railroad, July 29, 1903.—C. G. A.

EXECUTIVE ORDERS.*

By Brevet Lieutenant Colonel ED. F. BROWN, First U. S. Artillery.

DURING the last few months in Colorado we have heard a great deal about executive orders. No small amount of confusion has arisen because of the failure to understand the nature of an executive order, and the power which it carries with it.

Lawyers of more or less prominence have talked of constitutional rights that have been encroached upon by the action of our Governor. Suits of law have been filed in courts of record against the Governor and his executive officers for damages claimed to have been done through arrest without warrant: and as a result many people have been misled into the belief that the Governor has overstepped his power as an executive.

The reason for this belief is that only the judicial side of the question has been presented. The talking has all been done by lawyers, or through their suggestion, and most lawyers allow their thoughts to travel along narrow lines of judicial practice, and overlook the fundamental principles of government.

The Constitution of the United States provides for three distinct departments of government: Legislative, executive and judicial. There is an implied obligation preventing the interference of one of these departments with either of the others. It has been deemed by many a maxim of vital importance that these powers of government should forever be kept separate and distinct; and, accordingly, we find it laid down with emphatic care in the bill of rights of several of the State Constitutions.

*Read before the Colorado Commandery of the Loyal Legion, December 1, 1903.

Story "On the Constitution" (Sec. 1491) says:

"The command and application of the public force to execute the laws, to maintain peace * * * are powers so obviously of an executive nature, and require the exercise of qualities so peculiarly adapted to this department that a well organized government can scarcely exist when they are taken away from it."

The legislative is the law-making and deliberative part of our government. The executive is the active and governing part, while the judicial only follows as a corrective department. If those who criticise our Governor would take time to read the history of the Constitution, and would study the discussion which arose over the division of government into the three departments, they would probably be surprised to learn that it was only by a scratch that the absolute veto-power was taken from the President, and that the ultimate decision to require a two-thirds vote by Congress to pass a measure over the President's veto was a compromise, and was reached only after long discussion. The framers of the Constitution recognized the Executive as the chief factor in government, and seemed to consider the judicial and legislative as a means of guiding and assisting the Executive.

To the Executive is granted the power to convene the legislative branch of the government, and to him is also given the right to appoint the members of the highest court in the land. The Executive can pardon a criminal after a sheriff has arrested, a jury has adjudged him guilty, and a judge has sentenced him. In other words, our system of government provides that in some cases the Executive may set aside all the powers of the judicial.

It has devolved upon Colorado to develop a judge of such small knowledge of the relation of the executive and judicial branches of our government as to allow suits for $300,000 damages against our Executive and his officers to be filed in his court by hoboes who ought to be in prison. It cannot be said that our State Constitution in such matters is different from the Constitution of the United States; because, if it varies from the National Constitution in this important matter, it is of itself void and of no force.

The Constitution requires executive officers to forestall and prevent crime or threatened resistance to law just as much as it requires them to punish criminal actions. It is the duty of the Executive to act, even though the judges, juries and court officers delay or refuse to act. The President has so acted since the foundation of our government, and the governor of a State has exactly similar powers within his own State.

The idea that the President or a governor must wait until overt acts are committed, cannot be defended. The assertion that the sheriff may call for troops only after he has been defeated, is nonsense. The statute of Colorado expressly provides that when there is a "riot, mob or body of men, acting together by force with intent to commit a felony, or to offer violence to persons or property, or by force and violence to break and resist the laws of the State, or when such tumult, riot or mob is threatened, and the fact is made to appear to the Governor, he may order any portion of the National Guard into service to support the law."

During the first century of the history of the United States the President has been compelled more than once to take executive action in the suppression of insurrection, in support of the laws. A notable instance of this occurred in the year 1794, when President Washington mobilized 15,000 militia from New Jersey, Pennsylvania, Maryland and Virginia, for the suppression of the famous Whiskey Insurrection in western Pennsylvania. Similar executive action was taken five years later, when the President called out the militia of Pennsylvania to suppress Fries' insurrection.

When, in the latter part of 1832, the Legislature of South Carolina passed the famous Nullification Ordinance, and announced that any attempt on the part of the Federal government to enforce its laws would absolve the State from all connection with the Union, President Jackson, with characteristic energy and promptness, replied with a proclamation and a message to Congress, in which he denied the right of either nullification or secession, and assured the South Carolinians that if they resisted the laws they would be coerced by the combined power of the other States. General Scott

was sent to South Carolina with full authority to uphold the laws, and was provided with sufficient troops to carry out his purpose.

President Cleveland quelled the riot in Chicago by ordering United States troops to the scene of the disturbance, although the Governor of Illinois protested against the executive action and declared that the act was an invasion of State rights.

In the case of the disturbances at Wardner, Idaho, General Merriam thought best to secure a proclamation of martial law by the Governor of Idaho previous to occupation by the U. S. troops. In this case there was a confession on the part of the civil authorities of inability to protect life and property, but the confession was clearly recognized as an incident, and not a prerequisite for the presence of Federal troops.

During the past three months I have repeatedly heard it stated that martial law is impossible in Colorado. The Constitution of this State must not differ in this particular from that of other States in the Union, and martial law can be proclaimed here as elsewhere. The Constitution of Colorado recognizes the division of government into legislative, judicial and executive departments, and the limitations on each are the same here as in other States of the Union.

If under present conditions the Governor of this State should see fit to arrest and confine the leaders of the agitators who are keeping the entire State in a condition of turmoil, he would be far within his power, as representing the executive branch of the government, and his acts as such could not be reviewed by the coördinate judicial branch of government.

Acting as the executive branch of government, the Governor is required to see that lives and property are protected, and that the laws are enforced; and he would be acting well within his prerogative were he to pass over the mass of agitators and cause the arrest and bringing to trial of those who are back of them as leaders and instigators of riot and murder.

The courts of the State have no jurisdiction over the executive acts of the Governor. A State court which rules that

it may review the executive acts of a Governor, and restrain him or render nugatory those acts, confesses itself ignorant of the fundamental principles of our government. Of course I cannot foretell the action of the Supreme Court on the question at issue, but it does seem to me that when the question is properly brought before it the decision of the district judge in Teller County must be reversed.

At the close of the Civil War it was my privilege to witness a test case of the futility of the judicial branch of the government attempting to defy the executive. I was the officer who, under the order of Generals Thomas and Stoneman, made a marked example of a district judge and sheriff who refused to obey an executive order, regularly issued by the President. When the war closed and civil authorities took charge in the South, the President of the United States issued General Order No. 50, President's Series, which provided that men who had been tried for capital crimes by military commissions or courts martial, and found not guilty, should not be tried by civil courts for the same offense. This order merely stated in a formal manner the principle of justice—that a life once placed legally in jeopardy could not be tried the second time for the same crime.

Two men, Riggs and Berry, had been "orderlies" on the staff of the colonel of one of the Union Tennessee regiments. Pot shot had been taken at the colonel of that regiment at different times by parties in ambush. After one such shot the colonel ordered Riggs and Berry to go kill the man who fired on him, and they did so. The man belonged to one of the most prominent families in East Tennessee. His friends caused a court martial to try Riggs and Berry for murder. The court naturally released the men, but recommended the dismissal of the colonel for hasty action in giving the order to kill. President Lincoln disapproved the finding of the court martial, saying he "was not employing colonels to be shot at in this way," and ordered the colonel returned to command. This ended the military phase of the trial.

In the fall of 1865 the jury at Dandridge, Tennessee, indicted Riggs and Berry for murder, and the sheriff arrested

them and threw them into jail, chaining them to the floor, and making them "star" prisoners. The action of the civil authorities was called to the attention of General Thomas, and he sent a copy of the President's order to the district judge, and asked for the men's release. The judge refused to release the prisoners, and cited the constitutional argument, so often heard in Colorado during the last three months, that the civil authorities are paramount to the military, and that the trial would have to take its course. General Thomas, believing that a mere show of force would be sufficient to cause compliance with his orders, sent a lieutenant, with eighteen men, demanding the prisoners' release. The sheriff turned out several hundred men and captured the lieutenant, and "paroled" him and his men the next day, with an agreement that they should not return.

I had been chief of scouts in that section of country at one time, but in the fall of 1865 was in command of the garrison at Chattanooga, and my superior officers decided that I should be sent to Dandridge with a sufficient number of men to enforce the order of the President. General Gillam asked me how many men I would need, and I said 100 men, as I told him I did not believe it unsafe to go anywhere in the South with that number, as everybody was tired of war. I started with the smaller force, but General Stoneman, commanding the District of Tennessee, stopped me at Knoxville, and ordered a full battalion of heavy artillery to report to me there. He said with the larger force there would be no bloodshed. He also gave me orders to make it so "hot" for the judge, the sheriff, and the citizens of that vicinity that they never would dare to disobey an order of the President again. I marched into Dandridge in the latter part of November, 1865. I seized the jailer, and ordered the jail unlocked at once on penalty of death. I released the men within ten minutes of my arrival. I seized the hotel parlor for my headquarters, and moved out a book store from the corner below my room for the use of the provost guard. The judge appeared and offered me advice. I told him that his action had cost the government $25,000, and that if he attempted to advise me I would throw him over the banisters; that I ought to

"throw him in" with all the officers of the county, but his age and respectability caused me to hesitate. He and the sheriff and all who were responsible for the refusal to obey the President's order left the country, and stayed away until I sent them word that they might return.

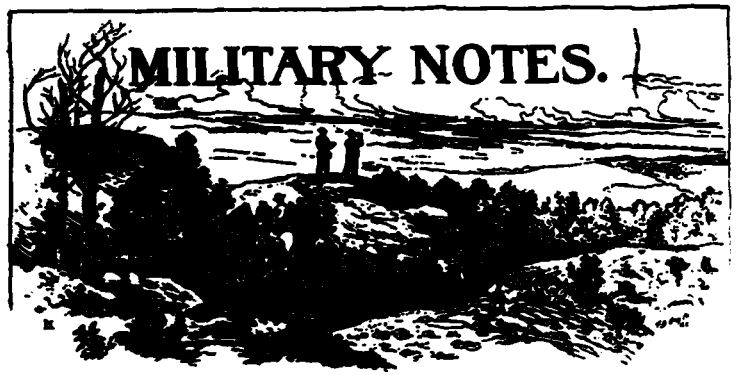
During the first month of our occupation no one was allowed on the streets after 9 o'clock at night without my permission, and I suppose these people thought I was a tyrant gone mad; but I was obeying orders.

Protest after protest was forwarded to my superior officers and to Washington, but all were returned to me with the endorsement that I was doing the right thing. I would then send for the petitioners and show them their signatures, and make it warm for them. I ordered winter quarters built when I arrived, supposing it would irritate the natives more than anything else; but it was February 10, 1866, before I got away from the dreary place. I almost thought the U. S. government had forgotten me.

One of the bright spots in my military life is the remembrance of these two men, Berry and Riggs, when I took them from that prison door and told them to salute their flag. Falling on their knees, and with streaming eyes, they kissed the folds of our regimental flag, and said to my soldiers: "Thank God, boys, we have a government that protects the poor and the weak as well as the rich and powerful."

The proceedings against the men were abandoned by the court, and the men reported to me each week during my stay there; and I would have arrested and imprisoned any man that interfered with them.

From the endorsement of seven of the petitions by the Attorney General of the United States that were returned to me regarding this matter, I am convinced that in emergencies the courts themselves are subservient to the executive authority.



SOME NOTES ON CAVALRY EQUIPMENT.

By Captain GEO. VIDMER, Eleventh U. S. Cavalry.

These few thoughts have suggested themselves to me, and I place them before the Cavalry Association for its discussion and criticism.

In all marches I have made with the fair leather saddle, I have noticed that the pack, as now prescribed, falls, and gradually works down on top of the blanket in rear of the saddle, *i. e.*, on the spine of the horse. On the walk the motion of the pack irritates the part to such an extent that invariably there is a bump raised, or in time a sore back. This, of course, can be prevented if an officer of the troop keeps constant watch, and has every man interest himself in the matter or march on foot. With the pack as now rolled, the middle strap cannot be drawn tight enough to prevent the pack working down and resting on the back.

I suppose every cavalryman has thought of lengthening the side bars, having them extend further to the rear. In addition to supplying a rest for the pack, it would give a greater bearing surface on the horse's back. This would be best by far, but as it has been suggested and recommended so many times and has not been done, it behooves us to find some other way to supply this want.

I have made and used with great success an extension, or pack rest, which consists of a triangular piece of metal, cut so that when bent it will fit snugly over the cantle arch and closely to the cantle, having three holes punched for the three No. 8 rivets in the arch. This is covered with leather on both sides and sewed on edges, and is riveted to saddle underneath quarter straps. It weighs but eight ounces, and is worth using. It keeps the pack up in the middle, relieving the back from all pressure therefrom and allows a free current of air under it.

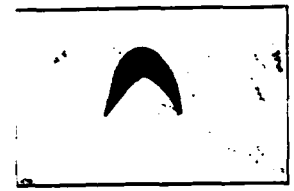


Plate 1.

The metal core, the extension and its arrangements, are shown in Plates 1, 2 and 3. These extensions could be made for the different sizes of saddles, and upon requisition of the different troops, giving the numbers of 11, 11½ and 12-inch saddles, could be supplied with the necessary large rivets and put on saddles by the troop saddler. This method adds to the weight slightly, necessitates the expense of making, and the trouble of fitting and securing when received. There is another method of relieving the horse's back without extra attachment whatever, and that is by rolling the pack differently.

Plate 2.

The regulations at present prescribe folding the blanket in three equal folds across the shorter edge. When this is done, the lower end drags in the mud, dust or dirt. It further prescribes placing the blanket on the shelter half in such a way as to dirty it still further. The blanket can be folded in three equal folds across the longer edge, and even the shortest man can keep it from touching the floor or ground. Lay it squarely and evenly across the shelter half, perpen-

dicular to median line, and place the left hand in middle of blanket, fold over ends of blanket to the hand, or to within about four inches of each other, place the underclothing on outer edge of blanket, then roll as prescribed in "Drill Regulations." The shelter half is turned under about four inches.

PLATE 3.

This method will allow the middle coat strap to be drawn in very tight, reduces the roll to within a diameter of two to three inches in the middle, clears the horse's back entirely, and also places the greater part of the weight lower on the horse, and the length of the pack steadies the parts of the equipment hung on the cantle rings (lariat, canteen and cup).

PLATE 4.

To me one of the greatest benefits derived from this method of rolling the pack is to prevent that constant shifting of the pack from side to side during the walk and trot. Plate No. 4 shows old pack, No. 5 the new pack, and how clear it is of the back. In this pack, as in the old way the neatness could be accentuated by placing the nosebag on

off side of pack. This would allow the buckle to be on top of the pack, and the splay of bag towards the cantle and out of sight, the rear of pack thus presenting a smart, neat appearance. A comparison of the two packs (Plate 6) will show the reduced size, lower load, and from every point of view show the value of the new method.

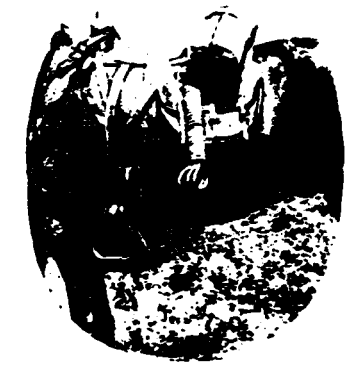


PLATE 5.

I would rather see a longer side bar, and also the mortises for the two lower coat straps cut lower in the cantle, than any rearrangement of pack, but until this is given us, we might adopt one of the two methods I have described for preventing the sore back. While I am on the saddle, let me call attention to something which is neglected by the majority of troop commanders. I say the majority after mature deliberation, for I have noticed something like twenty troops, representing parts of five regiments of cavalry, and I am judging from the proportion of them. That to which I desire to call attention is the adjustment of the different straps on the saddle. First, the stirrup strap is made for the buckle to be run down as near the stirrup as possible, thus taking advantage of the double part encircling the stirrup, and also to prevent the buckle from rubbing the carbine scabbard and the leg of

PLATE 6.

the rider. The added comfort of keeping the buckles against, or as near the stirrup as can be had, would seem to be sufficient to call attention to itself, yet I have seen officers and men riding with the buckle wearing their leggings and boots, and pressing severely into their shins.

I have seen troops with hardly a man who did not have his canvas leggings reinforced with leather on this account. Both straps of the carbine scabbard should encircle the scabbard, and the rear strap buckle should be up near the saddle. The buckle on nosebag should be on the top, or the rear of the pack. The saddlebag straps are too long, and if the men are not instructed they will buckle them in one of the holes as issued. Additional holes will have to be punched to use with effect. The surcingle should go over the saddle, but under all straps, the near end being drawn up until the strap is just below edge of near side bar. The reason for this is obvious.

In this connection it is well to consider on which side the carbine should be carried. The concensus of opinion seems to point to the left as the proper side. The new manner of returning saber (Cavalry Drill Regulations, paragraph 390) seems to point to the same way.

A recent order requiring the submission of requisitions for carbine slings, seems to indicate the right side, for why would we need them if the carbine is carried on the left side?

Reprints and Translations.

THE PARIS–DEAUVILLE RIDE.

TRANSLATED BY CAPTAIN T. BENTLEY MOTT, U. S. ARTILLERY.

After the results of the Brussels-Ostend Raid were made known we had ventured to hope that such revolting spectacles would never be repeated. No lover of the horse, no one who had any traces of humanity in him, could fail to be horrified and disgusted by these barbarous trials, for which not even the excuse can be offered that they are of any use from a military or other point of view. We have seen in this race, modern cavalry officers of the nation that claims to be the most refined and civilized in the world, apply injections of cafeine, ether and other stimulants to their fallen horses to make them totter along for a few kilometers, and thus prolong their terrible agony.

Considerable surprise has been expressed in some quarters at the limited number of competitors that entered this race. We, on the other hand, are surprised that there were so many, considering the fact that all of them were necessarily cavalry officers and consequently were fully conscious of the sufferings they were about to impose on the poor brutes.

It has also been a matter of comment that the Minister of War should have left to private parties the organization and management of a purely military enterprise. It was for that reason, no doubt, that, although the organizers did all they could to associate to their scheme the names of well

known parties whose high position gives them a certain authority in the matter, a great many officers refrained from taking part in the race.

We cannot too much emphasize the fact that this, which, in our desire to make use of foreign terms, even if we don't know what they really mean, is called the "Paris-Deauville Raid," is absolutely useless both from a hippic and a military point of view. That the resistance of a horse to fatigue is enormous was already well known, and no experiments of such brutal nature were required to tell us that.

The only possible result of the trial was to emphasize precisely that which we should be most careful to conceal, namely: that craving for new sensations and that absence of all pity and humanitarian feelings, which are the most infallible signs of the decadence of a nation.

Our officers, who for the last thirty-three years of peace, have had no opportunities of getting themselves killed for the mother country, seem to think that there is a certain glory in having a horse die under them, not of wounds received in battle, but of extenuation and fatigue.

On the first day the task of the jury was very simple; it was only a question of which competitor arrived first at the post at Deauville. On the second day, however, the jury had to perform the more delicate operation of classifying the horses according to their condition after the race, in order to determine who was the winner of the prize given for "best condition." Two of the horses had to be eliminated from this classification for the simple reason that they died; one, "Pretty Boy," upon entering the stable immediately after arrival, and the other, "Huppé," after a terrible agony of two hours.

On the other hand, some of the horses arrived in very good condition and did honor to their riders, whose first care had evidently been to spare their mounts as much as possible. Foremost among these were "Icane," belonging to M. de Royer; "Fabiola," to M. Nativelle; "Grillon," to M. Petit; and "Latimu," to M. de Ligniville. Other horses also arrived comparatively fresh. "Midas," mounted by Lieutenant Beausil, who won the first prize, was tired, but not exhausted. The resistance shown by this animal is really wonderful.

The great majority of the animals, however, were in a pitiful state of extenuation, and fully demonstrated the inutility and brutality of the trial.

The so-called raid may be divided into two parts: (1) A ride of 135 kilometers from Paris to Rouen, and (2) a race of eighty-five kilometers from Rouen to Deauville.

The 135 kilometers run had to be made within a certain time, but without racing, and may be considered as an eliminating trial.

As a matter of principle, as soon as a real horseman feels that his mount is tired out, he stops, whether he is engaged in a race, in hunting, or otherwise. But apart from that, it was one of the rules of the contest that no horse would be classified for prize distribution unless it arrived "in good condition." Yet one of the competitors, whose horse had dropped upon the ground, utterly worn out, administered injections of stimulants to the poor brute, and finally succeeded in reaching the post. But while on the way to the stable he suddenly collapsed, and had to be half pushed, half carried, by seven men to his stall. There he fell again, and after a most terrible agony of nearly two hours, he died in a position indicating the most exquisite torture.

Another horse, "Pretty Boy," fell dead upon reaching his box. His death was caused by cerebral congestion, and on that account may be termed accidental, as he appeared to be in tolerably good condition on his arrival at the post, and in all probability the rider did not notice during the journey that anything was wrong with the horse. But it must be admitted that it was a consequence of the race.

It is childish to deny, as some of the reporters who witnessed the arrival do, that the great majority of the horses were in a most pitiable state of exhaustion. Even "Midas," the winner, appeared to be very much fatigued, notwithstanding the surprising powers of resistance of this fine animal, and its perfect training.

On the following day, August 15th, the judges proceeded to the classification of the horses, according to their condi-

tions. Here we wish to say that the three animals that were awarded the first place were not at all those which were in the best condition, although they could not be said to be *hors de combat*. "Midas" limped severely, notwithstanding the half hour's walking his rider had given him previous to the examination. It is only fair to add that the condition of the limbs of this animal shows that he never could have been very straight on his legs, which is not surprising considering the work it has been doing for the last two years.

It was, therefore, perhaps quite fair not to attribute this lameness solely to the ride he had just finished.

It is to be feared that the committee was a little too indulgent in its use of the words, "Horse in good condition." In fact the only horses that really were in good shape on arrival were "Scapin," "Icane," "Gaston," "Grillon," "Fabiola," "Latium," and "Salvator." All the others were evidently suffering in the legs, and some in the loins, and most of them will certainly soon be candidates for condemnation.

We are told that this raid should be an annual event; I can only hope that it will not be any such thing, at least not under the conditions of this year's contest or that of the Brussels-Ostend. The horses bought for the army are not intended exclusively for the amusement of the public; and the pleasure of receiving a toy prize, however gilded, does not appear sufficient compensation for the massacre of a lot of good horses. I repeat that such contests develop a spirit more out of place in the army than in any other quarter.

We should not forget that our French officers are the grandsons of those same who a century ago went careering over Europe to some purpose, and it is unworthy of these men to suppose that in order to stimulate to-day a similar spirit of enterprise in their sons, we must offer silly prizes or the dangerous temptation of notoriety.

Nothing but harm, and great harm, can come of introducing into the cavalry a spirit which is wholly contrary to its needs. The role of the cavalry officer, due to modern firearms, is now a role of abnegation. He is obliged to have, of all the species of courage, that which makes the severest demands upon us, for indeed he must most often now expose himself to an

obscure death in some reconnaissance too unknown to be recorded in the annals of war; he, therefore, needs that self-sacrificing devotion to duty which gets its chief reward from conscience, and which is in no way encouraged by expeditions of the kind we were lately called upon to witness.

Here is the official résumé of the Paris-Rouen-Deauville Raid:

CLASSIFICATION IN THE ORDER OF SPEED.

First Prize: Lieutenant Beausil.

Second Prize: (500 francs) a silver bucket, Lieutenant Gouin.

Third Prize: 300 francs and an objet d'art. Lieutenant Allut.

Fourth Prize: 200 francs and an enameled cup. Lieutenant Petit.

Fifth Prize: Captain Maillard.

Sixth Prize: Captain de la Taille.

First Prize: Prize of the President of the Republic for the horse classed as first among those coming from the remount depot of France. Lieutenant Beausil,

Second Prize: From the City of Paris. Lieutenant Petit.

PRIZES TO HORSES JUDGED TO BE IN BEST CONDITION ON ARRIVAL.

First: Lieutenant de Bourbon-Busset.

Second: Lieutenant Beausil.

Third: Lieutenant Abzac.

Fourth: Captain Loos.

Fifth: Lieutenant de Ligniville.

Prize to the charger, inscribed the longest on the horse book, as assigned to his rider, Captain de la Taille. His mare has been for eight years assigned to him on the regiment's books.

The prize to the regiment furnishing the winner goes to the Twenty-eighth Dragoons.

ITALIAN CAVALRY IN WATER.

9/3/11

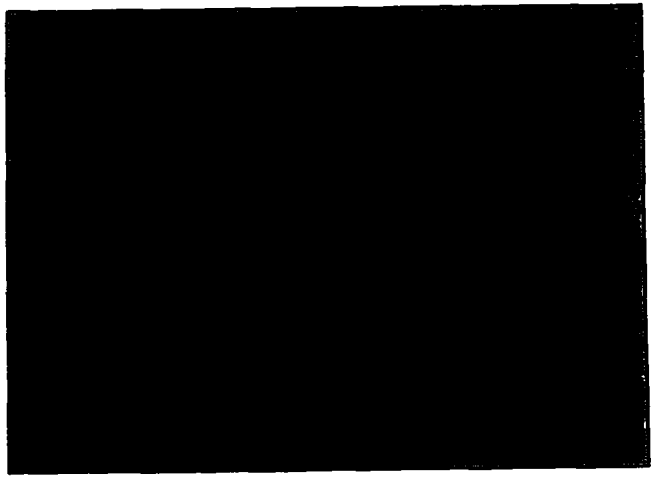
It is a well known fact, that in order to perform the important work of reconnoitering and clearing, cavalry must not be delayed by water courses, large or small. Hence in all military countries means for fording wide streams have been contrived; for example: In Austria aluminium floats and with us (Germany) the so-called "folding boat," the wooden frame of which is covered with a heavy water-proof cloth. These much lauded folding boats have their disadvantages, however, and it is an open secret that at the present moment experiments are being made with light steel boats, these boats to be transported after the cavalry upon expressly constructed wagons. "Expressly constructed," that is the point; the difficulty increases; the mobility of the whole as a unit is lessened, and it can come to pass that these wagons are not on hand when most urgently needed.

According to press dispatches the exercises in swimming in our (German) cavalry have not been neglected, these exercises taking place without the use of any contrivance; the method of procedure being the same, namely, in regard to small detachments, as will often occur in field. In Italy this rule is also followed for larger bodies of troops, and the fording of streams is diligently exercised, as the future scene of war will, in all probability, be upper Italy, which, aside from the Alpine wall, only in exceptional cases the scene of cavalry operation, is traversed by numerous rivers and small streams.

It is said that no detachment of cavalry, large or small, can ford a stream without previous exercising upon part of both horse and rider. These exercises, however, demand a certain amount of courage, and it is therefore not to be wondered at, that the daring and enterprising Count of Turin, a passionate horseman, should enjoy undertaking such drills with his regiment, the Lancers of Novara. It was he who gave Prince Henry of Orleans, a bloody souvenir when the

latter spoke slanderingly of the Italian army operations in Erythrae and Abyssinia.

As his regiment lay in Toskana (at present quartered in Vercelli), the Count used the beach at Viareggio to accustom his squadrons to entering the water and swimming. According to the account of a militiaman who partook in the exercises, and, as is to be seen from the accompanying illustrations, these exercises were carried out very methodically and were practically arranged, no one was permitted to



shirk. In the picture the young Prince appears third from the right with bridle tightly drawn.

To this same well informed militiaman we are indebted for the information upon the rules, according to which the Italian cavalry carries out these exercises.

If possible, all riders should learn to swim. Horses instinctively understand swimming, but they must be frequently instructed in order to inspire confidence, a more detailed description being given below.

In case of small detachments entrusted with a certain exercise, the required number of swimmers can always be found in every regiment. In choosing horses, one must bear in mind that those with a free shoulder movement, and those

which are fastest on land are usually the best swimmers. Full blooded horses always swim faster than others.

Our informant also made note of another peculiar circumstance; one of his horses, after repeated trials, swam badly in the exercises at Lodi, in the River Adda. This same horse further on in Ticino showed better speed than the others. He was shoulder stiff, and as the Adda lies close to the barracks, the freeness of shoulder movement failed him. In

order to reach Ticino a long march was necessary, during which the shoulder freedom returned, and this horse, particularly fast on land, overtook the others.

It is advisable where a choice can be had, to avoid weak horses or such with a bad gait.

The rider must, even when accustomed to swimming, proceed step by step in the exercises, going from easy to difficult swimming of streams in full marching order.

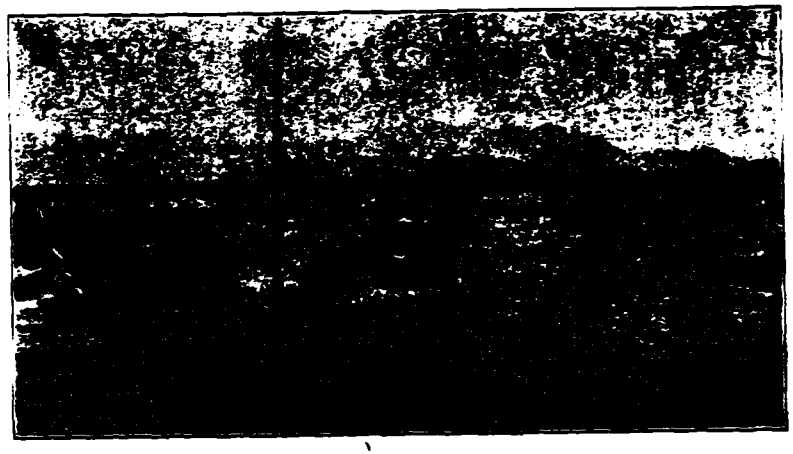
The swimming is first undertaken naked, then consecutively with socks and underwear; drill-cloth, trousers and shoes; entire drill-cloth suit; cloth trousers, drill-cloth jacket and shoes; entire cloth suit; cloth suit and leggings (gambali), and finally with field marching uniform.

In last two cases the participant must be an excellent swimmer in order to swim a moderately wide stream with a

weak current, but the gradual progressive exercises make it possible to accomplish a great deal in this line.

The men attain such confidence in water that they not only do not disturb the horse swimming beside them by seeking too strong a swimming support, but are able to guide the animal to the opposite shore.

The education of horse and rider can be undertaken simultaneously. When a rider has qualified by completing the



exercises, he must then mount and repeat the same. It is advisable to leave the horse unsaddled for some time.

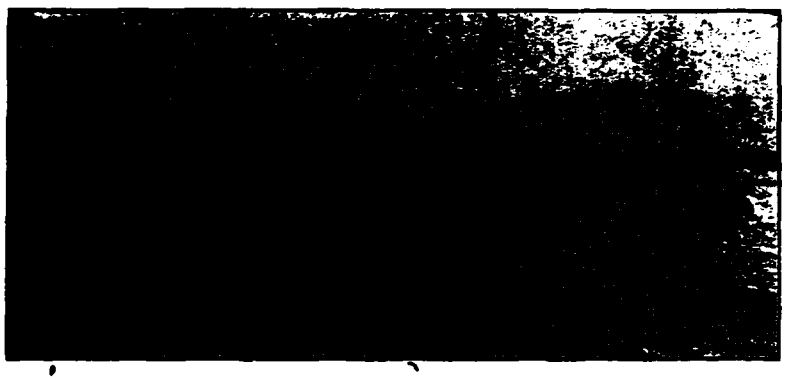
Horses with mount go much more readily into the water than when led in from flat-boats, at the same time overcoming their fear for water much more easily.

Four or five horses are allowed to enter the water with the necessary space. A life-boat crew oversees the exercises and must particularly take steps to prevent an intractable animal from disturbing its neighbors.

In first attempts, the rider should be on the lookout when reaching the opposite bank. As soon as the horse touches ground with the fore feet, he seeks to do the same with the hind feet; this causes the current to turn the animal and he now turns suddenly toward the stream; in this manner the

rider can be very easily thrown. But as has been said, this happens only in the beginning and not with all horses.

As soon as the rider, upon entering the water, feels that his horse is swimming, he glides from his back, allows the already knotted bridle rein to go free, and takes hold of the mane, in this manner swimming with the animal without allowing himself to be towed. The rider must in no case take hold of the bit during swimming, as the horse is in this regard very sensitive and can easily be disturbed; in fact the swimming qualities of a horse can in this manner be greatly impaired. The rider should seek to guide the horse with



his hand or with a small stick by tapping the animal on the cheek; also by throwing water on the horse's head, according to the direction desired. The rider must always swim on the down stream side of the horse in order to avoid being carried between the horse's legs by the current. The current also forbids the rider remaining in the saddle, it not only being a lightening for the horse, but in most cases the rider would be swept from the saddle by the current.

After a few trials at swimming, the horses enter the water without fear, especially when they have company, for example in detachments. The following from our informant is of much interest:

At Ticino, in one place the stream was 140 meters (460 feet) wide, and twelve meters (forty feet) deep, the current

one meter (3.28) per second. The Count allowed his men to enter the water in groups of four, with twenty meters distance, the single squads arriving at the other shore in just fifteen minutes, without a man having lost his horse and without the slightest accident. The return was made in the same way. As for himself, this Italian officer stated that he was considered an excellent swimmer, and that in full uniform he would be unable to swim more than two or three minutes, but that in swimming alongside a trustworthy animal he felt "like a king," and the thought of sinking or accident never entered his mind. He concludes therefrom that with well schooled horses, the worst of swimmers may well undertake the fording of streams.

According to the above, the fording of streams by cavalry does not afford as much difficulty as the layman would suppose, it only requiring intelligent schooling.

THE RUSSIAN CAVALRY; ITS ORGANIZATION, ITS CHARACTER, ITS STRATEGIC AND TACTICAL INSTRUCTION.

By CAPTAIN HART.

Translated from the French by Captain C. D. RHODES, Sixth Cavalry, General Staff, U. S. Army.

The wars of the future appear to reserve to the cavalry a more important role than ever. The experience of the field of battle will alone be able to determine its strategic and tactical character necessary to adapt it to the immense progress made in armament, and in the employment of long range fire—as intense as it is efficacious—which will result from it.

In view of these things, Russia has adopted for the enormous mass of cavalry which she controls, a special mode of strategic and tactical employment, essentially different from that of other armies. The habits and tendencies natural to

its population, as well as its immense resources in cavalrymen and horses, seem to justify it.

We propose to make a study of it; but first it will be fitting to prepare an estimate of the resources which Russia has at her control, and of comparing them with those of Austria and of Germany.

Effectives which Russia, Austria and Germany can Put in the Field.

	Squadrons.	*Horses.*
AUSTRIA POSSESSES—		
In the first line	286	43,000
In the second line	77	11,550
Total	363	54,550
GERMANY POSSESSES—		
In the first line	460	69,000
In the second line	72	10,800
Total	532	79,800
RUSSIA POSSESSES—		
In the first line	552	83,000
In the second line	526	77,000
Total	1,078	160,000
Total for Austria and Germany	895	134,350
Difference in favor of Russia	183	25,650

NOTE.—The troops which the Russian Empire is able to bring into a European war, are alone counted.

The Russian Colonel, Soukhotine goes still further in his estimate of the resources of Russia in men and horses.

According to him, she possesses a population of 42,000,000 souls, of which 2,500,000 (six per cent.) at least, are capable of taking the field. The Empire controls, besides, 20,000,000 horses, among which can easily be chosen a million saddle horses suitable for war (five per cent.). This will permit the organization of a field army of a million and a half of foot soldiers and of 500,000 cavalrymen, all available. In launching upon an adversary 300,000 cavalry alone, the latter would be more than twice the number that would be reached by the Austrian and German cavalry.

It may therefore be stated, without exaggeration, that Russia will have a formidable mass of at least 160,000 cavalry (the figure of our first estimate) to put in motion against her adversaries, and that mobilized for her European army alone.

In making, under these conditions, a parallel study of the cavalry force of the Russian Empire with that of Austria and Prussia, we have seen that she will have to oppose them a force of 183 squadrons and 25,650 horses in excess of what the two other nations will be able to put in line; besides, the division organization of the Russian cavalry and its location along the frontier during times of peace, in fact, its special organization, as well as mode of action and armament, in addition to the numerous horse artillery which will accompany it, will be able to give it, at the beginning of a war (especially if a considerable part of the German cavalry is employed against France), a crushing superiority which will bring about serious consequences for her adversaries.

Organization of the Russian Army.

All subdivisions of the enormous body of Russian cavalry have been organized into two types of cavalrymen: the *dragoon* and the *cossack*, excepting the guard.

The latter is composed of ten regiments of regular cavalry and two regiments of cossacks. It is divided into two divisions on a peace footing, and three divisions on a war footing. The first division comprises four regiments, all wearing the cuirass: the Chevalier Guards, the Horse Guards and two regiments of cuirassiers. The second division is composed of one regiment of grenadiers, one of dragoons, two of uhlans and four of hussars; on a war footing it is doubled, and forms two divisions, with the addition of two regiments of cossacks of the guard.

Tendencies Which Have Influenced the Russians in Adopting this Special Cavalry Organization.

Under the influence of the strategic and technical roles, filled with success by her cavalry anterior to the wars of the first French empire, during the campaigns of that period, during the Crimean War and that of 1877 (against the Turks),

besides numerous expeditions in Central Asia (against the Turkomans, the Herviens, the Youmoudes of Khiva, etc.); in fact, guided by the successful experience of extensive raids, by which the cavalry of North America were able to produce most significant results, during the War of Secession, the Russian cavalry has entered boldly on a new scheme, which it has adopted for the organization, instruction and military education of the cavalry. The type of dragoon is the ideal which it has followed for a long time; that is to say, a cavalryman who ought equally to be able to charge with the saber or to fight on foot, with fixed bayonets or with rifle fire. All its organization and instruction tend toward this end. These have in view to give the Russian cavalryman the technical education necessary for fighting as well on horseback as on foot, using turn about—following the necessity of the moment—the saber and shock action, or the magazine rifle, equipped with its bayonet, for fighting on foot. A numerous horse artillery (a minimum of one battery to a brigade—we have even seen one battery to two squadrons) will complete its technical value and will give great independence to the more or less numerous fractions possessing these elements. To attain this result, the education of the Russian cavalryman and his mount must, however, relegate *shock* action to the rank of secondary qualities—preserving, however, its relative importance, and keeping in view, as essential qualities, *mobility* and *endurance*.

The real, if not avowed object of the Russians, is to use horses in order to benefit by their rapidity of movement, which is the specialty of the cavalry; in order to direct it rapidly and unexpectedly on a given point, and there of employing the mode of fighting which gives strength to the infantry, in utilizing, following the terrain and circumstances of the ground, all the resources of armament, with which the Russian cavalryman will have been supplied, and that, as well on foot as on horseback; in the latter case, he ought to remain in condition for using shock action with the necessary energy if there appears to be need of it.

The natural aptitude of the Russian cavalryman, and the enormous body of mounted troops which may be mobilized,

will of themselves be able to bring about satisfactory results with that double mode of action, which, so far has produced only doubtful results in the experience of other nations, whose cavalrymen were far from possessing the natural attainments of the Russian, which permit of placing these two branches of the cavalry service under conditions which prevent mutual injury. On this account we must consider the exceptional conditions which surround the Russian army, which possessing for so long a time the ancient traditions of the cossack cavalry, has never known other forms of combat than those which have come to be adopted, forms which other nations accept only with repugnance. Besides, constant service and steadfast practice can alone develop the qualities necessary in regular cavalry. The expeditions into Central Asia have been an excellent school of practice, and the experience of the war of 1877 against the Turks has, generally speaking, given good results in the tests.

Results Towards Which the Russian Cavalry Aim in Case of a European War.

The Russian cavalry divisions are provided, as we have seen, with a numerous horse artillery (a minimum of one battery to a brigade); among their effectives are also considerable detachments of pioneers; in fact, they possess all the elements necessary for fighting mounted, and covering themselves with hasty intrenchments in ten or fifteen minutes.

These advantages give them every quality useful for forming independent corps, so far as strategic and tactical employment are concerned. This will allow the Russians, from the outbreak of war, to employ these corps a long enough time in the defense of their frontiers during mobilization and concentration (five to six weeks), or better still, to inundate the enemy's territory with their well organized and very mobile masses.

To be able to put in line the greatest number of guns possible, the effective of the squadron should be raised to a mean of one hundred and eighty horses. The Russian regi-

ments containing ten squadrons, can furnish a battalion of nine hundred bayonets, not counting the horse holders and a support of two squadrons which will remain with the horses. Two regiments of this strength will compose a brigade, and two brigades an independent division, capable of putting in line 3,600 guns, with a mounted support of 1,800 cavalrymen. Adding to this two horse batteries (sixteen pieces) with a light bridge train, a cavalry corps of 8,667 men will be constituted. Nine divisions, composed provisionally of two brigades each, organized and drilled to act with complete independence, are deployed in time of peace on the frontiers of Russia, but it is estimated that thirteen divisions would be sufficient to guard the western frontier against any eventuality, without the assistance of the infantry. They also group five other cavalry divisions on the lines of railroad, abutting on the frontier. A division formed of three brigades will constitute a powerful corps of independent cavalry, capable of putting 5,400 guns in line, a mounted support of 2,700 cavalrymen, three horse batteries (twenty-four pieces), and three squadrons of pioneers. All the cavalry divisions are largely provided with telegraph apparatus, and it is expected that one can be furnished to each squadron; cavalry officers and men are engaged in this service.

The superiority which the Russian cavalry owes to its effective, superior to that of the united forces of Austria and Germany (triple that of Austria), to its separation into independent divisions (of which nine are scattered along the western frontier) to its peculiar armament, as well as to its aptitude for fighting on foot, will give it great effectiveness, if experience justifies the results which are expected from this special organization. According to the Russians, the following are the results referred to:

1. The nine cavalry divisions stationed on the frontier will protect the latter effectually while awaiting the concentration of the Russian army, requiring five to six weeks.

2. Equipped with every appliance for immediately taking the offensive, they will be in condition for making, from the very beginning of war, an inroad on the entire hostile territory, living at the expense of the opponent and diminishing the heavy burden which the stay of armies on the lines of concentration imposes upon the country. The enemy surprised, will not be prepared to oppose equal forces to them, and especially to place their forces with the same rapidity at the menaced points.

3. They will thus be able to oppose, and even interrupt, the strategic movements of the hostile army by the destruction of the railway tracks and the surprise of certain supply depots. This would bring about, perhaps, on the part of the enemy, a modification of the plan of proposed operations from the very beginning of the war.

4. During the course of the campaign, service of exploration, and the transmission of information on the part of the enemy, which devolves upon the cavalry, can be prevented at certain points on account of the superiority of the Russian cavalry, who, on their part, can tear aside the network of security which envelopes their adversary, and inform the commanding general accordingly, with exactness and celerity. By doing this the cavalry will give freedom of movement to the army which it precedes, and it will fulfill its functions, although it might not appear in great numbers on the battlefield, even during the action. It will be equally able to threaten with its imposing forces the enemy's flanks and lines of supplies.

5. The armament of the Russian cavalry, the number of guns at its disposal, the custom of fighting on foot, the numerous pioneers trained in work on the railways and in the construction of field works, where it finds itself in its element (the Russians have been for all times great shovelers of earth) will permit it to penetrate into every part of the zone of operations, and to cut the latter with its detachments; in fact, to establish itself solidly at certain important points, and to defend them with success against the counter attack of the enemy while awaiting the aid of reinforcements. This would be a serious source of embarrassment to the communications of the enemy; all his plans of concentration and strategic maneuvers will be thwarted; and while the service of information on the part of the Russians would be estab-

lished on a solid basis, that of their adversary will be nullified at certain points of his own system of intelligence.

6. For fighting, the method adopted by the Russian cavalry will give it facility in occupying rapidly beforehand certain important positions, and of guarding them until the arrival of the infantry; for its organization will permit it to make disposition for defensive combat on foot of important detachments, trained in this kind of tactics.

7. During the battle, if the different corps or echelons of the enemy's army were separated by a tempest, a hurricane, a false movement, or any other cause, the cavalry would be thrown into the weakened intervals to intercept all communication (battle of Eylau). The commanding general will equally be able to throw strong parties of cavalry on the two flanks or rear of the enemy, which, appearing suddenly, will be able to produce with their charges, if need be by their fire, even by their simple appearance, considerable annoyance, paralyzing the action of the reserves, as happened at the battle of Moscow.

8. In the minor operations of war, a cavalry superior in numbers, knowing how to fight on foot and with a gun as well as how to throw up intrenchments, will be able to render itself unquestionably useful by seizing badly defended defiles, either in front or in reverse, occupying them in force, and then defending them. (Campaign of 1877, defile of Shipka.)

9. Besides, in case of the success of the army to which it pertains, this cavalry can play a capital role as much by direct pursuit, in advancing on the flanks of the retreating army, as by the occupation of important points on the lines of retreat. (Retreat from Moscow; retreat of the Turkish armies after the battle of Plevna.)

On the other hand, the Russian cavalry would have many advantages were it called upon to cover the retreat of its own army. Thanks to its great numerical superiority, an independent corps of cavalry can be entrusted with the duty which in other armies devolves upon a rear guard, principally of infantry. This will allow precious time to be gained by troops wishing to withdraw from the advance of the enemy,

the mobility of the cavalry permitting it to hold the latter a longer time in check, because it can retire more readily. It is often a great mistake in covering a retreat to fight foot by foot, unless it is desired to drive back the enemy, which has succeeded in throwing itself on the flanks of the rear guard. The great art consists in obliging the enemy to arrest his march, by appearing to offer him combat in a good position; then, when he shall have brought into action all expedients for overcoming the obstacle, to retire rapidly, or to fall on the head of the column when, in the pursuit, it shall have recklessly ventured far from the assistance of the support. The organization of the Russian cavalry for fighting on foot, and the rapidity with which it can withdraw, will be very favorable to these tactics.

En résumé, the action of independent masses of the Russian cavalry, with the effective mode of fighting which they possess, operating from the beginning of hostilities, on the flanks or in rear of troops of the first line, covering the concentration, will be particularly felt by the enemy. Thrown in the heart of the country, against the railways which will serve almost exclusively for military transportation toward the frontier, they will be able to cause such serious damage to them as to render the situation critical. They will scatter the depots of mobilization, destroy the storehouses and supply depots of all kinds, seize the public treasuries, and levy requisitions on the towns; in a word, they will disorganize the invaded country to such an extent, perhaps, that the enemy's corps, posted in front, will eventually be obliged to retreat *sans combat*. During the battle the independent cavalry corps will menace the wings and rear of the enemy, to oblige him to weaken his center, or to prevent the employment of his reserves, which they will hold in check; then they will slip into the breaks in his line of battle to intercept communications and the transmission of orders, always avoiding untimely engagements, knowing how to slip away before superior forces, and satisfied to resume a little while afterwards their aggressive attitude.

[*To be continued.*]

THE MILITARY FORCES OF JAPAN.

[Précis from *La France Militaire.* Published in *Journal of the Royal United Service Institution* for November, 1903.]

The *Rouskii Invalid* gives the following details of Japan's military strength:

The military forces of Japan are composed of: 1st, the Permanent Army, with its Reserves and its Recruiting Reserves; 2d, the Territorial Army; 3d, the National Militia; 4th, the Militia of the Islands of Hokkando, Tsousima, Goto, Liou-Kiou, and others. The Permanent Army conducts operations both at home and abroad; the Territorial Army is for the defense of the Empire itself; the Militia are used for auxiliary operations in the more distant parts of the country.

Recruiting.—Military service is personal and obligatory, and the male Japanese population is liable to it from the age of seventeen to forty years; at the same time the semi-savage population of the islands of the Archipelago are not liable to any military obligations. The total period of service is for twelve years and four months, of which three years are passed in the regular, four years and four months in the reserve, and five years in the territorial army. At the same time, about 13,500 men are drafted into the reserve after two years' service in the regular army. The recruiting reserve is formed from young men of the class who remain in excess after the calling out of the recruits necessary to complete the regular units; they remain for seven years and four months in this reserve, and then pass directly into the militia. On mobilization, the recruiting reserve, in the same manner as the regular reserve, serves to complete the units of the permanent army. The following only are entirely absolved from service, viz: Youths who are absolutely unfit; others only receive dispensations from service in peace time, or when in excess. The recruiting is by districts, and for this purpose Japan is divided into twelve divisional districts, each of which is again split up into four regimental sub-districts. Each regimental sub-district forms, on a war footing, one infantry regiment, one depot battalion, and one territorial army regiment. The cavalry, artillery, and other branches of the service are recruited from the whole of the divisional districts. The guards are recruited from the whole of the Empire. The noncommissioned officers come from the ranks.

The officers are recruited from the sub-ensigns. The latter come from the Military School, where the course lasts for a year, and where they enter after having served for six months in the ranks, and after completing the course at the Central Preparatory Military School. In order to be promoted from sub-ensign to sub-lieutenant, the consent of all the officers of the regiment in which the candidate is serving must be obtained. On account of present deficit in the cadres, 400 noncommissioned officers are annually promoted to commissioned rank. The limit of age fixed for the different ranks is as follows: Lieutenant generals, seventy years; major generals, sixty-five years; colonels and lieutenant colonels, fifty-four years; majors, fifty-one years; captains, forty-eight years; lieutenant and sub-lieutenant, forty-five years.

Military instruction is carried out in accordance with the German regulations which have appeared from 1880 to 1890. In the infantry, individuals as well as units are remarkable for their good appearance under arms, for the regularity of their movements and for the extraordinary mobility of their formations. Although the men are small and not thoroughly developed, they are distinguished for their smartness, lightness, and endurance under privations. In the cavalry, the horses are weak and badly trained; the men do not ride well; the paces are not properly developed: the harness and equipment are, however, satisfactory. On the field of battle the cavalry show but little initiative; they hardly ever guard the flanks, but remain almost always in the rear; hitherto, as a rule, it has shown but inferior quality. In the artillery the *personnel* is well trained, and the *matériel* very well kept; the horses, however, leave much to be desired, which greatly detracts from the mobility of that arm. The remount work is carried out by means of purchases and by requisition in time of war. With this object, they are divided into thirteen districts, but as a rule the number of horses on the lists is inadequate for the needs of the army.

Military Organization.—The Emperor is supreme head of the armed forces of Japan. The most important questions regarding the army are dealt with by the Superior War Council. The immediate assistants of the Emperor are three dignitaries, who are quite independent of one another, viz: the War Minister, the Chief of the General Staff, and the Director General of Military Training. In order to ensure unity of action amongst these three, as well as between the War Department and the Admiralty, a council was formed in 1900, consisting of the War Minister, the Minister for the Navy, the Chiefs of the General Staff and of the Naval Staff, and the Director General of Military Training. The General Staff consists of six officers, and is under the immediate orders of the assistant to the Chief of the General Staff. Three of the heads of the offices are, at the same time, chiefs of the staffs of the three defense zones into which the whole of the Empire is divided. Each of these zones consists of four divisional districts; the commanders of these zones supervise the preparation of the troops for war and the defense organization of their districts.

The corps of officers of the Staff is recruited from officers who have been through the War Academy, and who have then put in a year with their regiments. The Staff Corps consists of about 150 officers. The Army Service Corps establishments include clothing stores, tailors' shops, and a cloth manufactory at Senjon. The artillery establishments consist of two arsenals, viz: 1st. The arsenal at Tokio with an arms factory, which turns out 300 rifles a day; an instrument factory, a wheel factory, a saddle manufactory, and a cartridge factory, which can turn out 10,000 cartridges a day. 2d. The arsenal at Osaka, which includes a gun-carriage factory, a gun foundry, a fuse factory, a steel works, a loading establishment, and a harness and equipment store. There are also two national powder factories at Itabashi and at Evahane.

The military instructional establishments consist of: 1st. Six preparatory military schools, taking 150 pupils each, and where the courses are for three years. 2d. A Central Preparatory Military School, where the course lasts for two years, and the number of pupils amounts to 300; pupils go to this school on leaving the preparatory schools, and leave it as non-

commissioned officers, and are posted to regiments. 3d. The Military School at Tokio, open to noncommissioned officers who have passed through the Central School, when they have served six months with their regiments, and to those who have enlisted conditionally, and who have one year's service. The number of students is from 500 to 700, and the course there lasts for a year. On leaving it, students return to their regiments as sub-ensigns. 4th. The Artillery and Engineers' School of Application, where the course lasts for two years. 5th. The War Academy, for the preparation of officers for the Staff; the course lasts for three years, and, on leaving it, the officers must pass a year with their regiments before being posted to the Staff. 6th. The Cavalry School of Application, where the course is for ten months. 7th. The School of Musketry, with a course of one year and eight months. 8th. The artillery gunnery course of three months. 9th. The Technical Powder School, where the course lasts three years. 10th. The Fortress Artillery School. 11th. The School for Military Topography. 12th. The Army Service Corps School. 13th. The Medical and Veterinary Schools. 14th. The School for Tailors and Bootmakers. There are seven remount depots, three of 2,000, two of 1,000, and one of 600 horses. The chief depot has, in addition, a school for farriers.

The following are the details of the effective of the Japanese army on a war footing, not counting the troops on the Island of Formosa:

Administration and Establishments.—1,000 officers, 2,900 men, and 2,770 horses.

PERMANENT ARMY.

Infantry.—52 regiments of 3 battalions=156 battalions or 4,160 officers, 143,000 men, 520 horses.

Cavalry.—17 regiments of 3 squadrons=55 squadrons, or 400 officers, 9,300 men, 9,000 horses.

Field Artillery.—19 regiments of 6 batteries=684 guns, 800 officers, 12,500 men, 8,800 horses.

Fortress Artillery.—6 regiments and 3 battalions=20 battalions, or 530 officers, 10,300 men, 70 horses.

Engineers.—13 sapper battalions, or 270 officers, 7,000 men, 215 horses; 1 railway battalion of 20 officers, 550 men, 15 horses.

Transport.—13 battalions, or 220 officers, 7,740 men, 40,000 horses.

Total=203 battalions, 55 squadrons, 684 guns, or 7,500 officers, 193,790 men, 61,390 horses.

DEPOT TROOPS.

Infantry.—52 battalions, or 24,950 men.

Cavalry.—17 squadrons, or 2,350 men.

Artillery.—19 batteries=114 guns and 2,650 men.

Engineers.—13 companies, or 1,600 men.

Transport.—13 companies, or 3,050 men.

Total=52 battalions, 17 squadrons, 26 companies, 19 batteries, or 1,000 officers, 34,600 men, 9,000 horses, 114 guns.

TERRITORIAL ARMY.

Infantry.—52 regiments of 2 battalions=104 battalions, or 2,600 officers. 96,300 men, 200 horses.

Cavalry.—26 squadrons, or 130 officers, 4,520 men, 4,650 horses.

Artillery.—13 regiments of 4 batteries=312 guns, 210 officers, 5,510 men, 3,010 horses.

Engineers.—13 battalions of 2 companies=130 officers, 4,700 men, 80 horses.

Transport.—13 battalions of 2 companies=130 officers, 7,500 men, 3,920 horses.

Total=130 battalions, 26 squadrons, 312 guns, 3,200 officers, 118,530 men, 11,860 horses.

Militia.—1 battalion, 1 squadron, 6 guns, or 35 officers, 1,180 men, 210 horses.

Grand total=386 battalions, 26 companies, 99 squadrons, 1,116 guns, 11,735 officers, 348,100 men, and 86,460 horses.

ARMAMENT.

The infantry and engineers are armed with the Midji magazine rifle, model 1897. The depot troops and Territorial Army have a considerable reserve of Murata magazine,

and of Peabody and Remington rifles. The chief details regarding these arms, are as follows: For the Midji, 6.5-mm. calibre, magazine with 5 cartridges, weight with bayonet 4.3 kilogrammes (about 9 pounds), initial velocity 725 meters; has a dagger bayonet; for the Murata 7.5-mm. calibre magazine with 8 cartridges, weight with bayonet 4.5 kilogrammes, initial velocity 610 meters: has a sword bayonet. The bayonet is only fixed at the moment of attack, or by sentries when posted. Some divisions have machine guns on trial.

The cavalry is armed with swords with metal scabbards, and with Midji carbines, model 1897. The field and mountain artillery have Arisaka 75 mm. Q. F. guns, model 1898, with hydraulic compressor. Smokeless powder is manufactured in Japan. Batteries have two ammunition wagons in peace and six in war time. The gunners are armed with sword bayonets. The batteries at Formosa have Uchatin bronze guns, with a 75-mm. calibre. The fortress and siege park artillery have the most recent models of guns and mortars, as well as a considerable number of old bronze guns.

A RUSSIAN'S OPINION OF THE JAPANESE ARMY.

[Reprinted from the *Journal of the Royal United Service Institution* for November, 1903.]

The following opinion of a distinguished Russian military officer, which has recently appeared in the *Novoé Vrémia*, may be of interest at the present time:

"It goes without saying that the Japanese army is a serious adversary for us, especially on account of the vast distance which separates the heart of Russia from the future theater of operations, but in spite of that the troops of the Rising Sun labor under many defects. We place in the first rank the weak, effective and bad quality of the cavalry. It does not consist in war time of more than ninety-nine squadrons, that is to say, from 12,000 to 13,000 horsemen, which constitutes a thirtieth portion of the whole of the Japanese armed forces. It must be generally admitted that this proportion is an excessively small one compared with Euro-

pean powers, where the proportion of cavalry to the other arms varies from one-seventh in Russia, to one-twelfth and one-fifteenth. The principal obstacle to an increase of cavalry appears to lie in the small number of horses actually in the country. Further, according to competent authorities who have visited Japan, these horses are small and unsuitable for cavalry work. The paucity of mounted men, the unfavorable conditions of the country from a topographical point of view, and the density of the population, do not permit of such necessary training to be given to the cavalry in peace time as to prepare it for large sweeping stategic operations.

"Although the government is seriously endeavoring to improve the breed of horses, and buys from breeders in other countries, it still requires much time in order to develop, in sufficient quantities, the breeds of saddle and draught horses. The Japanese army would find serious difficulty in bringing units and their equipages up to a war footing in the event of a mobilization. It would have to bring horses from a distance, buying them in Australia, and losing much time before the necessary mobilization requirements could be properly carried out. The consequences of this situation are at once apparent. This is not the place to lay stress on the pernicious influence that insufficiency of cavalry in both quality and quantity would exercise on the conduct of operations. We will merely remark that every army under such conditions, marches at haphazard and in darkness. Such an army, even if it obtained a success, could not take advantage of it, in consequence of its inability to pursue, and could thus never gain a decisive victory. On the other hand, if unsuccessful, it would incur great danger from the cavalry of its conqueror.

"The infantry appears superior to the other arms; its *morale* is excellent, but, on the other hand, its physical qualifications are small. In hot countries the Japanese infantryman has proved himself capable of enduring great fatigue, but it is not likely that he would show the same quality in cold climates. Not long ago a company, making an ordinary march in Japan, was surprised by a snow storm, and almost

entirely annihilated by the cold. As regards its tactical instruction, the infantry is good, but there is reason to believe, based on recent military operations in China, that it is but little trained in taking proper advantage of ground. The press has given but little information regarding the artillery, but, at the same time it is known that the *matériel* is not bad. In a general way it is difficult to estimate, as a whole, the fighting value of an army which has not yet seriously received its baptism of fire. It is, however, beyond dispute that during the last thirty-five years the Japanese have been able to create a very valuable military machine. They had natural advantages at their disposal, and the seed has fallen on good ground, viz: a naturally warlike nation, as her history proves Japan to be. That history shows a series of internecine wars, which have given a military temper to the people. It remains to be seen how that army will bear itself on the day when a great war will put it to a decisive proof, when it has to bring into line all its available forces, and not merely a portion of them."

RECORD OF ENGAGEMENTS WITH HOSTILE INDIANS IN THE DIVISION OF THE MISSOURI FROM 1868 TO 1882.

[CONTINUED.]

1877.

The large cantonment at the mouth of the Tongue River having been established, from this point as a base the pursuit of the remnants of the Sioux and Northern Cheyennes with Sitting Bull and Crazy Horse was energetically pressed by the troops under Colonel Miles. The low state of water in the river now gave the troops on the Yellowstone a three-fold task of great difficulty, to shelter themselves by building huts, to bring up their supplies by tedious hauling from the head of navigation, and to prosecute, simultaneously, in the midst of winter, vigorous field operations against the hostiles.

On the 29th of December, Colonel Miles, with Companies A, C, D, E, and K, Fifth Infantry, and Companies E and F, Twenty-second Infantry, numbering four hundred and thirty-six officers and men, with two pieces of artillery, moved out against the Sioux and Cheyennes under Crazy Horse, whose camp had been reported south of the Yellowstone, in the valley of Tongue River. As the column moved up the Tongue, the Indians abandoned their winter camps, consisting of about six hundred lodges, and the column had two sharp skirmishes on the 1st and 3d of January, driving the Indians up the valley of Tongue River, until the night of the 7th, when the advance captured a young warrior and seven Cheyenne women and children, who proved to be relatives of one of the head men of the tribe. A determined attempt was made by the Indians to rescue the prisoners, and preparations were made for the severe fight to be expected the next day. On the morning of January 8th, about six hundred warriors appeared in front of the troops and an engagement followed, lasting about five hours. The fight took place in a cañon, the Indians occupying a spur of the Wolf Mountain range, from which they were driven by repeated charges. The ground was covered with ice and snow to a depth of from one to three feet, and the latter portion of the engagement was fought in a blinding snow-storm, the troops stumbling and falling in scaling the ice and snow covered cliffs from which the Indians were driven, with serious loss in killed and wounded, through the Wolf Mountains and in the direction of the Big Horn range. The troops lost three men killed and eight wounded. The column then returned to the cantonment at the mouth of Tongue River.

January 9th, a detachment of Troops H and L, Sixth Cavalry, and Company C, Indian scouts, under command of Lieutenant J. A. Rucker, Sixth cavalry, from the Department of Arizona, had a fight with a band of Indians in the mountains in the western part of New Mexico, killing ten Indians and capturing one; one enlisted man was wounded.

January 12th, on Elkhorn Creek, Wyoming, a small detachment of Troop A, Third Cavalry, had a fight with a band of Indians, three enlisted men being wounded.

February 23d, near Deadwood, Dakota, Lieutenant J. F. Cummings, with Troop C, Third Cavalry, attacked a war party of Indians, killing one Indian and recapturing six hundred sheep, seventeen horses, and seven head of cattle.

May 4th, Captain P. L. Lee, with Troop G, Tenth Cavalry, had a fight with Indians near Lake Quemado, Texas, killing four and capturing six; one enlisted man was killed, sixty-nine head of stock were captured, and twelve lodges, with their contents, destroyed. On May 6th, three more lodges and their supplies were burned by Captain Lee's command in Cañon Resecata.

The prisoners which Colonel Miles' command captured from Crazy Horse's village, on the night of January 7th, proved a valuable acquisition in communicating with the hostiles, and in arranging negotiations for their surrender. On February 1st, Colonel Miles sent out a scout, with two of the captives, offering terms on which a surrender would be accepted, informing the hostiles that a non-compliance would result in a movement of the troops against them. Following up the trail from the scene of the engagement of January 8th, near the Wolf Mountains, the Indians were found camped on a tributary of the Little Big Horn. The mission was successfully executed, and on February 19th the scout returned with nineteen Indians, mainly chiefs and leading warriors, who desired to learn the exact conditions upon which they could surrender. The terms were repeated, viz: unconditional surrender and compliance with such orders as might be received from higher authority. The delegation returned to their village, the camps moved to near the forks of Powder River for a general council, and a large delegation of leading chiefs came in March 18th to learn whether further concessions could be obtained from Colonel Miles. They were informed that there would be no change in previous conditions, and that it would be equally satisfactory if the Indians surrendered at the more southern agencies, but that they must do one thing or the other, or troops would be immediately sent out after them. Crazy Horse's uncle, named "Little Hawk," with others, then guaranteed to either bring the Indian camp to the cantonment at Tongue River, or to take it to the lower agencies, leaving in Colonel Miles' hands, as a pledge of good faith, nine hostages, prominent men and head warriors of both tribes. Three hundred Indians, led by "Two Moons," "Hump," and other chiefs, surrendered to Colonel Miles on April 22d. The largest part of the bands, numbering more than two thousand, led by Crazy Horse, Little Hawk and others, moved southward and surrendered at the Red Cloud and Spotted Tail Agencies in May.

Crazy Horse and his people were placed on the reservation near Camp Robinson, where, for a time, they appeared quiet and peaceable, but in a few months the restraints of this new position became so irksome to Crazy Horse that he began to concoct schemes again involving his people in war. It was determined, therefore, to arrest and confine him. Whilst on his way to the guard house he broke from those around him and attempted to escape by hewing his way with a knife through

the circle of sentinels and by-standers. In the melée he was fatally wounded and died on the night of September 7th.

In the meantime Sitting Bull's camp had gathered near the Yellowstone, and when Crazy horse and his confederates decided to place themselves under subjection to the government, Sitting Bull's band, in order to avoid surrendering and to escape further pursuit, retreated beyond the northern boundary and took refuge on Canadian soil, the party being in a very destitute condition, almost out of ammunition, and having lost nearly everything excepting their guns and horses.

From those who had surrendered Colonel Miles learned that a band of renegades, chiefly Minneconjous, under "Lame Deer," had determined not to yield, had broken off from those who surrendered at Tongue River, and had moved westward. This was about April 22d, and as soon as the necessary forage could be obtained, on May 1st, Colonel Miles, with a force consisting of Troops F, G, H and L, Second Cavalry, Companies E and H, Fifth Infantry, and E, F, G and H, Twenty-second Infantry, started up Tongue River. At a point sixty-three miles from its mouth, they cut loose from the wagons, struck across to and moved up the Rosebud, and after a very hard march, with scarcely a halt during two nights and one day, the command surprised Lame Deer's band on May 7th, near the mouth of Muddy Creek, an affluent of the Rosebud. The village was charged in fine style and the Indian herd of animals cut off and secured. The Indians were called on to surrender; Lame Deer and "Iron Star," his head warrior, appeared desirous of doing so, but after shaking hands with some of the officers, the Indians, either meditating treachery or fearing it, again began firing. This ended peace-making and the fight was resumed, the hostiles being driven in a running fight eight miles across the broken country, to the Rosebud. Fourteen Indians were killed, including Lame Deer and Iron Star, four hundred and fifty horses, mules and ponies, and the entire Indian camp outfit were captured, including fifty-one lodges well stored with supplies. Lieutenant Alfred M. Fuller, Second Cavalry, was slightly wounded; four enlisted men were killed and six wounded. The Indians who escaped subsequently moved eastward to the Little Missouri, and the command returned to the cantonment, where four companies, B, F, G and I, Fifth Infantry, were mounted with the Indian ponies and continued to serve as cavalry until after the Nez Percés campaign in the following autumn.

During the remainder of May and the early part of June the force under Colonel Miles, commanding the District of the Yellowstone, was increased by eleven troops of the Seventh Cavalry, four companies of the First Infantry, and two of the Eleventh Infantry. A portion of these were sent to assist in the construction of the new post on the Big Horn (now Fort Custer), and field operations were continued by several separate columns from Colonel Miles' force.

One of these detachments, consisting of six companies of the Twenty-second Infantry, three companies of the First Infantry, and one troop of the Seventh Cavalry, under command of Major H. M. Lazelle, First Infantry, on June 18th left Tongue River, dropped down by boat to below the mouth of Powder River, marched thence beyond the Box Elder,

on the Upper Little Missouri, and struck the trail of Lame Deer's band. This was followed nearly to Sentinel Buttes, the advance overtaking and skirmishing with a part of the band.

A second detachment, consisting of three troops of the Second Cavalry and one piece of artillery, was sent by boat from Tongue River to Glendive, July 2d, with orders to march towards the Little Missouri and to try to intercept the Indians pursued by Major Lazelle. The two forces united on the Yellowstone about July 18th, and the three troops of the Second Cavalry, reinforced by three companies—A, H and I—Fifth Infantry, mounted, were placed under command of Major J. S. Brisbin, Second Cavalry. These two commands moved across the Little Missouri, following the trail of the Indians up that stream to Short Pine Hills. Major Lazelle's force then returned with the wagons to Wolf Rapids and subsequently to Tongue River, arriving there about the end of August. Brisbin's column, with pack animals, continued the pursuit of the Indians across the Little Powder River, then to the main Powder and over the Wyoming boundary, gaining upon the hostiles and causing them to abandon some of their property, but without succeeding in getting a fight. Worn out by the hard marching and pursuit, Brisbin's column returned by the valleys of Powder and Tongue Rivers to the cantonment at the mouth of the latter, where it arrived August 30th; the Indians, continually pursued and harassed by the troops, moved southward to Red Cloud and Spotted Tail Agencies, surrendering there during the months of July, August and September.

In the latter part of July, the Nez Percés Indians, pursued by General Howard with troops from the Department of the Columbia, made their way, via the Lo-Lo trail, toward Montana; Captain Rawn, Seventh Infantry, promptly threw a small force, consisting of his company of thirty men and a few citizen volunteers, into the Lo-Lo Pass, where they intrenched themselves in the cañon, determined to dispute the entrance of "Chief Joseph" and his band into Montana.

On July 27th Captain Rawn had a talk with the Nez Percés, who proposed, if unmolested, to march peaceably through the Bitter Root Valley, but Captain Rawn refused to allow them to pass without the warriors surrendering their arms. Another council was arranged for the following day, July 28th, Captain Rawn hoping to detain the Nez Percés until General Howard's troops, or expected assistance from Fort Shaw, Montana, under Colonel Gibbon, should arrive.

After the second council, the Nez Percés refused to comply with Captain Rawn's demands, and, by climbing the hills, succeeded in passing around his flank into the Bitter Root Valley. Captain Rawn then abandoned his breastworks, formed a skirmish line across the cañon, and advanced in the direction the Indians had taken, but they retreated into the Bitter Root; only about a dozen or twenty of the volunteers remaining with Captain Rawn's small company, it was obliged to return to its post near Missoula.

Colonel J. Gibbon, Seventh Infantry, having collected from the posts in Montana several companies of his regiment, started from Fort Shaw for Missoula, one hundred and fifty miles distant, making the march in seven days. He reached the new post there on the afternoon

of August 3d, his force consisting of Companies A, D, F, G, I and K, Seventh Infantry, with about thirty-five citizen volunteers, aggregating one hundred and ninety-one officers and men.

With this command Colonel Gibbon started in pursuit of the Indians, who had turned southward up the valley of the Bitter Root, and after five days of terrible climbing over the rugged and broken country intervening, the Nez Percés village was overtaken on the night of the 8th of August, in the "Big Hole Basin," Montana. The troops quietly made their way, in the darkness, through the Indian herd of ponies, and stationed themselves near the village, the command lying down to wait for dawn.

As day began to break, the troops, in perfect silence, moved to their positions for attack, a deep slough, with water waist deep, having to be crossed before reaching the Indian camp. Suddenly a single shot was heard on the extreme left, followed quickly by others, and the line of men sprang forward. A heavy fire was at once opened along the entire length of the Indian "teepees," the startled Nez Percés rushing from their lodges in every direction, many taking refuge in the brush and behind the bank of the creek along which the village lay. A destructive fire was poured into the troops as the latter came into the open ground, but in less than twenty minutes they were in full possession of the camp, and orders were given for its destruction.

Whilst part of the men were engaged in burning the lodges the Indians kept up a fire from their sheltered positions, officers and men falling rapidly under these well-directed shots, until orders were reluctantly given to withdraw from the village and take shelter in the timber. This movement was successfully accomplished, the troops carrying off with them such of their wounded as could be found, the Nez Percés following closely and keeping up a constant fire. The fighting continued with activity all day, the Indians attempting to burn out the troops by setting fire to the grass and woods, and during the night shots were occasionally discharged into the position of the troops.

In the night march, on August 8th, to surprise and attack the camp, the supply train had to be left behind, so that the troops were wholly without food, blankets, or medicine for the wounded, all being forced to satisfy hunger, as well as they could, with the flesh of their dead horses. About eleven o'clock at night, on August 10th, the Indians gave the troops a parting volley and disappeared.

On the morning of August 11th, parties were sent out by Gibbon to bury the dead, all of whom were found and properly interred. At ten o'clock in the morning, General Howard, with a small escort from his column, reached Gibbon's position, and preparations were at once made to resume the pursuit.

In this engagement the casualties were very great, considering the small size of the force engaged, and were as follows: Killed, Captain William Logan and First Lieutenant James H. Bradley, Seventh Infantry; twenty-one enlisted men and six citizens; total killed, twenty-nine. Wounded, Colonel John Gibbon, Captain C. Williams, two wounds; First Lieutenant C. A. Coolidge, three wounds; First Lieutenant William L. English, two wounds, one wound mortal; Second Lieutenant C. A. Woodruff, three wounds; four citizen volunteers wounded and thirty-one enlisted men, one of the latter mortally; total killed and wounded, sixty-nine, out of a strength of one hundred and ninety-one. Lieutenant English died of his wounds August 20th.

Captain Comba, who commanded the burial party, reported finding the bodies of eighty-nine dead Indians on the field.

On August 13th, fifty of Colonel Gibbon's badly crippled force volunteered, under Captain Browning and Lieutenants Wright and Van Orsdale, to go with General Howard in pursuit of the hostiles, and Colonel Gibbon proceeded with the wounded to Deer Lodge, Montana, ninety miles distant, where they arrived on August 16th. Captain R. Norwood, with Troop L, Second Cavalry, started from Fort Ellis, August 8th, to join Colonel Gibbon in the field, but while *en route* was ordered to report to General Howard.

After leaving the Big Hole battle ground, the Nez Percés proceeded south, passed the town of Bannock, murdering settlers and stealing stock as they went. They then crossed the main divide of the Rocky Mountains, east of Fort Lemhi, turned east and recrossed the Rockies again, near Henry's Lake, moved thence to the Madison River, up that stream to the Geyser Basin and through that to the Yellowstone. This they crossed, and then moved, by an irregular course, to Clark's Fork and down that to its junction with the Yellowstone, closely pursued by General Howard's wearied troops and the detachment from Colonel Gibbon's command.

Early in the morning of August 20th, at Camas Meadows, Idaho, the Nez Percés succeeded in capturing about one hundred mules from General Howard; Major Sanford, with two troops of the First Cavalry, and that of Captain Norwood, pursued with great energy, struck the Indians and recaptured about fifty of the animals. In this attack Lieutenant H. M. Benson, Seventh Infantry, attached to Captain Norwood's troop, and six enlisted men were wounded; one enlisted man was killed.

Information of the direction the Nez Percés were taking having been transmitted by telegraph, Colonel Sturgis, with Troops F, G, H, I, L and M, Seventh Cavalry, numbering about three hundred and sixty men, was dispatched from the neighborhood of Tongue River, to try to intercept the hostiles in the direction of Judith Gap. On August 27th, Colonel Sturgis received, by way of Fort Ellis, a telegram from General Howard, dated the 25th, at Virginia City, Montana, stating that the hostiles would cross the Stinking River about one hundred miles southeast of the Crow Agency; he also received information through his scouting parties, which satisfied him that the Nez Percés were still south of the Yellowstone, so Colonel Sturgis decided to watch both the Stinking River and Clark's Fork. On September 8th he struck the trail and on September 11th met the exhausted troops of General Howard in the vicinity of Clark's Fork.

Colonel Sturgis pushed on, with his own command, hoping by forced marches of fifty or sixty miles per day, for three or four days, to overtake the Nez Percés; so, joined by about fifty men of Troops C and K, First Cavalry, and two mountain howitzers from General Howard's expedition, the chase was resumed. At the same time word was sent by

couriers to Colonel Miles, at Tongue River, notifying him of the course the Nez Percés were last following, in the belief that he might, by a rapid direct march from his post, intercept the hostiles still further to the north.

The first day after leaving General Howard, Colonel Sturgis marched fifty miles, and the next morning, September 13th, he reached the Yellowstone and crossed the river. The Nez Percés being reported in sight, the column moved rapidly down the valley six or seven miles, the advance guard attacking a few Indian skirmishers posted behind the crests of some ridges. Colonel Sturgis' entire force soon became engaged and drove these Indians back upon their main body, which was moving up Cañon Creek. The Indians strongly occupied both the cañon and high ground on each side of it, but they were steadily driven by the troops from rock to rock toward the head of the cañon, when nightfall put an end to the fight.

The loss of the Indians in this engagement and in the pursuit on the following day was twenty-one killed; the loss of the troops was three enlisted men killed and Captain T. H. French, Seventh Cavalry, and eleven enlisted men wounded; the number of ponies lost by the Indians was altogether about nine hundred.

Early on September 14th, Sturgis resumed the pursuit, preceded by a large party of Crow scouts, who killed five more of the rear guard of the Nez Percés and captured four hundred of the entire number of ponies taken by Sturgis' command. Worn out by incessant marching, the troops could do little, however, to diminish the distance between themselves and the Indians, every officer and man of the cavalry taken from General Howard's column being on foot, owing to the exhausted condition of their horses. For several days the troops had been wholly without rations, and the limit of endurance had been reached by both men and animals; Colonel Sturgis accordingly discontinued his pursuit and waited for General Howard to overtake him, when both commands were united and marched together from the Musselshell to the Missouri, reaching Carroll on October 1st. General Howard proceeded by boat to Cow Island, leaving Colonel Sturgis in command of the troops.

The night of September 17th, Colonel Miles received the communication informing him of the movements of the Nez Percés; he at once started from Tongue River, September 18th, and marched rapidly in a northwest direction to intercept the enemy. His force consisted of Troops F, G and H, Second Cavalry; A, D and K, Seventh Cavalry, and Companies B, F, G, I and K, Fifth Infantry (mounted), two pieces of light artillery, and a detachment of white and Indian scouts; he decided to push for the gap between the northern end of the Little Rocky and the Bear Paw Mountains. On September 23d, the Nez Percés crossed the Missouri at Cow Island, destroying the public and private stores there. A detachment of twelve men, under Sergeant Molchert, Seventh Infantry, was stationed at this point, in a slight intrenchment; they were repeatedly charged by the Nez Percés, who were, however, as often repulsed by the little garrison, consisting of but four citizens and Sergeant Molchert's detachment; two of the citizens were wounded.

Major Ilges, Seventh Infantry, commanding at Fort Benton, received information on September 21st, that the Nez Percés were approaching Fort Claggett; he immediately started with his single weak company of the Seventh Infantry and a party of thirty-six citizen volunteers, and reached Claggett the next day. On September 26th, a skirmish ensued, lasting two hours, one of the volunteers being killed. Major Ilges feeling that his force was not strong enough to continue the pursuit, he withdrew to Cow Island.

On September 25th, Colonel Miles received, through the citizens who had escaped from Cow Island, information that the Indians had crossed the Missouri, so he began very rapid forced marches, which brought his command to Bear Paw range on September 29th.

On September 30th, at seven o'clock in the morning, after a march of two hundred and sixty-seven miles, Colonel Miles' command was upon the trail of the Nez Percés, and their village was reported only a few miles away. It was located within the curve of a crescent-shaped cut bank in the valley of Snake Creek, and this, with the position of some warriors in ravines leading into the valley, rendered it impossible for his scouts to determine the full size and strength of the camp. The whole column, however, advanced at a rapid gait, the leading battalion of the Second Cavalry being sent to make a slight detour, attack in the rear, and cut off and secure the herd. This was done in gallant style, the battalion, in a running fight, capturing upwards of eight hundred ponies, the battalions of the Seventh Cavalry and the Fifth Infantry charged, mounted, directly upon the village.

The attack was met by a desperate resistance and every advance was stubbornly contested by the Indians; but with courageous persistence, fighting dismounted, the troops secured command of the whole Indian position, excepting the beds of the ravines in which some of the warriors were posted. A charge was made on foot by a part of the Fifth Infantry down a slope and along the open valley of the creek into the village, but the fire of the Indians soon disabled thirty-five per cent. of the detachment which made this assault, and attempts to capture the village by such means had to be abandoned.

In the first charge by the troops, and during the hot fighting which followed, Captain O. Hale, Seventh Cavalry, Lieutenant J. W. Biddle, Seventh Cavalry, and twenty-two enlisted men were killed; Captains Moylan and Godfrey, Seventh Cavalry, First Lieutenants Baird and Romeyn, Fifth Infantry, and thirty-eight enlisted men were wounded.

The Indian herd having been captured, the eventual escape of the village became almost impossible. The casualties to the troops had amounted to twenty per cent. of the force engaged; there were many wounded to care for, and there were neither tents nor fuel, a cold wind and snow storm prevailing on the night of September 30th, so Colonel Miles determined to simply hold his advantage for a time, notifying General Howard and Colonel Sturgis of the situation; Colonel Sturgis received Colonel Miles' dispatch on the evening of October 2d, and at once started his troops for the battlefield.

On the morning of October 1st, however, communication was opened between Colonel Miles' troops and the Indians, and Chief Joseph, with

several of his warriors appeared, under a flag of truce. They expressed a willingness to surrender, and brought up a part of their arms (eleven rifles and carbines), but being suspicious, the Nez Percés remaining in camp, hesitated to come forward and lay down their arms. While Chief Joseph remained in Colonel Miles' camp, Lieutenant Jerome, Second Cavalry, was sent to ascertain what was going on in the village. He went into the Indian camp and was detained there by the Nez Percés unharmed, until Joseph returned on the afternoon of October 2d. General Howard, with a small escort arrived upon the scene on the evening of October 4th, in time to be present at the full surrender of the Indians.

During the fight with Colonel Miles' command seventeen Indians were killed and forty wounded. The surrender included eighty-seven warriors, one hundred and eighty-four squaws, and one hundred and forty-seven children. The prisoners were first sent to Fort A. Lincoln, thence to Fort Leavenworth, Kansas, and were finally located in the Indian Territory.

In the annual report for the year 1877, by Colonel Miles, commanding the District of the Yellowstone, the following summary of the operations of his troops against Indians in that district for the years 1876 and 1877 appears: Aggregate distance marched, over four thousand miles; besides the large amount of property captured and destroyed, sixteen hundred horses, ponies and mules were taken from the hostiles; each principal engagement was followed by important surrenders of bands, and upwards of seven thousand Indians were either killed, captured, forced to surrender or driven out of the country.

September 29th, Lieutenant Bullis, Twenty-fourth Infantry, with a small detachment, pursued a band of hostile Lipans and attacked them in their camp, four miles from Saragossa, Mexico; he captured four squaws, one boy, twelve horses and two mules, and destroyed the Indians' camp equipage.

November 1st, near the Rio Grande, Lieutenant Bullis, Twenty-fourth Infantry, with a detachment of thirty-seven Seminole scouts had a fight with a band of renegade Apaches and other Indians. Captain S. B. M. Young, Eighth Cavalry, with a force of one hundred and sixty-two men, consisting of Troops A and K, Eighth Cavalry, and C Tenth Cavalry, and Lieutenant Bullis's detachment of scouts, after a very long pursuit succeeded in surprising this band of Indians near the Carmen Mountains, Mexico, on November 29th. A charge by the troops dispersed the Indians in every direction, with a loss of their camp equipage, seventeen horses, six mules and some arms; one enlisted man was wounded.

December 18th, at Ralston Flat, New Mexico, a detachment of Troops C, G, H and L, Sixth Cavalry, commanded by Lieutenant J. A. Rucker, Sixth Cavalry, from the Department of Arizona, had a skirmish, in which one Indian was killed. The same detachment had another fight with Indians in Las Animas Mountains, New Mexico, December 18th, when fifteen more Indians were killed.

In addition to engagements between troops and Indians in the Department of Texas, the following attacks were also specially reported by various post commanders:

October 9, 1876, Juan Marengo was killed at the mail station at Eagle Springs, Texas.

Two men, named Kountz and Spears, mail carriers from Fort McKavett, Texas, were killed; date not given.

February 22, 1877, a buffalo hunter, named Soulé, was killed near the Staked Plains.

March 7, 1877, four miles from Fort Davis, Deroteo Cardinas and John Williams were killed.

The commanding officer at Fort Clark, Texas, reported three persons killed by Indians on April 20, 21 and 22, 1877.

May 30, 1877, Bescento Acosta was killed by Apaches about four miles from Fort Davis.

August 1, 1877, Henry Dill, a stage driver, was killed at El Muerto, Texas, and on the same day, four miles from that place, a man named Sandy Ball was killed.

A Mexican was killed near Uvalde November 16th, and two Mexican herders were also killed near Fort Clark on November 18th.

December 23d, Gabriel Valdez and Horan Parsons were killed in Bass Cañon, near Van Horn's Wells, Texas.

1878.

January 5th, sixty miles northwest of Presidio del Norte, Texas, six men were killed by Mescalero Apaches from the Fort Stanton Reservation, New Mexico. (Reported by commanding officer Fort Davis, Texas.)

January 16th, Colonel J. E. Smith, Fourteenth Infantry, commanding officer at Fort Hall, Idaho, reported the surprise and capture by troops of his command of a party of hostile Bannocks at the Ross Park Agency, Idaho; ten warriors were disarmed and two hundred and fifty horses captured.

On the same day, Companies A and H, Twenty-fifth Infantry, and Troop H, Tenth Cavalry, commanded by Captain Courtney, Twenty-fifth Infantry, proceeded in pursuit of Indians who had raided Russell's ranch, on the Rio Grande, Texas, where four Mexicans had been killed and three wounded. The time which had elapsed before receiving news of the attack, and the distance to be marched by the troops were so great, however, that the Indians could not be overtaken. The same day the commanding officer of Fort McKavett, Texas, reported Mr. Doty killed by Indians near Brady City, Texas, and another person, name unknown, in Mason County, Texas.

February 16th, Victorio Rios and Sevoriano Elivano were killed by Indians at Point of Rocks, Limpia Cañon, Texas. (Reported by commanding officer Fort Davis, Texas.)

February 23d the commanding officer at Fort Clark, Texas, reported that R. W. Barry and Juan Dias were killed by Indians on the Laredo Road, twenty-three miles below Fort Duncan, Texas.

April 15th, Lieutenant A. Geddes, Twenty-fifth Infantry, with ten men of Troop K, Tenth Cavalry, pursued to the Carrizo Mountains a band of Mescalero Apache Indians, who had stolen twelve mules from a train near Fort Davis, Texas. The same day Lieutenant Bigelow, with

twenty-five men of Troop B, Tenth Cavalry, pursued a band of Indians who had killed a mail rider near Escondido Station, Texas; the trail was followed for six days and the mail found, but the Indians could not be overtaken.

April 17th the following named persons were killed: W. M. McCall, nine miles from Fort Quitman, Texas; Frederick B. Moore, at San Ygnacio, McMullen County, and Vicenti Robledo, near Brown's ranch, Texas. George and Dick Taylor were also killed at Mr. Steele's ranch, on the Nueces River, Texas, by Lipan and Kickapoo Indians. (Reported by the commanding officers of Fort Davis, San Diego, and Fort Clark, Texas.)

April 18th, Guadaloupe Basan was killed at Rancho Soledad, Duval County, Texas; near this ranch, on the same day, a Mexican shepherd and his wife were shot, tied together, and thrown across a horse; John Jordan was also killed at Charco Escondido, Duval County, Texas. (Reported by commanding officer at San Diego, Texas.)

April 19th, Margarito Rodriguez was killed ten miles west of Charco Escondido, Texas; at Quijotes Gordes, Texas, José Maria Cañales was shot by Indians, thrown into his camp-fire, and his lower extremities consumed. (Reported by commanding officer at San Diego, Texas.)

April 20th, Linjinio Gonzales, mail rider, was killed near "Point of Rocks," eighteen miles northeast of Fort Davis, Texas; also Florentino and another person (name unknown); these were supposed to have been killed by Mescalero Apaches from Fort Stanton Reservation, New Mexico. (Reported by commanding officer at Fort Davis, Texas.)

The hostiles, who had broken away and followed Sitting Bull to the British possessions in 1877, continued hovering in considerable numbers on both sides of the boundary. Reports were received of over four hundred lodges having gone north, in various bands, since the 1st of October preceding, so Colonel Miles, with about eight hundred mounted men from Fort Keogh, Mont., started in February for the purpose of finding a large force of Indians then on the south side of the line; instructions were sent from the War Department not to attack them, however, if they remained north of the Missouri, so the expedition was recalled under these conditions. On April 2d, the United States Indian agent at Fort Peck, hearing of the approach of a small force of troops under Lieutenant Baldwin, Fifth Infantry, requested that officer to visit the agency, where small parties of well armed hostiles had been coming in constantly, professing a desire to cease hostilities, demanding food, making violent demonstrations when refused, and threatening the agent by firing over his head. Lieutenant Baldwin proceeded to the agency, leaving his troops on the south side of the river, and about April 26th he received the surrender of a small band, five or six of whom were warriors.

June 1st, the commanding officer of Fort Clark, Texas, reported that two herders were killed at Mr. Nicholas Colson's ranch, twelve miles west of Camp Wood, Texas.

June 29th, at Fort Sill, Ind. Ter., a United States marshal, with a guard of soldiers, commanded by Lieutenant Whitall, Sixteenth Infantry, attempted to execute a writ for the arrest of Indians engaged in an attempt to kill a man named Montgomery; the Indians resisting and drawing their knives upon Lieutenant Whitall and his guard, two Indians were killed and one wounded.

June 30th, Lieutenant C. R. Ward, with fifteen men of Troop D, Tenth Cavalry, pursued a band of Indians who had stolen seven horses on the South Concho River, Texas; heavy rains having obliterated the trail, the pursuit was finally abandoned.

Small parties of Nez Percés having again committed murders and depredations in Montana, on July 15th First Lieutenant T. S. Wallace, Third Infantry, with a detachment of fifteen mounted men, started in pursuit; he overtook them near Middle Fork of the Clearwater, July 21st, killed six Indians and wounded three, captured thirty-one horses and mules and killed twenty-three, without loss to his command. This party were supposed to be deserters from "White Bird's" band, on their way from British Columbia to their former homes in Idaho.

August 2d, Sergeant Claggett, with eleven men of Troop H, Tenth Cavalry, pursued to the Guadaloupe Mountains a band of Indians who had killed a stage driver and run off stock at El Muerto, Texas.

Hostile Bannock Indians from the Department of the Columbia proceeded eastward, over the Nez Percé's trail of the previous year, stealing stock on the way; Captain J. Egan, with Troop K, Second Cavalry, proceeded up the Madison River, in the direction of Henry's Lake, and on August 27th, struck a Bannock camp and captured fifty-six head of stock.

Hearing of the approach of the Bannocks, Colonel Miles, with one hundred men of the Fifth Infantry and a band of thirty-five Crow scouts hastened to intercept the hostiles. A small party under command of Lieutenant Clark, Second Cavalry, was detached by Colonel Miles to make a detour, and on the 29th and 30th of August, struck parties of Bannocks, inflicting some damage in each case. Colonel Miles continued up Clark's Fork of the Yellowstone, and on September 4th, surprised a camp of Bannocks, killed eleven Indians and captured thirty-one, together with two hundred horses and mules; Captain Bennett, Fifth Infantry, was killed, also the interpreter and one Indian scout; one enlisted man was wounded.

On September 12th, Lieutenant H. S. Bishop, Fifth Cavalry, with a detachment of thirty men and some Shoshone scouts, struck a party of Bannocks on a tributary of Snake River, Wyo., killed one Indian and captured seven, together with eleven horses and three mules; the prisoners had escaped from the fight with Colonel Miles on Clark's Fork, September 4th, and reported that they had lost twenty-eight killed in that affair.

After the extensive surrenders in 1877, of the hostile Northern Cheyennes, in the Departments of Dakota and the Platte, a portion, numbering two hundred and thirty-five men, three hundred and twelve women, and three hundred and eighty-six children, with four Arapahoes, were sent with a military guard from Fort Robinson, Neb., to the Cheyenne and Arapahoe Agency, at Fort Reno, Ind. Ter., where they were turned over to the Indian agent on August 8, 1877.

Subsequent to that date other small parties surrendered and some died, so that on July 1, 1878, the number of Northern Cheyennes, at Fort Reno, Ind. Ter., was nine hundred and forty-two. An attempt had been made by General Pope, commanding the Department of the Missouri, to disarm and dismount these Indians, so as to place them on the same footing with the Southern Cheyennes, but as it was found this could not be done without violation of the conditions of their surrender, they were permitted to retain their arms and ponies.

A large part of these Northern Cheyennes found friends and kindred among the Southern Cheyennes at Fort Reno, mixed with them, and joined the various bands. About one-third of the Northern Cheyennes, however, under the leadership of "Dull Knife," "Wild Hog," "Little Wolf," and others, comprising about three hundred and seventy-five Indians, remained together and would not affiliate with the Southern Cheyennes. Dissatisfied with life at their new agency at Fort Reno, they determined to break away, move north, and rejoin their friends in the country where they formerly lived. As nearly as could be ascertained, those who escaped from Fort Reno numbered eighty-nine men, one hundred and twelve women and one hundred and thirty-four children. Their intention to escape had long been suspected, and their movements were consequently watched by the troops, but by abandoning all their lodges, which they left standing, they stole away on the night of September 9th. Two troops of the Fourth Cavalry, under Captain Rendlebrock, the only mounted force at Reno, started immediately in pursuit, and the garrisons were ordered out from Forts Supply, Dodge, Lyon, and other places near the Arkansas River, to intercept or overtake the escaping band; some cavalry was also ordered up to Fort Reno from Fort Sill, to prevent an extension of this exodus, and two troops of the Fourth Cavalry were also directed to march rapidly from Fort Elliott, Texas, to Fort Dodge. Besides these precautions, the garrisons of Fort Wallace, two companies of Sixteenth Infantry, Fort Hays, three companies of Third Infantry, and Fort Leavenworth, the latter consisting of one hundred mounted men of the Twenty-third Infantry, altogether two hundred and fifty men, were disposed along the line of the Kansas Pacific Railroad, to watch for the Cheyennes, should they succeed in eluding the troops upon the Arkansas.

In the Department of the Platte, dispositions of troops were made along the line of the Union Pacific Railroad, at points where the Indians might be expected to cross, should they escape between the detachments in the Department of the Missouri.

On September 16th, Lieutenant Colonel Wm. H. Lewis, Nineteenth Infantry, commanding officer at Fort Dodge, Kansas, reported that the Cheyennes were raiding about the mouth of Bluff Creek, Ind. Ter., and were driving off stock. Colonel Lewis sent all the force he could spare (about forty men of the Nineteenth Infantry) to Pierceville, north of the Arkansas and west of Fort Dodge, to try and strike the Indians if they attempted to cross the river. On September 19th, he sent Captain Morse, with his company of thirty-five men of the Sixteenth Infantry, ten more men of the Nineteenth Infantry, and Troop I Fourth Cavalry, all of whom had arrived at Fort Dodge, to assist in pursuit south of the Arkansas.

All the operations along the line of the Arkansas were finally placed under direction of Colonel Lewis, whose force at last numbered about two hundred and fifty men, only one-half of them being cavalry.

On September 21st, about dark, the united companies of Captain Rendlebrock and Captain Morse, numbering about one hundred and fifty soldiers, with some fifty citizens, had a skirmish with the Indians on Sand Creek, south of the Arkansas, and again upon the following day.

On the 24th of September, the trail of the Indians was found northeast of Pierceville, showing that they had succeeded in crossing the Arkansas, and on the morning of the 25th, Colonel Lewis, in command of all the detachments of troops in the immediate neighborhood, started in pursuit, his cavalry having only just arrived at Fort Dodge, after a very hard forced march from Fort Elliott, Tex.

Colonel Lewis pursued rapidly in a northwest direction, through Kansas, until about 5 o'clock in the evening on September 28th, when he overtook the Cheyennes on "Punished Woman's" Fork of the Smoky Hill River, where the Indians were found very strongly intrenched and waiting for the troops. Colonel Lewis attacked them at once and in gallantly leading an assault upon their position he was mortally wounded, dying the same night whilst being conveyed in an ambulance to the nearest military post, Fort Wallace, Kansas; three enlisted men were wounded, one Indian was found killed, and seventeen dead saddle ponies; sixty-two head of stock were captured.

On the morning of September 28th, the senior surviving officer, Captain Mauck, Fourth Cavalry, continued the pursuit and reached the Kansas Pacific Railroad on the morning of September 29th, the Indians having succeeded in passing between the infantry detachments patrolling the line of that road, and having crossed the track near Carlyle, Kansas, during the night of September 28th.

All the troops on the line of the Kansas Pacific Railroad, under command of Colonel Jeff. C. Davis, Twenty-third Infantry, were then pushed northward in pursuit, as was also the cavalry under Captain Mauck, but the Indians tore through the country, murdering and devastating the settlements on the Beaver, the Solomon, and the Republican, killing every settler they encountered, remounting themselves with some two hundred and fifty horses stolen on the way, and abandoning about sixty worn-out ponies in crossing the State of Kansas.

On November 11th, the Governor of Kansas, in writing, informed the honorable Secretary of War that in this raid through his State the Cheyennes had murdered over forty men and had ravished many women.

Simultaneously with the escape from Fort Reno of this party of Northern Cheyennes under "Dull Knife" and other chiefs, a band of one hundred and eighty-two surrendered Northern Cheyennes, from Fort Keogh, Mont., were also moving with a small military escort towards the Indian Territory, to be located on the same reservation at Fort Reno. These Indians were at once halted at Fort Sidney, Neb.,

and for a time serious apprehensions were felt that they might learn of the escape of their people from the Indian Territory and attempt to unite with them.

The utmost activity prevailed on the part of the few troops which could be collected upon the line of the Union Pacific Railway, and a train of cars was kept ready at Sidney, with steam up, to rapidly throw all that could then be assembled (about one hundred and forty infantry and cavalry, under Major Thornburgh, Fourth Infantry) upon any point on the road where the fugitives from the south might attempt to cross. General Merritt, with the Fifth Cavalry, was ordered to move as rapidly as possible to Fort Laramie, and Colonel Carlton, with the Third Cavalry, to Fort Robinson, while other troops in the department also joined in the pursuit.

In spite of all precautions, however, on October 4th the Cheyennes crossed the Union Pacific Railway at Alkali Station, a considerable distance east of Sidney. Within an hour after receipt of the news Major Thornburgh, with the troops at Sidney, were on board of a train, hastening toward the place of the crossing. Captain Mauck, with the troops following on the trail from the Department of the Missouri, arrived only a few hours later. Major Thornburgh, with his small detachment of cavalry and mounted infantry, pushed ahead rapidly upon the trail, the rest of his infantry following in wagons as fast as they could, through a very difficult country, selected by the Indians, full of high hills of soft sand and destitute of water and grass. All of Thornburgh's wagons were soon abandoned and his troops pressed on, from October 6th to October 10th, with only such supplies as could be carried on their horses. On October 10th, Thornburgh's command, wholly out of rations, joined a column of five troops of the Third Cavalry, under Major Carlton, near the Niobrara River, where, finding further immediate pursuit impracticable, the two commands marched to Camp Sheridan, Neb., having suffered severely for want of food and water, and being completely worn out by the hard pursuit through the sand hills. Captain Mauck's command was exhausted by their long march all the way from Texas and their rapid chase of the fugitives, so they moved to Fort Sidney, whence they conducted the Northern Cheyenne prisoners, held there, to the Indian Territory.

On October 15th, the commanding officer at Fort Robinson telegraphed that Indians had run off stock in that vicinity, so Major Carlton's column of the Third Cavalry started from Camp Sheridan for Fort Robinson. The same day the commanding officer of Fort Sidney reported the capture of two Cheyennes by a party of cowboys on Snake Creek. The prisoners stated the fugitives had intended to reach the Cheyennes, supposed to be at Fort Keogh, Mont., where, if permitted to stay, they would themselves surrender, otherwise that they should try to join Sitting Bull, who still remained in the British possessions. These prisoners also stated, through Mr. Ben Clarke, Cheyenne interpreter, that they had lost fifteen killed in the various fights subsequent to their escape from Fort Reno.

The fugitives, having now eluded capture in both the Departments of the Missouri and the Platte, the troops in the Department of Dakota

were added to the pursuing forces, and on October 17th, Major Tilford, with nine troops of the Seventh Cavalry, two companies of the First and two of the Eleventh Infantry, numbering four hundred and thirty enlisted men, reached Camp Sheridan from Bear Buttes (Fort Meade), Dakota.

On October 18th, Acting Indian Agent Tibbetts, Red Cloud Agency, reported the capture, by Red Cloud's Indians, of a party of ten of the fugitives. On October 21st, Major Carlton reported that "American Horse," an agency Indian, expressed the opinion that two parties of the Cheyennes had escaped northward, but that a third party still remained in the Sand Hills, and that the agency Indians wanted to catch them, if they could keep their captured arms and horses. Major Carlton detached a force in search of this party, and on October 23d, Captain J. B. Johnson, commanding Troops B and D, Third Cavalry, captured one hundred and forty-nine of the Cheyennes and one hundred and forty head of stock. Chiefs "Dull Knife," "Old Crow," and "Wild Hog" were among the prisoners. Their ponies were taken away, together with such arms as could then be found, but the prisoners said they would die rather than be taken back to the Indian Territory. On October 25th, when told they must go to Fort Robinson, regarding this as a step toward the Indian Territory, they began digging rifle pits and constructing breast-works in their camp. A fight seemed inevitable, but by great coolness and good judgment on the part of the officers a collision was prevented; reinforcements with two pieces of artillery arrived, when the Indians yielded and accompanied the troops to Fort Robinson, where all arms which could be found remaining were taken from them, and the prisoners were confined in an empty set of barracks. The remainder of the fugitives, under "Little Wolf," succeeded in making their escape by scattering among the Sand Hills, where a dense snow covered their trail, though troops kept up the search until numbers of the soldiers were badly frozen.

On October 5th, the commanding officer at Fort Clark, Texas, reported that one boy and three girls, belonging to a family named Dowdy, were killed by Indians at a ranch on Johnson's Fork of the Guadaloupe, Texas.

October 22d, Major G. Ilges, Seventh Infantry, with a detachment of troops from Fort Benton, Mont., captured a camp of thirty-five half-breed Indians, with eighty horses and fourteen guns, trespassers in Montana from the British possessions. The same day John Sanders, a stage driver, was killed near Flat Rocks, Texas. (Reported by the commanding officer of Fort Stockton, Texas.)

November 27th, the commanding officer of Fort Ellis, Mont., reported that "Ten Doy," a friendly Indian, had arrested seven hostile Bannocks, disarmed them, and sent them under an Indian guard to Colonel Miles, at Tongue River.

(*To be continued.*)

ELIHU ROOT, SECRETARY OF WAR.

By Brigadier General W. H. CARTER, U. S. Army.

THE resignation of General Alger from the Cabinet made it necessary for President McKinley to select another Secretary of War. It was an extremely fortunate thing that in casting about for the right man for this great work President McKinley selected Elihu Root. That this selection was eminently wise, is the opinion not only of the army, but of public men generally, and will surely be the verdict of future history.

Elihu Root was born in northern New York and graduated from Hamilton College, an institution, while not so widely known as some of the larger colleges and universities, has yet sent forth a considerable number of earnest, energetic and able men who have succeeded in professional and public life to a degree which has reflected much honor upon their Alma Mater. For a short time after receiving his diploma, Mr. Root employed his time as a tutor, but soon abandoned this for the legal profession. Gradually pushing to the front by virtue of his able and forceful character, he rapidly acquired the high regard of those responsible for the great interests of many of the large corporations scattered through the country. There was nothing meteoric in his early career, nor did he owe success to influential friends; possessed of wonderful natural ability, he prepared himself for the great work of life by careful and detailed study of every case which he undertook professionally. His rare knowledge of law caused him to be selected for a most important duty, as one of those who revised the constitution of the great State of New York.

When Secretary Root entered the Cabinet there was but little time to familiarize himself with the history of the War

Department before he was called upon to organize armies, supervise their administration and supply, and to control and guide the administration of a large aggregation of people in various islands, constituting a heterogeneous whole to be found under no ather flag the world over except that of Great Britain, which country has, through long experience, gradually trained a large number of experts to assist in managing its enormous colonial affairs.

Untrained in the details of this work, as Mr. Root necessarily was, he brought to its solution a highly organized mind which has enabled him to bring order out of chaos and to install the Cuban Republic on a safe and stable foundation; to place Porto Rico in a condition where it is rapidly becoming a prosperous and self-supporting island; to establish civil government in the Philippine islands almost before the firing had ceased along the lines of battle, and to guide the administration of affairs in China with diplomatic ability of the highest order. All these results are matters of history, and no page of the many volumes recording that of the United States reflects more credit upon the American people than the conduct and results of this last campaign in China.

However much opinions may differ on our Cuban and Philippine policies and their execution, the fact remains that, entirely without precedent, Elihu Root has guided the central administration of affairs with those islands with an ability, integrity of purpose and uniform success, which even partisan and prejudiced criticism is unable to justly assail.

The army is familiar with the results of recent army reorganization, and much other legislation accomplished by Secretary Root. There was no mere luck or chance in all this accomplishment. The Secretary devoted himself to a detailed study of each recommendation laid before him. Where opinions differed he analyzed them and reached his own conclusions. Many needs of the service were presented to the Secretary, about which there was a long record of favorable and urgent recommendations. The three battalion organization for infantry and the establishment of bands are good examples of this character. These desirable changes were secured and additional staff and noncommis-

sioned staff officers added to each regiment of cavalry and infantry.

The organization of a corps of artillery was accomplished against some strong opposition, and notwithstanding the brief period it has been in existence it would be difficult to find an artillery officer who would approve a return to the regimental system. Harbor defense ashore is now treated as a whole, and resembles a battleship in the operations of the various batteries and submarine mines from conning towers. The result produces a more unified defense and centralizes responsibility in experienced commanding officers who, with average professional aptitude, will be able to discharge the duties of directing the defense better than can be expected of several isolated posts, each with its own independent commander.

These reorganization measures were put in operation under the personal supervision of the Secretary, and as soon as they were safely under way he took up anew the proposition to establish a General Staff in the army. All the essays and proposed measures for the establishment of a General Staff in the past had contemplated the injection of this new corps into the army without disturbance of the office of Commanding General. It was impossible to provide any arrangement of administration by which a General Staff Corps could accomplish good work under the faulty system of administration and command as heretofore operated by the Secretary of War and the Commanding General of the Army. Nothing but friction and fatal loss of efficiency could be expected from perpetuating the old system. The new General Staff is slowly working out its solution of the new law with the great advantage of having a chief in the confidence of the Secretary of War and President, and who has supervision over all the bureau chiefs who have anything to do with the efficiency of the army.

When the country was in despair over the anthracite coal strike, which threatened suffering to several millions of people, and which was rapidly assuming a political aspect of no mean magnitude, it was Elihu Root who was hurried to New York to induce the coal operators to come to terms.

His success was immediate, and the appointment by the President of an arbitration commission, terminated successfully.

Many army officers are aware of the international danger which has lurked in the Alaska boundary controversy. It had assumed a grave phase when the war with Spain turned attention in other directions. The commission which has just completed its delicate labors in London, was composed of an able body of representatives of modern America, and the selection of Secretary Root for membership on that commission was universally recognized as a well deserved tribute to exceptional fitness and ability.

And so, all through life his course has been marked with the accomplishment of great results. These have not come through chance, but are the legitimate results of well directed effort, marvelous brain capacity and concentration. Secretary Root once remarked to the writer that men may be divided into two classes: those who concentrate and those who scatter; the forceful work of the world comes from those who concentrate. Elihu Root is a firm believer in the ultimate success of industry, application and concentration, and there is no better living example of the results of such a combination than is furnished by his own successful life.

Editor's Table.

Lieutenant J. Frank McFadden, First Troop, Philadelphia City Cavalry, writes:

"The idea has occurred to me that there are many organizations in the National Guard that would be very glad to have from time to time lectures on special subjects delivered to them by officers of the regular establishment, especially on subjects like "Outposts," "Advance Guard Duty," and "Extended Order." And it has occurred to me that possibly you might be able to devise some plan which could be proposed to the government, which would put the thing on a working basis, so that any organization, by applying to the War Department, or the nearest department headquarters, could have some one assigned to deliver a lecture on the special subject desired."

This seems to us a most timely suggestion, and deserving of consideration by the War Department. Lieutenant McFadden's suggestion, if carried into effect, will have two excellent and desirable results: First, valable instruction to the Guard by lectures given by regular army officers; and second, further and mutually advantageous relations and understanding between the National Guard and the regular service. It is believed that any of our department commanders would gladly detail an officer to deliver such lectures to any organization of the National Guard that might make such application to him. It is certain that no department commander would find it difficult to select an officer who would be willing to give such lectures voluntarily. It is suggested to Lieutenant McFadden that such an application be forwarded to the nearest department commander, and it is believed that he will find his very excellent idea adopted.

Colonel Martin B. Hughes, First U. S. Cavalry, writes from his station at Fort Clark, Texas, anent the republication in the JOURNAL of "Record of Engagements With Hostile Indians," as follows:

"In the record of engagements with hostile Indians (October number) I find on page 370 the statement: 'October 9th, on Salt Fork of Red River, Texas, the scouts of a column consisting of Companies A, E, F, H and I, Eleventh Infantry, under Lieutenant-Colonel Buell, Eleventh Infantry, etc.' I was with Colonel Buell from July until December 4, 1874. His column was composed of five troops of the Ninth and two of the Tenth Cavalry. One company Eleventh Infantry was guard to the wagon train and one (Chaisey's) in charge of supply camp.

"It therefore seems that the statement as printed is at fault."

All the records available give the facts as recorded by the official publication, which the JOURNAL is now reprinting. It is more than likely that all the other records, published since the pamphlet from which we reprint was first published, have been copied from this original compilation.

Colonel Hughes was at the time to which he refers a lieutenant in the Ninth U. S. Cavalry, and his version is the correct one.

The subject for the Enno Sander prize offered by the Association of Military Surgeons of the United States for 1904 is "The Relation of the Medical Department to the Health of Armies." As this subject embraces practically the whole field of military hygiene, it is hoped that the competition will be widespread and the results of value to the soldier.

The prize essayist will receive a gold medal of the value of $100, and the essayist securing second prize will be given a life membership in the Association, valued at $50.

The members of the Board of Award are the distinguished military hygienists, Lieutenant Colonel John S. Billings, United States Army (retired); Brevet Brigadier General Geo. R. Fowler, Division Surgeon N. G., N. Y., and Surgeon Henry T. Beyer, United States Navy.

PROMOTION BY SELECTION.

The following letter from an army officer, states clearly and briefly some of the arguments against the adoption of the system of promotion by selection proposed in House Bill No. 7645 (Mr. De Armond):

"The promotion of officers of the established regiments and corps of the Line of the American army has always been by seniority, and there is no boasting in the assertion that the deeds of our regular troops have not been surpassed by those of any nation, ancient or modern. Even the heroism of Thermopylæ was equalled by that of General Custer's command at the Little Big Horn; and it has been approximated in numerous instances.

"The reports of commanding generals and the facts of history all show the conduct of American regulars on the march or in battle, as well as in camp or garrison, has been excellent. Recently some of our regiments selected by roster served in China side by side with the troops of the principal nations of the world; and it is well known that the daily press has teemed with reports of foreign officers, all of them very complimentary indeed to our troops, many of them placing the American soldier above all others in matters pertaining to efficiency.

"That this condition is due solely to the fact that our line organizations are always under the command of officers of many years of practical experience in and careful study of military affairs is the universal opinion among army officers, who surely have better opportunities for forming correct opinions on that subject than any other persons.

"All this experience and study require years of work, in order that the multitude of details may be not only mastered but at the finger's end ready for instant use when required; and in order that men may work, an incentive is necessary. Part of the incentive is the officer's pay, and the very much greater part is the prospect of promotion; when that prospect is removed, labor becomes merely perfunctory and progress and improvement are at an end. The present method of promotion has been satisfactory to all our great generals, including Scott, Taylor, Grant, Sherman, Sheridan, Meade, Hancock, and many others, and it is believed, without a single exception. The very great majority of Line officers are to-day entirely satisfied with it; and they view any attempt to change it with alarm and with the most serious apprehension.

"This bill is intended to increase the efficiency of the service. It is the belief of the undersigned that the effect will be to demoralize it. When once the principle of promotion by seniority in the Line is set aside there is no certainty that promotion will be regulated by merit alone; and even if that were certain, the effect would be demoralizing because for each man stimulated by promotion scores or even hundreds would be exasperated, discouraged and demoralized by being overslaughed by their juniors in rank, experience, and perhaps other respects, and whose promotion will have been made for reasons the justice of which they will never admit. The usefulness of those men is at an end: their interest in the service is seriously impaired, and they forever suffer from the sting of injustice, their belief in which will rest on grounds not entirely fanciful. Their presence and influence will not fail to have a bad effect on junior officers, who will expect a similar experience, and whose interest, industry and usefulness will be seriously injured. Officers who deserve to be jumped should be retired that they may not remain to demoralize others.

"An army without discipline is a mob; but good discipline depends upon the respect of juniors for their superiors. If a senior has been jumped several times, his juniors cannot respect him because he has been branded as worthless and unfit by the highest authority. The juniors, feeling no respect for such a superior, cannot avoid disrespect and insubordination; and in battle would probably take things into their own hands, thereby causing disaster. Juniors cannot respect a senior when the highest authority has shown publicly and officially that *he* does not respect him. A fine morale is hard to secure, easy to lose, very difficult indeed to reëstablish, and an impossibility if many overslaughed persons are present.

"It cannot be doubted that very much the greater part of the preparation for war of our officers must be the result of studies of the campaigns of others, and of their methods of preparing for those campaigns, supplemented by such exercises as are possible at or near the military posts; and that, in these days of short wars, the actual experience of all officers in war must be small. But in the case of an officer who finds himself overslaughed and powerless to prevent repetitions of the same, it cannot be expected that he will, without any incentive whatever, do all the reading and study and general drudgery necessary to equip himself for a position that he feels that he cannot possibly reach; and the lucky man who

has jumped his seniors can certainly not be expected to labor to secure a position that he already holds—perhaps without any great effort of his own—nor to further an ambition that may have already been gratified without such effort.

"An officer in the army without hope of promotion is in a far worse position than a man of business who should lose his capital; for the latter might recoup, but the former has already been 'weighed in the balance and found wanting,' and as he will always dispute the justice of the transaction and will have many sympathizers, he must either be retired or he will create discontent, demoralization, apprehension, and, worst of all, insubordination on the part of younger men.

"The principle of promotion by seniority has always existed in the U. S. Navy, where it is given a far wider scope than in the Army. It is believed that there has never been any complaint that the system did not work well there.

"A system that has been in vogue for generations, that has given the maximum of good results, that is satisfactory to nearly the whole list of officers, that has earned the approval of every great general in our history, ought not to be changed on account of theoretical considerations, however plausible; nor should ideas that have worked well in civil services be enforced in the military service, because those services differ in a thousand ways, and are not alike in any essential respect.

"Another point should be considered. It is well known that throughout the United States an opinion prevails, justly or unjustly, that various forms of 'influence' are of great assistance in securing promotions under the government. The principle of promotion by seniority bars such 'influence' from any effect upon the Line of the Army; if that principle is set aside, in whole or in part, efforts most injurious to the service will be made by many to obtain advancement by such means; and, though such means be wholly without effect, demoralization would result because many would never believe it.

"To arrange the officers of any grade in the order of merit is a practical impossibility. No board can be assembled whose members are acquainted personally with more than a small percentage of any grade. They must therefore classify them by their efficiency reports, not many of which would be made out by the same commanding officer. The efficiency reports of officers of any grade represent the opinions of perhaps thirty or forty commanding officers, measuring by that number of standards, all more or less different. To illustrate: One commanding officer would classify a junior as 'excellent' that a different commanding officer would classify as 'very good,' or even 'good.' Different commanding officers attach very different degrees of importance to superior skill in various military accomplishments: for instance, some commanding officers attach the utmost importance to horsemanship; others to skill on the target range; others to accuracy of drill; others to neatness in personal appearance and surroundings, and so on. And as very few officers can be highly skilled in everything, or even in most military accomplishments, the military character set forth in their efficiency reports must and does vary according to the views of the commanding officer who makes them out. And thus, an efficiency report, while a good general description of an officer's abilities, is not sufficiently accurate for such comparisons.

"A classification based upon efficiency reports, the work of perhaps forty commanding officers, applying different standards and judging men who perform totally different classes of duties under different conditions and in different parts of the world, must necessarily be entirely worthless, erroneous and very defective, because it is lacking in the essential elements of a just comparison."

JOURNAL OF THE UNITED STATES CAVALRY ASSOCIATION.

[From *Broad Arrow*, October 31, 1903.]

This is an unpretentious publication conducted by a comparatively small body of professional men, but it is one replete with information both instructive and interesting. The number before us, for the July quarter, contains a variety of articles written in a fair and impartial spirit, and with evidently thorough knowledge of the subjects treated upon. The first paper, on "The American Cavalry in China," gives, with historical details, some useful hints regarding the equipment of the horse soldier and the necessity of reducing the weight upon his horse, reforms which have been long insisted upon in the columns of *The Broad Arrow*. The writer, Captain William Forsyth, Sixth Cavalry, advocating that the carbine should be carried on the trooper's back, says: "The

British cavalry were the only mounted troops in China besides our own that carried the carbine on the saddle, and it may be added that they had more sore back horses that any other. * * * It does not seem to me a sound argument to say that it is better to have the sore on the horse's back than on that of the trooper; the sore on the trooper's back would be the lesser evil—it could be more easily treated and more quickly cured." Another officer, Captain M. C. Butler, Seventh Cavalry, advocates the doing away with the "saber," as American dictionaries spell it. He quotes in support of this contention the official medical statistics of the German Empire during the war of 1870, which fixes the number of Germans killed and wounded at 65,160, out of which number only 212 were wounded and six killed by the saber. The revolver is the weapon which finds most favor with the writer, who adds, however, that the men must be experts with it on horseback. "We should be allowed more time and ammunition in training our men and horses in pistol practice." The subject of cavalry bits is discussed at considerable length by several officers. "Army Transportation by Land and Water," and the question of the best form of ammunition cart are touched upon. Indeed the prominent features of this journal is the thoroughly practical tone which pervades all the articles. We cannot afford the space necessary to do justice to more of these, but we can unhesitatingly commend the publication to our readers. It is admirably "got up" so far as typographical arrangement is concerned, and numerous photographic illustrations help to explain the letter press.

Book Reviews.

*** The Cavalry Horse and His Pack.**

This book comprises 538 pages, with 192 illustrations. It is divided into eighteen chapters. We have read it through with a great deal of interest and pleasure, for it gives what it professes to give—a great amount of information concerning the practical details of cavalry service, which must of necessity appeal to every commissioned and noncommissioned officer of cavalry.

The book shows diligent research, careful sifting of a mass of material from numerous standard works, and, under the subheads discussed, intelligent interpretation and application of the author's own experience, and that of old and distinguished officers, whose lives either have been or still are devoted to the cavalry arm. In our opinion, the author has succeeded in a difficult task; his pride and enthusiasm are qualities that we hope his juniors will seek to emulate.

In any book of this size and character there must necessarily be some points that can be criticised, but we admit we have found few such.

In the beginning of the book we found the author to be too thorough, and in the end, for lack of space, he was prevented from inserting information that we consider essential.

Before proceeding to a discussion of the several chapters, we repeat in plainer language what was implied above, that no officer and no noncommissioned officer of cavalry, who desires to know all about his profession, can afford to be without a copy of this book.

In the first five chapters the author treats of the following subjects respectively: "Brief History of the Horse and

* "The Cavalry Horse and His Pack." By First Lieutenant John J. Boniface, Fourth Cavalry. Hudson-Kimberly Publishing Co., 1903.

Pack;" "Classes of Cavalry;" "The Horse Supply;" "American Horse Supply and Remount;" "Classes of Horses." As the author's professed object was "to place in the hands of the young cavalry officer one volume embracing the duties and responsibilities which confront him from the moment he joins his troop, and to make clear to him how things are done in the cavalry service," we think he could easily condense these first five chapters into at least one-third the space now taken up by them. For while the information conveyed is interesting and instructive, two-thirds of it has hardly anything to do with "the practical details of cavalry service."

Chapter VI. "The Cavalry Horse." The American cavalry horse is here compared with the cavalry horse in the German, Russian, French, English and Austrian services. The remarks on conformation, defects, stable vices and teeth, are good and compare favorably with other compilations on the same subjects.

Chapter VII. "Shoeing." The author very properly makes his remarks on this important subject in accordance with the teachings of the experience of the American cavalry, as laid down in the Cavalry Drill Regulations; in addition, he gives accounts of the methods of shoeing practiced in the German, Austro-Hungary, French, British and Italian cavalry services.

Our shoeing regulations are probably the best general regulations extant; but it must be borne in mind that these merely touch upon the large and vital subject of shoeing.

No man is competent either to shoe a horse or direct the work until he is able to make certain observations that pertain, first to the horse's foot and leg below the fetlock joint; second, to the wear of the old shoe; the former having reference principally to the foot-axis viewed from in front and from the side, the latter having reference to the "pointers" given by the old shoe in leveling the hoof. The two sets of observations will at once indicate to the skillful blacksmith how to prepare the hoof and the shoe for the particular case under consideration.

The illustration on page 138 shows too great a width of bearing surface which should merely support the full thickness of the wall, the *white line*, and about one-eighth of the margin of the sole. The suction exerted on the shoe of the illustration would cause a powerful wrench on muddy roads.

The bar-shoe shown in the illustration on page 144 is not the best variety. The bar should average in width the remainder of the shoe, and should be given such shape as to press but lightly on the branches of the frog.

Clenches should be twisted off and then the stubs should be carefully turned down with the hammer. Rasping down the clenches is a frequent cause of loose or lost shoes, and may cause injury to the crust in unskilled hands.

As supplementary to this chapter by the author, we call attention to "Farmer's Bulletin No. 179"—a paper on horseshoeing by Professor John W. Adams, A. B., V. M. D., University of Pennsylvania.

Chapters VIII to XI inclusive treat respectively of "Bitting." "Saddling of the Cavalry Horse." "The Pack." "Marches." The discussion is very good, and the remarks accord in each instance with the experience of our cavalry service, especially so in the last two chapters; in the first two chapters we have the presentation of the subjects given by Major Dwyer and other authorities. The saddle, the pack and the march have probably reached their highest development in our service. But we must admit that improvement in our present bit is quite desirable. We, therefore, await with interest the report of experiments on the bit invented by Mr. W. C. Johnson, of Winchester, Kansas. This bit will in all probability obviate one or more of the objections to the present ordnance bit, but only exhaustive experiments under service conditions will be able to demonstrate its ability to do all that is claimed for it, without at the same time introducing disadvantages, such as too much weight, a noseband, difficulty to keep clean, etc., now absent in the government bit.

Chapter XII. "Passage of Rivers." The author has treated this subject in an able manner. The methods in use in Germany and France and an account of our own experiences

abroad and at home are given clearly and interestingly. They are deserving of careful perusal by all officers.

Chapter XIII. "Transporting Cavalry Horses." An excellent and timely chapter, full of practical experience aboard cars and ships. The author will find many cavalry officers differ with him as to his method of standing the horses in the car—head to tail and without being tied up. In the "Streeter" car head to tail is all right, but the horses should be tied up; if they do not have hay almost constantly they will gnaw one another's tails. Unless very closely packed, horses will gradually move about in a car, if not tied up during a long trip, and so endanger themselves and others.

Although our experience in disembarking horses cost us the lives of a number of valuable animals, we believe the experience was cheaply bought. Where the horse transport had to lie off shore, as was the case in almost every port in the Philippines, Cuba and Porto Rico, the best method was unquestionably to attach the lariat to the halter head-stall, a man aboard holding the loose end; then the horse was backed off the deck, shoving him hard as his hind feet gave way, and saving his belly and hind and forequarters from injury; the loose end of the lariat was then passed to one of the holders in the row boat, and when three horses were tossed over, the rowers pulled for the shore. The men in the boat must be cool and steady, the rowers pulling a strong and regular stroke. The men should be ready on the beach to receive their mounts; the horses should be tied to a temporary picket line near the water, as this encourages the swimmers and waders to go through breaking surf to land. The method of allowing horses to swim to shore by themselves is always risky, especially so, of course, if the distance from the shore is great. We have seen such horses swim round and round the ship and then strike out to sea for miles, attracted apparently by the view of the mountains across the channel.

Chapter XIV. "Riding and Training." This chapter is an amplification of riding and training the horse, as advocated in the Cavalry Drill Regulations. We hope the author in the next edition of his book will give a little more space to the use of the reins and legs as aids to horsemanship, and

exemplify that use by remarks on turning the horse on the forehand and on the hind quarters. We also suggest a little more space to accustoming the horse to firearms.

Chapter XV. "The Cavalry Horse in Stable and Camp." As far as our recollection goes, this is the first time we have seen in print many of the details of cavalry service mentioned by the author in this chapter. It should be a welcome aid to the young cavalry officer.

Disease germs require filth, warmth, moisture and confined space in order to flourish, hence modern veterinary sanitary science demands that stables be so constructed that cleanliness, ventilation, drainage and light be properly maintained. A stable fulfilling these requirements should be free from contagious and infectious diseases, or at all events such diseases should be easily controlled there; whereas, the absence of any one of these requirements will make unhealthy a stable otherwise perfect. The stables at Fort Riley seem to fulfill all four of the conditions mentioned above, and we are glad to see a description of them in this chapter.

Chapter XVI. "Grooming, Watering and Feeding." The author discusses these subjects so thoroughly and applies so well the knowledge of actual experience of himself and others in the cavalry service that we have nothing but commendation for all he says. The subject of watering has always been much discussed outside of the service. From recent experiments made in Europe the general conclusion is drawn that horses may be watered before, during or after meals without interfering with the digestion and absorption of food. All these methods are equally good for the horse, and each may be employed according to circumstances. After severe loss of water, such as occurs in consequence of long continued exertion, the animal should always be allowed to drink before he is fed, as otherwise he will not feed well.

Our ration of oats, hay and bran is the best yet devised by any service. This is seen from chemical analysis, physiological change, and actual experience in camp and garrison. In foreign services, as the author states, straw is partly fed; but, although straw has the usual constituents of protein, fat,

carbohydrates, mineral matters and water, it frequently has a *minus* nutritive value; that is, the work and heat expended in mastication, deglutition and digestion, when fed in large quantities, are greater than the energy-producing value of the straw as a food. Or, put in other words, a quarter of a pound, or less, of nutrients per pound of feed is of no value for the body.

It might be well to call attention to the use of molasses and other by-products of sugar making as a food. In Porto Rico, molasses sprinkled over chopped hay was fed to army horses for about five months, and their condition improved. Apparently, a daily ration of thirty-five pounds of grass and thirteen to fifteen pounds of molasses per 1,000 pounds of live weight, was sufficient to maintain a horse in good condition. It was noted that molasses possessed some disadvantages; it attracted flies and ants, stuck to the animal's coat, smearing his face and breast, halter and strap, and caused some trouble and delay in mixing it with other feeds. Apart from the nutritive material that molasses supplies, it has a value as an appetizer, and frequently renders poor hay or other feed more palatable; this is important to remember in tropical service. Farmer's Bulletin No. 170, U. S. Department of Agriculture, from which we have quoted, is a valuable adjunct to Chapter XVI of "The Cavalry Horse and His Pack."

Chapter XVII. "The Pack Train." The importance of this subject to the cavalry officer is so manifest that we are sure the author's exposition will meet with general approval. Not the least interesting part is his description of the actual management of a troop pack-train by troopers. The illustrations in this chapter are especially good, and they aid the text materially.

Chapter XVIII. "On Diseases and Medicines." This chapter is good as far as it goes. In an appendix is given the U. S. Veterinary Supply Table, as established by General Orders No. 20, A. G. O., 1902. After explaining what to do with the sick horse, and after explaining the methods of administering medicines, the author describes the causes, symptoms and treatment of thirty-four ordinary diseases, ailments and injuries of the horse.

We can well understand that he was induced to omit a statement of the use of each medicine and instrument on the supply table by the fact of his book becoming unwieldy in size. Except at regimental headquarters, it is rare for cavalry officers to have the advantage of the presence of the veterinary surgeon; they, therefore, must depend on their own knowledge and that which they can acquire from a book that aims to give the practical details of cavalry service.

Considerable space is properly devoted to glanders and surra—two diseases that foreign service has brought many cavalry officers in contact with. Hundreds, yes, thousands, of horses and mules have been destroyed because of glanders and surra in the Philippines and in Porto Rico. We, therefore, hope that in the author's next edition he will mention and devote considerable space to the *mallein* diagnostic test for occult glanders. For by means of this glycerated extract of the boullion culture of the *bacillus malleus*, concealed glanders can be unfailingly detected, because the infected animal responds to the test with large swelling at the seat of inoculation, general constitutional disturbance, and a rise in fourteen hours of from two to five degrees F. in temperature. This *mallein* test should be used by the government on every horse and mule immediately after purchase, but before shipment; we venture to say this method will save thousands of dollars yearly in horses and mules. P. E. T.

Phoenixiana, or Sketches and Burlesques.*

All of us have heard some or most of the tales and burlesques which emanated from the pen of John Phœnix, or J. B. Squibob. It was therefore a foregone conclusion that we would be pleased with the new edition of these burlesques, published by D. Appleton & Co., New York. That an army officer should have produced a work that has survived two generations is a matter of pride to us all, and aside from its merit, the book will on that account attract much interest.

* "PHŒNIXIANA, OR SKETCHES AND BURLESQUES." By John Phœnix. New edition. D. Appleton & Co., New York, 1003.

Lieutenant George H. Derby, the author of this quaint volume of humor and satire, was graduated at the U. S. Military Academy at West Point in 1846. He fought in the Mexican War, suffered severe wounds in the battle of Cerro Gordo, and for gallant and meritorious conduct on that occasion was brevetted first lieutenant. Later he conducted surveys and explorations in the far West. He saw and knew California in its pioneer days, and was himself one of the leaders. Many of his sketches were written on the Pacific Coast. His last commission was as surveyor and lighthouse engineer on the Florida coast, in the discharge of the duties of which he suffered a sunstroke, which affected his eyesight and caused softening of the brain, from which he died in 1861. He always performed his duties faithfully and loyally, and bore the responsibilities of his position well, as is attested by his record in the War Department.

But in all, his humor and his fine loving nature bubbled forth spontaneously, and to him are attributed many stories, which may or may not have originated with him. It is said that even in official reports his bent for seeing the humorous side of things often took possession of him. The following story of the army engineer sent to inspect and make a report on an old mill site in California is attributed to Squibob, though by what authority is not certain. After inspecting the place, and not finding the mill of which a report was required, he sent in the following concise official communication:

"SIR:—I have the honor to report that I have found the dam by the mill site, but cannot find the mill by a dam site."

It would be interesting to collect in a volume all the stories that have passed the rounds of the army and attributed to Squibob. But in "Phœnixiana" we find a volume filled with the tales that have been told and retold in army circles. Phœnix's "Official Report of the Survey and Reconnaissance to the Mission of Dolores" is especially interesting to topographical students, and the incidents recorded therein recall to the reader's mind many trials and tribulations in his own experience. It seems like meeting old friends as we

come upon these familiar difficulties, but the expedients or "short cuts" used in arriving at results are the ones which contain the most humor and satire, and which we can therefore best appreciate. None of those who have done surveying but, after hours of painstaking work, have found that he has lost count, and forgotten whether it should be eight, or eighteen, or twenty-eight, and cannot tell just which. In that case we usually have used Phœnix's method, invented in 1850 This method is described as follows: "I stopped an omnibus, and asked the driver how far he thought it was to the Plaza. 'Half a mile,' he replied, which I accordingly noted down, much pleased at so easily obtaining so much valuable information." The "Go-it-ometer" attached to "Slippery Bill" afforded no check on the driver's estimate.

Phœnix uses a similar short-cut for getting the true time by his sidereal clock, and an observation of the transit of the sun across the meridian. After taking various observations, it is found that it will require some three months to make the necessary calculations. Being anxious to get the time immediately, he sends a man to the corner grocery for it.

The "New System of English Grammar," the "Musical Review," and the "Lectures on Astronomy," are all very good, but it is when "Phœnix is installed as editor of the San Diego *Herald*" that the fun commences, the chapter ending with the memorable interview between Phœnix and the true editor.

"Phœnix's Pictorial" and "Second Story Front Room Companion" is a masterpiece of satire which is as suited to the present day as it was to the period of fifty years ago.

Every conceivable topic is covered and satirized in the collection of burlesques, and the range of subjects is surprising. In depicting the mad rush of office seekers, Phœnix draws a very spirited picture. Among the letters asking for office is the following:

"Mike wants Timothy flaherty who was sergent in Pirces regiment and held Pirces hoss when he rared and throwed him, to be a inspector too hes very good man. E. M."

It is too bad that the collection of "Camp Reminiscences" is so short. They are so good that the chapter is

finished all too soon. In fact, that is the only fault we find with the book, and to which we direct all our criticism. There is only one remedy for this, and that is to read the book again. The quality of humor contained therein does not suffer, but is rather enlarged by a second perusal.

The new edition is illustrated by E. W. Kemble, with an introduction by John Kendrick Bangs, and will make a most welcome addition to every officer's library.

Cadet's Handbook.*

"Cadet's Handbook," by Captain John A. Lockwood, U. S. Army, retired, published by the Hudson-Kimberly Publishing Co., is a compilation of a great deal of interesting matter for the youth who has military aspirations. A perusal of this book will give practically all the information that is needed by a young man who desires to enter the military service in any capacity, and it is especially valuable to those who desire to become commissioned officers, as all the difficult roads to a commission are described at some length in the last chapter.

"Cadet's Handbook" contains much that is especially valuable to the student at any of the military schools. The author opens the introductory chapter with a brief discussion of military schools, and quotes the law and some pertinent War Department orders on this subject. The composition and organization of the army of the United States and the National Guard are tersely described.

Other chapters relate to court-martial, correspondence and orders, field engineering, hygiene, first aid to the wounded, camping, marches, lines and bases of operations, and the United States Military Academy.

The articles of war and the most important blank forms in use in a company are appended.

The book is nicely gotten up and bears many excellent illustrations, which add to the interest.

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*"Cadet's Handbook," by Captain J. A. Lockwood. Hudson-Kimberly Publishing Co., 1903.

LIST OF MEMBERS OF THE UNITED STATES CAVALRY ASSOCIATION.

(Errors should be reported to the Editor.)

LIFE MEMBERS.

The Constitution no longer permits the creation of life memberships. This does not affect those who have been so elected.

Bixby, Wm. H., Major, Engineer Corps.
Dodge, Charles C., General, N. G.
Grierson, H. B., Brig.-Gen., retired.
Norman, Wm. W., Colonel, Punjab Cav.
Parker, Dexter W.
Remington, Frederick.
Windsor, Henry, jr.
Wetmore, Wm. Boerum, Major.

REGULAR MEMBERS.

(The following are eligible to regular membership: (a) Commissioned officers of the cavalry of the regular army. (b) Former commissioned officers of the cavalry of the regular and volunteer services, provided their records are honorable: general officers of the regular army and former general officers.)

GENERAL OFFICERS.

Lieutenant-General.
Chaffee, Adna R.

Major-Generals.
MacArthur, Arthur.
Wade, James F.
Sumner, Samuel S.
Wood, Leonard.

Brigadier-Generals.
Grant, F. D
Bell, J. Franklin.
Funston, Frederick.
Baldwin, Frank D.
Wint, T. J.
Lee, J. M.
Carter, William H.
Bliss, Tasker H.
Moore, Francis.
Carr, Camilio C. C.
Barry, Thomas H.
McCaskey, W. S.
Mills, A. L.

ADJUTANT-GENERAL'S DEPARTMENT.

Colonel.
Hall, William P.

Lieutenant-Colonel.
Parker, James, *cav.*

Majors.
McClernand, Edward J., *cav.*
Swift, Eben, *cav.*

INSPECTOR-GENERAL'S DEPARTMENT.

Lieutenant-Colonel.
West, Frank, *cav.*

Major.
Gale, G. H. G., *cav.*

JUDGE-ADVOCATE-GENERAL'S DEP'T.

Brigadier-General.
Davis, George B.

Lieutenant-Colonels.
Crowder, Enoch H.
Morrow, Henry M.

QUARTERMASTER'S DEPARTMENT.

Lieutenant-Colonel.
Pond, George E.
Miller, W. H.

Majors.
Hodgson, Frederick G.
Bellinger, John B.
Aleshire, James B.
Bingham, Gonzales S.
Cruse, Thomas.
Knight, John T.
Carson, John M., jr.

Captains.
Wood, Winthrop S.
Williamson, Geo McK.
Stevens, Thomas H
Schofield, Richmond McA.
Walcutt, Charles C., Jr., *cav.*
White, George P., *cav.*
Crabbs, Joseph T.
Fleming, Lawrence J., *cav.*

SUBSISTENCE DEPARTMENT.

Lieutenant-Colonel.
Smith, A. L.

Majors.
Brainard, D. L.
Bean, W. H.

Captains.
Davis, A. M.
Gallagher, H. J.
Hawkins, H. S., *cav.*

PAY DEPARTMENT.

Brigadier-General.
Dodge, F. S.

Captain.
Whipple, H. S., *cav.*
Benton, Chas. W., *cav.*
Mears, George W., *cav.*

CORPS OF ENGINEERS.

Captain.
Potter, Chas. L.

ORDNANCE DEPARTMENT.

Chief of Ordnance.
Crozier, William.

First Lieutenant.
Jordan, Harry B.

SIGNAL CORPS.

Brigadier-General.
Greely, A. W.

Lieutenant-Colonel.
Allen, James.

First Lieutenants.
Breen, Herbert J., *cav.*
Hemphill, John E., *cav.*
Butler, James S., *cav.*
Johnston, Gordon.

PROFESSOR MILITARY ACADEMY.

Colonel.
Wood, E. E.

ARTILLERY.

Brigadier-General.
Randolph, W. F.

Captain.
Van Deusen, Geo. W.

INFANTRY.

Captains.
Simpson, W. L., (6th Regt.)
Nolan, D. E. (Gen. Staff.)

PORTO RICO REGIMENT.

Major.
Howze, R. L.

PHILIPPINE CONSTABULARY.

Brigadier-General.
Allen, Henry T.

Colonels.
Scott, W. S.
Harbord, J. G.

NATIONAL GUARD.

Illinois.
Young, C. E., *col.*
Wilson, J. C., *maj.*

Pennsylvania.
Halderman, Horace L., *lt.-col.*
McFadden, J. Franklin, *lieut.*

Iowa.
Lincoln, Jas. R., *brig.-gen*

CIVIL LIFE.

Bear, C. U., *lieut.*
Curry, W. L., *capt.*
Johnston J. A., *brig.-gen.*
Jones, Rodman C., *lieut.*
Keechmeyer, J. C., *capt.*
Russell, F. W., *lieut.*
Hammond, C. L. (Ill.)

RETIRED LIST.

Augur, Colon, *capt.*
Babcock, J. B., *brig.-gen.*
Baird, William, *capt.*
Bell, James M., *brig.-gen.*
Biddle, James, *col.*
Boutelle, F. A., *capt.*
Braden, Chas., *1st lieut.*
Brock, Sam'l, *brig.-gen.*
Burnett, G. R., *1st lieut.*
Carlton, C. H., *brig.-gen.*
Carpenter, L. H., *brig.-gen.*
Carr, E. A., *brig.-gen.*
Carroll, Henry, *col.*
Converse, G. L., *capt.*
Cooper, C. L., *brig.-gen.*
Craigie, D. J., *brig.-gen.*
Craycroft, W. T., *lt.*
Davis, Wirt, *col.*
Evans, George H., *capt.*
Forbes, W. C., *col.*
Forsyth, J. W., *maj.-gen.*
Freeman, H. H., *brig.-gen.*
Guest, John, *capt.*
Harris, Moses, *maj.*
Holabird, S. B., *brig.-gen.*
Hoyle, George G., *maj.*
Huntt, George G., *col.*
Huggins, Eli L., *brig.-gen.*
Jackson, Henry, *col.*
Kelley, Joseph M., *maj.*
Kendall, Henry M., *maj.*
Kennedy, W. B., *maj.*
King, Chas., *c pt.*
Kline, Jacob, *brig.-gen.*
Knox, Thomas T., *col.*
Lee, Fitzhugh, *brig.-gen.*
Lockwood, J. A., *capt.*
Loud, John S., *maj.*
Ludington, M. L., *maj.-gen.*
Merritt, Wes., *maj.-gen.*
Mills, Anson, *brig.-gen.*
Miner, C. W., *brig.-gen.*
Norvell, S. T., *lt.-col.*
Noyes, Henry E., *col.*
Oakes, James, *col.*
Powell, Philip P., *capt.*
Pratt, B. H., *col.*
Robe, C. F., *brig.-gen.*
Rucker, L. H., *brig.-gen.*
Russell, Gerald, *maj.*
Sheridan, M. V., *brig.-gen.*
Schwan, Theo., *brig.-gen.*
Swigert, S. M., *col.*
Tompkins, C. H., *col.*
Viele, Charles D., *col.*
Vroom, Peter D., *brig.-gen.*
Wagner, Henry, *lt.-col.*
Waite, H. De H., *1st lieut.*
Wesendorff, Max, *capt.*
Wheelan, James N., *col.*
Wheeler, Fred, *maj.*
Whiteside, Sam. M., *col.*
Wilson, J. H., *brig.-gen.*
Wood, T. J., *brig.-gen.*
Woodruff, C. A., *brig.-gen.*
Wells, Almond B., *brig.-gen.*

CAVALRY OFFICERS.

FIRST CAVALRY.

Colonel.
Hughes, Martin B.

Lieutenant-Colonel.
Ward, F. K.

Majors.
Gaston, Joseph A.
Blackmon, A. P.

Captains.
Brown, William C.
Brown, Oscar J.
Lemlin, J. P. Reynolds.
Goode, Geo. W.
Cabell, De Rosey C.
Wright, Edmund S.
Rivers, Wm. C.
Harriman, John D. L.
Davis, Milton F.
Lindsay, Elmer.
Arnold, Samuel B.
Sills, Wm. G.
Murphy, Pierce A.

First Lieutenants.
Arnold, Percy W.
Mosley, George V. H.
Foy, Robert C.
Hickman, Edwin A.
Tilford, James D.
Hazzard, Russell T.
Fitch, T.
Chapman, Leslie A. I.
McAndrews, Joseph R.
Gleaves, Samuel R.
Nolan, Robert M.
Thomas, Charles O., jr.
Perkins, Alvin S.

Second Lieutenants.
Smith, Selwyn D.
Enos, Copley.
Graham, Arthur M.
Lininger, Clarence.
Munro, Horace N.

Bell, William H., jr.
Roscoe, David L.
Rodney, Walter H.
Hodges, Harry L.
Krumm, Herbert Z.

Veterinarian.
Nockolds, Coleman.

SECOND CAVALRY.

Colonel.
Edgerly, Winfield S.

Lieutenant-Colonel.
Schuyler, Walter S.

Majors.
Pearson, Daniel C.
Sibley, Frederick W.
Slocum, H. J.

Captains.
Lewis, Thomas J.
Foltz, Frederick S.
Gardner, John H.
Stevens, Charles J.
Sargent, Herbert H.
Trout, Harry G.
Winn, John S.
Harrison, Ralph.
Clark, William F.
Hawkins, Clyde E.
Herron, Joseph S.
Wade, John P.
Kochersperger, Stephen M.
King, Edward L.
Orton, Edward P.

First Lieutenants.
Johnson, Frederick C.
Moore, J. W.
Reaney, J. J.
Mumma, Morton C.
Harvey, Charles G.
Smith, Gilbert C.
Coughlan, Timothy M.
Tyner, Geo. P.
Martin, Walter F.
McGee, Oscar A.
Hazzard, O. P. M.
Garity, Geo.
Coffey, Edgar N.

Second Lieutenants.
Lynch, Frank E.
Collins, Robert L.
Pope, William R.
McEnhill, Frank.
Smalley, Howard R.
Love, Moss L.
Barry, John A.
Gordon, W. W.

Veterinarians.
Lusk, William V.
English, Burt.

THIRD CAVALRY.

Colonel.
Dorst, Joseph H.

Lieutenant-Colonel.
Beck, Wm. H.

Majors.
Dodd, George A.
Andrus, Edwin P.
Hammond, A. G.

Captains.
McDonald, John B.
Tate, Daniel L.
Rice, Sedgwick.
Thayer, Arthur.
Hedekin, Charles A.
Barton, Frank A.
Conrad, Julius T.
Williams, Andrew E.
Pattison, Harry H.
Conrad, Casper H., Jr.
Hanna, Matthew E.
Munro, J. N.
Harper, Roy B.
McCoy, Frank R.

First Lieutenants.
Babcock, Conrad S.
Wallach, Robert R.
McNally, Reginald E.
Buchan, Fred E.
Cowin, William B.
Cullen, Dorsey.
Van Voorhis, D.
Wood, Robert E.
Grant, Walter S.
Benjamin, Julian A.
Jackson, Robert F.
Comly, George B.
Taylor, William R.
Seoane, Consuelo A.
Disque, Brice P.

Second Lieutenants.
Sterling, E. Kearsley.
Hunsaker, Irvin L.
Coppock, Edward R.
Lesher, Robert W.
Maize, Sidney D.
Bernard, Thomas P.
Valliant, R. B.
Mitchell, Henry E.
Goodspeed, Nelson A.
Boyd, Carl F.

Veterinarian.
Schwarzkopf, Olaf.

FOURTH CAVALRY.

Colonel.
Steever, Edgar Z.

Lieutenant-Colonel.
Fountain, Samuel W.

Majors.
Murray, Cunliffe H.
Edwards, Frank A.
Lockett, James.

Captains.
Benson, Harry C.
Rivers, Tyree R.
Cameron, George H.
Cress, George H.
Hughes, James B.
Brown, Robert A.
Koehler, Lewis M.
Stewart, Cecil.
Harris, Floyd W.
Scherer, Louis C.
Winans, Edwin B., jr.
O'Shea, John.
Rutherford, Samuel McP.
Chitty, William D.
Arnold, Frederick T.

First Lieutenants.
Henry, Guy V.
Pershing, Ward B.
Haight, Charles S.
Boniface, John J.
Dorcey, Ben H.
Purviance, Samuel A.
Gillem, Alvan C.
McCaskey, Douglas.
Hershler, Fred W.
Knox, Thomas M.
Austin, Wm. A.
Righter, Joseph C., jr.
Lee, Geo. M.

Second Lieutenants.
Edwards, Frank B.
Naylor, Charles J.
Jurich, Anton, jr.
Mohn, Albert J.
Henry, James B., jr.
Cowles, W. H.
Lewis, LeRoy D.

FIFTH CAVALRY.

Colonel.
Stedman, Clarence A.

Lieutenant-Colonel.
Paddock, Geo. H.

Majors.
Watts, Charles H.
Bishop, Hoel S.
Johnson, Franklin O.

Captains.
Foster, Fred W.
Goldman, Henry J.
Bryan, Roger B.
Holbrook, Willard A.
Traub, Peter E.
Jenkins, John M.
McClure, Nathaniel F.
Nissen, August C.
Pritchard, George B., jr.
Williard, Harry O.
Holbrook, Lucius R.
Dallam, Samuel F.
Valentine, William S.
Day, Clarence R.

First Lieutenants.
Craig, Malin.
McClure, Albert N.
McClintock, John.
Sturges, Edward A.
Raysor, Marion C.
Lewis, J. H.
Rodney, Geo. B.
Dixon, Varien D.
Foerster, Lewis.
Barton, R. M.
Walker, R. W.

Second Lieutenants.
Oliver, Prince A.
Cooley, William M.
Mears, Frederick.
Barnard, Joseph H.
Hennessey, Peter J.
Wheatley, Wm. F.
English, Ebert G.
Rothwell, Thomas A.
Sheridan, P. H.

SIXTH CAVALRY.

Lieutenant-Colonel.
Bomus, P. S.

Majors.
Pitcher, John.
Cheever, Benjamin H.

Captains.
Steele, George H.
Forsyth, William W.
Steele, Matthew F.
Cole, James A.
Byram, George L.
Howze, Robert L.
Ryan, John P.
Rhoden, Charles D.
Furlong, John W.
Anderson, Alvord Van P.
Hatberg, Irvin R.
Lott, Abraham G.

First Lieutenants.
Raymond, John C.
Reinburnman, Stuart.
Read, Beverly A.
Kerman, Wm. L.
Barr, Joseph A.
Morris, Willis V.
Riddle, David H.
Reed, William O.
Turner, Frederick G.
Woods, Albert J.
Hanson, John F.

Second Lieutenants.
Schroeter, Anton H.
Stryker, Gen L.
Lahm, Frank P.
Sidman, Frank R.
Butler, Redman.
Joyce, Kenyon A.
Pierce, Olney.
Keyes, Edward A.
Winter, John G., jr.
McCabe, E. R. Warner.

SEVENTH CAVALRY.

Colonel.
Morton, Charles.

Lieutenant-Colonel.
Woodward, Samuel L.

Majors.
Varnum, Charles A.
Fuller, Ezra R.
McCormick, L. S.

Captains.
Brett, Lloyd S.
Mercer, William A.
Waterman, John C.
Beach, Francis H.
Vestal, Solomon P.
Anderson, Edward.
Butler, Matthew C., jr.
Paine, Wm. M.
Averill, Nathan K.
Bell, Ole W.
Kennington, Alfred E.
Powers, R. B.
Roberts, Thomas A.

First Lieutenants.
Booth, Irving R.
Rhea, James C.
Connell, William M.
Boice, Charles A.
Cantzel, Delphey T. E.
Lovell, Geo E.
Rush, Christian A.
West, Emery S.
Caldwell, Ralph C.
Jeffers, Solomon L.

Second Lieutenants.
Jennings, Thos. H.
Hayden, Ralph M.
Tatum, Howard C.
Bamberger, Raymond S.
Zell, Edward M.

EIGHTH CAVALRY.

Colonel.
Anderson, G. S.

Majors.
Shunk, William A.
Ripley, H. L.

Captains.
Dickman, Joseph T.
Sloeum, Stephen L'H.
Duff, Robert J.
Sayre, Farrand.
Farber, Charles W.
Barnum, Malvern H.
Evans, Ellwood W.
Donaldson, Thomas Q., jr.
Stockle, George E.
Sawtelle, Chas. G., jr.
Saxton, Albert E.
Bigelow, Mortimer O.
Parsons, Lanning.
Stirmyer, Edgar A.

First Lieutenants.
Roberts, Hugh A.
Oliver, Llewellyn W.
Norvell, Guy S.
King Albert A.
Wemon, Charles M.
Watson, John.
Kirkman, Hugh.
Purington, Geo. A.
Canon, Lawrence S.
Cone, Alexander B.
Rethorst, Otto W.

Second Lieutenants.
Otis, Frank I.
Megill, Sabring C.
Keller, Frank.
Cunningham, Thos. H.
Kilbourne, Louis H.
Smith, Talbot.
Davis, Frank E.
Mueller, Albert H.
Barly, O. L.

Veterinarian.
Stanclift, Ray J.

NINTH CAVALRY.

Colonel.
Godfrey, Edward S.

Lieutenant-Colonel.
Godwin, Edward A.

Majors.
Bigelow, John, jr.
Erwin, James B.
Morgan, George H.

Captains.
Fuller, Alvarado M.
Walsh, Robert D.
Read, George W.
Nance, John T.
Armstrong, Frank S.
Stivers, Herman A.
Sproter, Chas. E.
Miller, Alexander M., jr.
Kelly, William, jr.

First Lieutenants.
Pearson, Samuel B.
Fair, John S.
Coleman, Sherrard.
Winterburn, Geo. W.
Calvert, Edward.
Fechét, James E.
Pilcher, Winston.
Jones, Frederick M.
Gibbins, Henry.
Cole, Casper W.
Bowie, Hamilton.
Herman, Frederick J.
Sterrett, Robert.

Second Lieutenants.
Coz, Edwin L.
Hathaway, C. Emery.
Howard, John H.
Esty, Thomas B.
Love, Robert R.
Buchanan, Edmund A.
Ruggles, F. A.

Veterinarian.
Tempany, John.

TENTH CAVALRY.

Colonel.
Augur, Jacob A.

Lieutenant Colonel.
Hein, Otto L.

Majors.
Scott, George L.
Beach, William D.
Read, Robert D., jr.

Captains.
Grierson, Charles H.
Watson, James W.
Johnson, Carter P.
Macdonald, Godfrey H.
Hay, William H.
Paxton, Robert G
Livermore, Richard L.
Fleming, Robert J.
Carson, Thomas G.
Cavanaugh, Harry LaT.
Parker, James S.
Jervey, Eugene P., jr.
Boyd, Charles T
Whitehead, H. C.

First Lieutenants.
Farmer, Charles C., jr.
Hart, Augustus C.
Fonda, Ferdinand W.
Godson, Wm. F. H.
Cornell, Wm. A.
Oden, Geo. J.
Palmer, Bruce.
Cartwell, N. M.
Terrell, Henry S.
Fortescue, Granville R.
Scott, Walter J.

Second Lieutenants.
Müller, Carl H.
Bowdish, Myron B.
Davis, Benjamin O.
Tompkins, Daniel D.
Price, Geo. E.
Edwards, William W.

Veterinarians.
McMurdo, C. D.
Service, S. W.

ELEVENTH CAVALRY.

Colonel.
Thomas, E. D.

Majors.
Wheeler, Homer W.
Boughton, D. H.

Captains.
West, Parker W.
Brooks, Edward C.
Hardeman, Letcher.
Elliott, Stephen H.
Perry, A. W.
Langhorne, George T.
Rowell, Melvin W.
Jones, Samuel G.
Clayton, Powell, jr.
Leary, Edmund M.
Vidmer, George.
White, Herbert A.

First Lieutenants.
McCornack, Willard H.
Kromer, Leon B.
Luhn, William L.
Ryan, Thomas F.
Taylor, Theodore B.
Gaujot, Julien E.
Davis, Edward.
Rockwell, V. LaS.
Odell, Albert S.
Shelley, James E.
Tompkins, E. R.
Swift, Eben, jr.

Second Lieutenants.
Westmoreland, Wade H.
Smith, Walter D.
Symington, John.
Baird, Geo. H.
Warren, Rawson.
Cocke, John.
Grunert, George.
Meade, William G.
Harris, Emmet R.
Stevenson, W. L.

Veterinarians.
McDonald, Alex.
Gould, J. H.

TWELFTH CAVALRY.

Colonel.
Kerr, J. B.

Lieutenant-Colonel.
Chase, Geo. F.

Majors.
Guilfoyle, John F.
Kendall, Henry F.
Sickel, Horatio G.

Captains.
Nicholson, William J.
Trippe, P. E.
Michie, Robert E. L.
Littebrant, William T.
Hornbrook, James J.
Anderson, Edward D.
Rockenbach, Samuel D.
Cusack, Joseph E.
Morgan, John M.
Parker, Francis Le J.
Craig, John W.

First Lieutenants.
Lee, Fitzhugh, jr.
Long, John D.
Sharpley, Arthur G.
Case, Frank L.
Cootes, Harry N.
Burroughs, James M.
Morey, Lewis S.
Kimball, Gordon N.
Biegler, George W.
Deren, John A.

Second Lieutenants.
Abbott, James E.
Troxel, Orlando C.
Beck, Robert McC., jr.
Mayo, Charles R.
Offley, Edward M.
Stott, C. A.

Veterinarian.
Hill, Wm. P.

THIRTEENTH CAV'Y.

Majors.
Hunt, Levi P.
Taylor, Chas. W.

Captains.
Lochridge, P. D.
Dade, Alexander L.
Corcoran, Thomas M.
Glasgow, William J.
Phillips, Ervin L.
Sweezey, Claude B.
Whitman, Walter M.
Babcock, Walter C.
Hyer, Benjamin B.
Mitchell, Geo. E.

First Lieutenants.
Longstreet, James, jr.
Winters, William H.
Ball, Louis R.
Sturges, Dexter.
Heaton, Wilson G.
Davidson, Alexander H.
Lowe, William L.
Steunenberg, George.
Moffet, Wm. P.
Clopton, Wm. H., jr.
Deitrick, Leonard L.

Second Lieutenants.
Ellis, Roland B.
Reynolds, Robt. W.
Smith, Walter H.
Meyer, Henry A., jr.
Bristol, Matt C.
Dougherty, Clarence A.
Bull, Henry T.
Cathro, Thomas E.

Veterinarian.
Jewell, Charles H.

FOURTEENTH CAV'Y.

Colonel.
Lebo, Thomas C.

Lieutenant-Colonel.
Garrard, Joseph.

Majors.
Hardie, Francis H.
O'Connor, Chas. M.
Scott, Hugh L.

Captains.
Gray, Alonzo.
Suplee, Edwin M.
Meyer, Oren B.
Howard, Harold P.
Reeves, James H.
Walker, Kirby.
Adams, Sterling P.
Smith, Cornelius C.
Smedberg, William R., jr.
Yates, William.
Crosby, Herbert B.
Smith, Mathew C.
Drake, Charles B.
Pope, F. H.

First Lieutenants.
McKinley, James F.
Heidt, Grayson V.
Dudley, Clark D.
Hayne, Paul T., jr.
Schultz, Theodore.
Lippincott, Aubrey.
Whitlock, Frank O.
Poillon, Arthur.
McKenney, Henry J.

Second Lieutenants.
Jacobs, D. H.
Russell, George M.
Riggs, Kerr T.
Keyes, Allen C.
Jewell, James M.
Read, John H., jr.
Fisher, Ronald E.
Hume, John K.
Somerville, Geo. R.
Weyrauch, Paul H.
Zane, Edmund L.
Davis, Norman H.

FIFTEENTH CAVALRY.

Lieutenant-Colonel.
Rodgers, Alexander.

Majors.
Gresham, John C.
Hoppin, Curtis B.

Captains.
Pershing, John J.
McNamee, Michael M.
Marshall, Francis C.
Ryan, James A.
Johnston, William T.
Lindsey, Julian R
Hickok, Howard R.
Kirkpatrick, George W.
Andrews, Lincoln C.
Walker, Kenzie W.
Eltinge, Le Roy.

First Lieutenants.
Dean, Warren.
Whiteside, Warren C.
Ross, James O.
Duncan, Geo. O.
Bowman, Geo. T.
Tremaine, W. C.
Briand, Christian
Lear, Ben., jr.
Mowry, Philip.
Scott, Walter J.

Second Lieutenants.
Culver, Clarence C.
Mangum, Wiley P., jr.
Burnett, Chas.
Norton, Clifton R.
Ely, Eugene J.
Barriger, Wm S.
McMullen, Joseph I.
Martin, Isaac S.
Holliday, Milton G.
Partridge, Leon R.
Overton, Wm. W.
Robertson, Samuel W.

Veterinarian.
Grutzman, W. R.

ASSOCIATE MEMBERS.

The following are eligible to associate membership: (a) Persons who are, or who ever have been, commissioned officers of honorable record in the Regular Army (service other than cavalry) or in the Navy. (b) Persons who are, or who have ever been, commissioned officers of honorable record of the National Guard of any State or Territory. (c) Former general officers and former commissioned officers of cavalry of honorable record in the Confederate Army.

ADJUTANT GENERAL'S DEPARTMENT.

Colonel.
Wagner, Arthur L.

Lieutenant-Colonel.
Kerr, J. T.

Major.
Evans, Robert K., *inf.*
Starr, C. G., *inf.*

INSPECTOR GENERAL'S DEPARTMENT.

Lieutenant-Colonel.
Mills, Stephen C.

Majors.
Irons, J. A., *inf.*
Nichols, W. A., *inf.*

QUARTERMASTER'S DEPARTMENT.

Majors.
Rahlen, Geo.
McCarthy, D. E.

Captains.
Yates, Arthur W.
Horton, Wm. E.
Scott, Wm. Sanders.

SUBSISTENCE DEPARTMENT.

Colonel.
Sharpe, H. G.

Captains.
Grove, Wm. R.
Kilian, J. F.

MEDICAL DEPARTMENT.

Lieutenant-Colonels.
Hoff, J. Van R.
Comegys, E. T.

Majors.
Gardner, Edwin F.
Bannister, W. B.
Rafferty, Ogden.

Lieutenant.
Roberts, Wm. M.

PAY DEPARTMENT.

Colonel.
Tower, A. S.

Lieutenant-Colonel.
Tucker, W. F.

Major.
Watrous, J. A.

CORPS OF ENGINEERS.

Lieutenant-Colonels.
Allen, Chas J.
Miller, A. M.

Majors.
Leach, Smith S.
Biddle, John.

Captains.
Zinn, G. A.
Morrow, Jay J.
Craighill, W. E.

ORDNANCE DEPARTMENT.

Lieutenant-Colonel.
Blunt, S. R.

Major.
Clark, C. H.

SIGNAL CORPS.

Second Lieutenant.
Briggs, Allen M., *inf.*

CHAPLAINS.

Anderson, Wm. T., *10th cav.*

ARTILLERY CORPS.

Lieutenant-Colonel.
Schenck, A. D.

Majors.
Duvall, W. P.
Andrews, H. M.
Macomb, M. M.
Wisser, J. P.

Captains.
Rowan, H.
Strong, F. S.
Treat, C. G.
Foote, S. M.
Ridgway, T.
Conklin, John, Jr.
Sturgis, S. D.
Mott, T. Bentley
Straub, O. L.
Hayden, J. L.
Foster, L. F.
Carpenter, Edward
Lanza, C. H.

First Lieutenants.
Granger, R. S.
Faulkner, A. U.
Hyde, A. P. S.
Edwards, Frank B.

Veterinarians.
Sproule, W. A.
Donovan, A. R.

FIRST INFANTRY.

Colonel.
Dugan, W. T.

Captain.
Lacy, F. E.

SECOND INFANTRY.

Major.
Bailey, H. L.

THIRD INFANTRY.

Lieutenant-Colonel.
Macklin, J. E.

Major.
Plummer, E. H.

Captain.
Noble, R. H.

FOURTH INFANTRY.

Major.
Mason, Charles W.

FIFTH INFANTRY.

Major.
Bowen, William H. C.

SIXTH INFANTRY.

Major.
Wotherspoon, William W.

Captain.
Poore, B. A.

SEVENTH INFANTRY.

Major.
Hardin, E. E.

Captain.
Goodin, J. A.
Penn, J. A.
Farnsworth, Charles S.

EIGHTH INFANTRY.

Lieutenant Colonel.
Crane, C. J.

NINTH INFANTRY.

Major.
Noyes, C. R.

Captains.
Ramsey, Frank DeW.
Wise, Hugh D.

ELEVENTH INFANTRY.

Major.
Jackson, James B.

Second Lieutenant.
Farnum, F. H.

THIRTEENTH INF.

Captain.
Johnson, Arthur.

FIFTEENTH INF.

First Lieutenant.
Sillman, R. H.

SIXTEENTH INF.

First Lieutenant.
Morton, C. E.

NINETEENTH INF.

Captains.
Foster, A. B.
Burkhardt, S., jr.

TWENTIETH INF.

Captains.
Hirsch, H. J.
Mearns, R. W.
Exton, Charles W.
Estes, G. H.

TWENTY-SECOND INF.

Lieutenant-Colonel.
Maus, Marion P.

Captain.
Wassels, W. H.

TWENTY-FOURTH INF.

First Lieutenant.
Knox, R. S.

TWENTY-FIFTH INF.

Captains.
Roudiez, L. S.
Allbright, F. H.

TWENTY-SIXTH INF.

Captains.
Ely, H. E.
Rosenbaum, O. B.

PORTO RICO REGIMENT.

Captain.
Townshend, O. P.

First Lieutenants.
Taulbee, M. K.
Patterson, Wm. L.
Woodruff, Wm Schuyler.

Second Lieutenants.
Armstrong, W. H.
Stephenson, F.

PHILIPPINE SCOUTS.

First Lieutenant.
Smith, R. M.

RETIRED LIST.

Avis, E. S., *capt.*
Dodge, T. A., *lt.-col.*
Head, G. E., *lt. col.*
Page, Charles, *col.*
Pearson, E. P., *col.*
Russell, E. K., *maj.*
Smedberg, Wm. R., *capt.*

NATIONAL GUARD.

ALABAMA.

McCrossin, E. J., *capt.*

ARIZONA.

Tuthill, A. M., *capt.*

CALIFORNIA.

Howell, J. C., *col.*
Fulle, C. J., *capt.*
Winham, F. W., *1st lieut.*
Vierra, F. M., *2d lieut.*

COLORADO.

Chase, John, *maj.*
Eaton, W. R., *1st lieut.*

CONNECTICUT.

Cole, G. M., *gen.*

ILLINOIS.

Tripp, S. O., *lieut.-col.*
Lowe, Wilson, *maj.*
Cassidy, H. C., *capt.*
Strong, Gordon, *capt.*
Whigam, W. H., *capt.*
Counselman, Willis, *capt.*
Bush, F. N., *capt.*
Wampold, Leo, *capt.*
Clark, Will H.
Luedeka, Emil C., *lieut.*

KANSAS.

Metcalfe, W. S., *col.*

LOUISIANA.

Churchill, Robert, *capt.*
Liverman, H. T., *capt.*
Eustis, Herbert L., *2d lieut.*

MISSOURI.

McCord, J. H., *lieut. col.*

MASSACHUSETTS.

Perrine, W. H., *maj.*
Kelly, W. H., *capt.*
Parker, S. D.

NEW YORK.

Appleton, D., *col.*
Richmond, Harry S., *capt.*
Miller, Livingston, *lieut.*
Olmstead, Edward.
Weiman, H.
Miller, E. H., *lieut.*
Sayre, Reginald H., *lieut.*
Wright, Wm. R., *lieut.*

NEW JERSEY.

Bryant, W. A., *capt.*
Roome, B. R., *lieut.*
Parker, C., Jr., *lieut.*

NEW MEXICO.

Rankin, R. C., *maj.*

OHIO.

Miller, Otto, *2d lieut.*

PENNSYLVANIA.

Stewart, Thos. J., *brig. gen.*
Logan, A. J., *col.*
Ripple, E., *col.*
Brown, L. T., *l.-col.*
Dolan, T. J., *capt.*
Edmunds, C. W., *lieut.*
MacLeod, Norman, *lieut.*
Groome, J. C., *capt.*
Martin, J. Miller, *lieut.*
Ott, F. M., *capt.*
Schermerhorn, F. E., *capt.*
Wood, J. P., *lieut.*
Bates, W. E., *cornet.*

RHODE ISLAND.

Richards, John J., *capt.*

TEXAS.

Towles, Churchill, *maj.*
Davis, Ira D., *capt.*
Ingerton, W. H., *capt.*

WASHINGTON.

Griggs, Everett G., *capt.*

WEST VIRGINIA.

Smith, Harry R., *col.*
Simms, C. W., *col.*
Morrison, C. F., *col.*
Kramer, J. L., *maj.*
Powell, T. R., *capt.*

WISCONSIN.

Mueller, R. W., *capt.*

CIVIL LIFE.

Winter, M. A., *col.*
Rawle, Wm. B., *lt.-col.*
Rawle, J., *lieut.*
Wilson, F. L., *maj.*
Bryan, *capt.*
Craig, H. D., jr., *lieut.*
Cable, Wm. A.
Lowe, A. W.

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: Camden, Ala.)

Maj. James T. Bock
Capt. A. G. Forbes, Adjutant, Montgomery
Capt. Jno. F. Burns, Q. M., Barnesville
Capt. L. L. Leseur, Commissary, Montgomery
Capt. R. H. Kilpatrick, Surgeon

TROOP A—MONTGOMERY

Capt. W. O. Garside
1st Lt. W. W. Walker
2d Lt. Thos. Robinson
Jr. 2d Lt. C. K. Dexter

TROOP B—CAMDEN

Capt. J. D. Jenkins
1st Lt. O. J. Spear
2d Lt. R. R. Tait
Jr. 2d Lt. S. W. McIntosh

TROOP C—SELMA

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. McCronin
1st Lt. C. S. Price
2d Lt. C. H. Moody
Jr. 2d Lt. A. J. Hall

ARIZONA.

FIRST CAVALRY TROOP—NOGALES.

Capt. Charles E. Perkins
1st Lt. Phil Herold.
2d Lt. Emery L. Chatlant

SECOND CAVALRY TROOP—MORENCI.

Capt. A. M. Tuthill
1st Lt. James M. 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 Janeen, 524 Washington St.
1st Lt. Chas. F. Wells, 315 Montgomery St.
2d Lt. Chas. M. Fickert, 530 California St.

TROOP B—SACRAMENTO

Capt. Sam'l W. Kay, 1113 Q St.
1st Lt. Oscar J. Boden, 52[illegible] M St.
2d Lt. Thomas S. Kelly, 1601 8th St.

TROOP C—SALINAS

Capt. Charles Fulle
1st Lt. Fred'k W. Wickham
2d Lt. F. M. Vierra

TROOP D—LOS ANGELES

Capt. Jno. D. Fredericks, Co Court House
1st Lt. A. C. Freeman, 605 Laughlin Block
2d Lt. Earl W. Jonas, 717 San Pedro St.

COLORADO

(Headquarters: Denver)

Maj. Zeph T. Hill, commanding
1st Lt. W. R. Eaton, Adjutant

TROOP B—DENVER

Capt. G. A. Perry
1st Lt. D. W. Strickland
2d Lt. Carleton A. Kelley

TROOP C—DENVER

Capt. H. D. Smith
1st Lt. C. S. Card
2d Lt. J. G. Dickinson

TROOP D—MEEKER

Capt. George L. Greer
1st Lt. George E. Aicher
2d Lt. Ambrose Oldland

CONNECTICUT

TROOP A—NEW HAVEN

Capt. Lazarus Ludington
1st Lt. William J. Bradnack
2d Lt. Robert J. Woodruff, Orange

GEORGIA

(Headquarters: Savannah)

Col. P. W. Meldrim, Savannah
Lt.-Col. Befrue 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, Springfield
Capt. E. J. Giles, Troop D, Reidsville

Second Squadron

Capt. J. W. Hughes, Troop E, Johnston Station
Capt. Gustavus Canning, 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. Hope, Troop L, Atlanta
Troop M (vacant)

ILLINOIS

FIRST REGIMENT CAVALRY

(Headquarters: 196 Monroe St., Chicago)

Field and Staff

Col. Edward C. Young, 196 Monroe St.
Lt.-Col. Robert B. Fort, Lacon
Maj. Milton J. Foreman, 100 Washington St.
Maj. Joseph Wilson, 144 E. 22d St.
Capt. Willis Counselman, 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. Rfl. Prct., 2205 Calumet Ave.
Maj. T. Jay Robeson, Surgeon, 3807 Grand Boulevard
Capt. Jesse Racone, Asst. Surg., Abingdon
1st Lt. Morton M. C. Inow, Asst. Surg. 4207 Grand Boulevard
1st Lt. Martin Peterson, Squadron Adjt. Chicago
1st Lt. Walter A. Rosenfield, Squadron Adjt. Rock Island
Capt. Stewart S. Baker, Veterinarian, 901 Jackson Boulevard
Capt. Rufus A. White, Chaplain, 6800 Perry Ave.

First Squadron

TROOP A—CHICAGO

Capt. Gordon Strong, 497 State St.
1st Lt. Gustav F. Wuerst
2d Lt. Joseph W. Mattes

TROOP B—BLOOMINGTON

Capt. Isaac F. Douglass, Shirley
1st Lt. Louie Foreman
2d Lt. Bert O. Trueiner

TROOP C—CHICAGO

Capt. F. S. Dunham, 424 E 48th St.
1st Lt. Albert E. Butler, 1783 Chicago Ave.
2d Lt. Ludwig T. Kuehl

TROOP D—SPRINGFIELD

Capt. John W. Vorhes, Riddle Hill
1st Lt. Harry L. Neer
2d Lt. Charles Wals

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

LOUISIANA

FIRST TROOP—NEW ORLEANS

Capt. C. Robert Churchill, 407 Morris Bld.
1st Lt. Wm. Hero, 823 Commercial Alley
2d Lt. Herbert L. Eustis, 1410 Jentson Ave.
Capt. Arthur Nolte, Surgeon, 1505 State St.

SECOND TROOP—MANSFIELD

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—PIKESVILLE

Capt. Joseph W. Shirley
1st Lt. C. Lyon Rogers, Jr.
2d Lt. Redmond C. Stewart

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. Blinn, Paymaster, Roxbury
1st Lt. Albert J. Walton, Inspector of Rifle Practice, Melrose

COMPANY A—BOSTON

Capt. Frank T. Hitchcock, Winthrop
1st Lt. Fred G. Havlin, 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 94th St. New York City)

Maj. Oliver B. Bridgman
1st Lt. Robert C. Lawrence, Adjt.
1st Lt. John M. Galloway, Q. M.
1st Lt. Louis V. O'Donohue, Commissary of Subsistence
1st Lt. Reginald H. Sayre, Insp., of Small Arms Pract.
Asst. Surgs. 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 Meuse 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. ——
2d Lt. Ernest L. Miller

TROOP C—BROOKLYN

(North Portland Ave. and Auburn Place)

Capt. Charles I. De Bevoise
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. Cortlandt 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. McWenie
2d Lt. Ludwig Wm. Ilfeld

OHIO

TROOP A—CLEVELAND

Capt. Wm. M. Scofield
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 Chestnuts Sts.)

Capt. Frank Earle Schermerhorn
1st Lt. John P. Wood
2d Lt. Charles Welsh Edmunds
1st Lt. and Asst. Surg. W. A. Newman Dorland, 130 S. 17th St.
2d Lt. and Q. M. Randolph Sailer

TROOP A

(Armory N. 4 st 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. Meck
2d Lt. John M. Major
2d Lt. and Q. M. Edgar C. Hummel

RHODE ISLAND

(Headquarters: Pawtucket)

Maj. William A. Maynard, Providence, Commanding
1st Lt. Leo F. Nadeau, Adjt., Providence
Maj. Charles F. Sweet, Surg., Pawtucket
1st Lt. Lucius H. Newell, Q. M., Pawtucket
1st Lt. Henry D. C. Dubris, Commissary, Providence
1st Lt. Edward M. Holmes, Paymaster, Central Falls
1st Lt. Joseph J. Woolley, Chaplain, Pawtucket

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. Sparkman, 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. Pyatt, Judge Advocate, Georgetown
Maj. Olin Sawyer, Surgeon, Georgetown
Maj. A. M. Brailsford, Jr., Paymaster, Mullins
Lt. J. D. West, Bat. Adj., Locaster
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. G. 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—PAXVILLE

Capt. A. J. Richbourg, St. Paul
1st Lt. J. D. Hoyle, Paxville
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. Marvin, 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. Pyatt
2d Lt. Miles Bellune
Add. 2d Lt. John J. Johnson

TROOP H—ECTAWVILLE

Capt. R. G. Causey
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. Spivey
1st Lt. Charles J. Epps
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 R. 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—COMANCHE

Capt. W. H. Murphy
1st Lt. C. C. Cunningham
2d Lt. J. F. Cullinan

UTAH

TROOP A—SALT LAKE CITY

Capt. _____
1st Lt. Burl V. Smith, Commanding
2d Lt. Albion W. Caine

VIRGINIA

TROOP B—SURRY

Capt. Henry C. Land
1st Lt. Aurelius W. Bohannan
2d Lieut Robert R. Furgusson, 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.

THE ADVERTISING DEPARTMENT.

In No. 49 of the present volume of THE CAVALRY JOURNAL will be found a short article on the value and use of the advertising department. Since that number the JOURNAL has made great progress both in membership and advertising. What was said in that number can be repeated with increased emphasis in this number. If the members of the Association will kindly help the JOURNAL by mentioning it as the medium in which they saw ads., it will do much to increase our growth in this direction, and will be much appreciated by the management. Another change has been made, and an advertisement now adorns the back cover page, and it is hoped that the reasons which induced the placing of this page in the advertising department will be equally as apparent to the readers as they were to the JOURNAL.

PHOTOGRAPHIC SUPPLIES.

Kansas City has become a market for Western States, and it is no longer necessary to send for many things, for now they can be procured most quickly and at reasonable prices in the West. One of the large establishments that makes its headquarters in Kansas City is Mullet Bros. Photographic Supply Co. Write to them for circulars and information.

ATHLETIC GOODS.

Another firm in Kansas City that has established itself by name, by quality of goods and reasonable prices, is the J. F. Schmelzer & Sons Arms Co. They have an immense

store in the heart of the business section of Kansas City, and are prepared to furnish everything in the line of athletics and sports. All company, troop and battery commanders should have Schmelzer's catalogue, and this is to be had for the asking. Address, Kansas City, Mo.

COFFEE.

Even should we get a condensed ration that will include all the necessary constituents of what is required to sustain life, every man will want a good cup of coffee. Schotten's Best Rio Coffee has been used by the army to a great extent, and it makes a good coffee for the use of officers and their families. A better quality is "Schotten's 1904," and the firm of Wm. Schotten & Co. will be glad to send you a pound of this delicious product for the asking. Address St. Louis, Mo.

WM. A. BARR DRY GOODS CO.

The largest department store in St. Louis needs no commendation to officers and their families stationed in St. Louis, but to those who have never been at Jefferson Barracks, it should be known that this firm does a large mail order business, by which means thorough and prompt service may be had. Write to this house for its catalogue or for any specific information desired.

PLUMBING FIXTURES AND SUPPLIES.

Constructing and post quartermasters at Eastern stations should not fail to send their advertisements for bids on plumbing supplies to the well known firm of Peck Brothers & Company, whose notice appears in the advertising department. This firm has large offices and storehouses in New York, New Haven and in Boston. They have had many contracts for government work and have always given thorough satisfaction.

"SMALL BLACK" COFFEE.

Every lover of an after dinner cup of coffee should try the "Small Black," of Hills Bros., of San Francisco. The coffee is packed in vacuum and will keep fresh for years. It is the highest product of coffee maker's art. It retails at fifty cents a pound, and you will realize that it gives satisfaction and full value received. A trial pound can will be sent prepaid as a sample on the receipt of fifty cents.

UNDERWEAR.

Captain Charles E. Woodruff, Assistant Surgeon, U. S. Army, writes as follows in the *Philadelphia Medical Journal*: "The skin under the flannel was always hot, moist and macerated, and covered with irritating eruptions and pustules (heat-rash). Indeed, each man was carrying around and cultivating beautiful varieties of bacteria, which only waited a chance to kill them. Such is the action of flannels on the human skin." To all who value health, appreciate comfort, and are a bit particular as to what they permit to touch their skin, we would say that the Dr. Deimel undergarments of white and cleanly linen-mesh are worth their weight in gold, though they are sold for less.

POST EXCHANGE TRADE.

The Scudders-Gale Grocer Company is still on hand and ready to furnish Post Exchanges and Company and Troop Messes with good things to eat and "smooth things to smoke." This firm is agent for many prominent foreign and domestic concerns. A monthly bulletin of prices is issued, and may be had for the asking. A perusal of its pages convinces a person that this house supplies everything, and everything good.

COFFEE, TEAS AND SPICES.

The only firm adhering exclusively to coffee, teas and spices in the West is that of J. William Pope, who make it their business to select, carry and sell only the finest grade of these articles. Cardinal, San Juan, Menelek and Lucknow Coffees are handled exclusively by this firm, and are of the very finest grade. Ask your grocer for them, and demand that he shall keep them. It will be to his and your interest.

CLEAN OATS.

The Kasper Self-acting Oats Cleaner is an automatic device that serves its purpose well, and also does duty as a hopper. Cavalry troop commanders should insist upon having one in their stables. There is no excuse for feeding dusty and dirty oats when such a cheap and thoroughly satisfactory cleaner is on the market.

POLISHINE.

All troopers know the value of Polishine, and the Exchange that does not keep it on hand is missing an excellent selling article. Wherever it is not kept the enlisted men should demand it. Polishine is made in all forms—liquid, pomade, paste, powder, etc.—and each has its special uses. It is a fine cleaning material for the house, and should be on hand in every kitchen. The ad. will be found among our pages.

HAMS AND BACON.

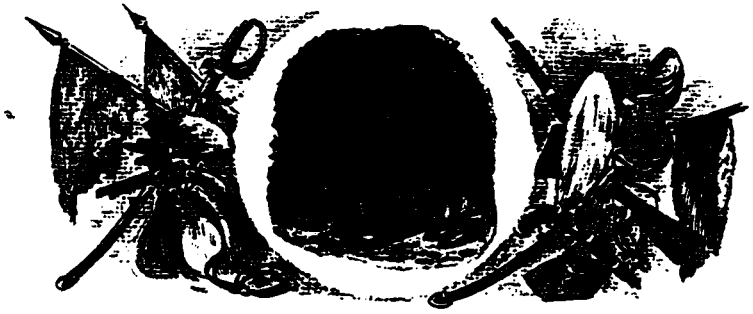
The Majestic brand of hams and bacon are recommended in an ad. of the Schwarzschild & Sulzberger Co. This firm has business offices in New York, Chicago and Kansas City. They also make a specialty of fresh beef, veal and mutton delicacies, and we suggest to Exchanges of posts not within easy reach of markets to communicate with this firm with a view to establishing a delivery system at the post. Wherever introduced it made a good business investment, besides being highly appreciated by the patrons. The fresh meats, of which cuts of any kind may be ordered, are packed in ice boxes and shipped by express.

BATH ROOMS AND FIXTURES.

The firm of James B. Clow & Sons, of Chicago, New York and Havana, makes a specialty of fine bath room fixtures. Their general catalogue should be found at every post. They have had many contracts for delivering their wares to the government, and their name is a guarantee of fine material and excellent workmanship. The "ad." shows the Clow porcelain-lined iron bath with shower.

CENTURY PUBLISHING CO.

The attention of our readers is called to the advertisement of the Century Publishing Company in the first part of this JOURNAL. The ad. appears for the first time in the JOURNAL, and is one of our newest departures. We hope that it may be appreciated, and that our members will take advantage of the opportunity offered.



BACK NUMBERS

Journal of the U. S. Cavalry Association

May be obtained from the Secretary

. . . Price, Fifty Cents a Copy . . .

Members desiring to complete their files of the CAVALRY JOURNAL can do so by submitting a list of the numbers wanted and sending with the order a remittance of fifty cents per copy.

The files of the CAVALRY JOURNAL contain much interesting reading and also many valuable hints for cavalrymen. The essays and articles cover every conceivable ground, the majority relating to experiences and giving the results of observation of soldiers and campaigners. For the younger cavalry officers no reading matter can be offered that would be of greater benefit in developing them for their manifold duties in the field and in garrison.

The following numbers are on hand and will be sent on application as far as the supply will admit.

LIST SHOWING BACK NUMBERS OF U. S. CAVALRY JOURNAL ON HAND.

No.	*On Hand.*	*No.*	*On Hand.*	*No.*	*On Hand.*	*No.*	*On Hand.*
1	.....	14	80	27	115	40	38
2	.....	15	87	28	115	41	69
3	.....	16	74	29	95	42	62
4	.....	17	71	30	100	43	66
5	.....	18	70	31	125	44	104
6	.....	19	86	32	90	45	125
7	.....	20	75	33	85	46	70
8	60	21	85	34	108	47	15
9	144	22	85	35	124	48	150
10	80	23	65	36	51	49	500
11	100	24	88	37	53		
12	93	25	85	38	77		
13	90	26	95	39	49		

Members having extra copies of any number may exchange such copies for others by sending them to the Secretary and stating which numbers they wish in exchange.

MAJOR EDMUND AUGUSTUS OGDEN,
UNITED STATES ARMY.
Died at Fort Riley, Kansas, August 3, 1865. Aged 44 years.

JOURNAL

OF THE

United States Cavalry Association.

Vol. XIV. [illegible] No. 52

[illegible]

That [illegible]
[illegible]
At the [illegible]

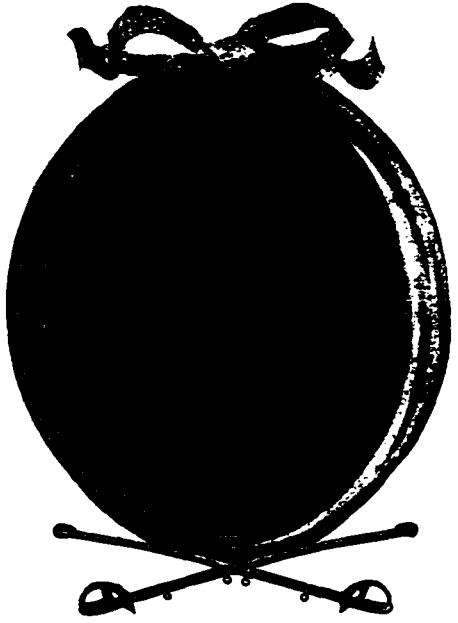
MAJOR EDMUND AUGUSTUS OGDEN,
UNITED STATES ARMY.
Died at Fort Riley, Kansas, August 3, 1865. Aged 41 years.

JOURNAL
OF THE
United States Cavalry Association.

VOL. XIV. APRIL, 1904. No. 52.

GRIERSON'S RAID.

BY B. P. SHILLABER. (MRS. PARTINGTON.)



[From the Boston Journal, 1863.]

Who has not heard of Grierson's raid,
And the feats of valor therein displayed?
'Twas a brave, bold dash through the hostile land
That scattered terror on every hand,
Making the rebel heart afraid
At the daring valor of Grierson's raid.

Over their mountains and over their plains,
The rider his galloping courser strains,
His sword gleams bright in the foeman's face,
And ruin follows his onward pace:
While eyes are sad and hearts dismayed
At the terrible scourge of Grierson's raid.

Through their cities and over their streams
The flag of the Union once more gleams.
There's a curse on the air, but in underbreath,
As the troopers go on their work of death.
Like lightning flashes each loyal blade
To light the path of Grierson's raid.

Onward, yet onward, oh who may stay
The fiery tide of this fearful day?
It sweeps like a tempest along his path,
And whelms the rebel in vengeful wrath:
The smoking bridge shows war's fierce trade,
And fire and ruin mark Grierson's raid.

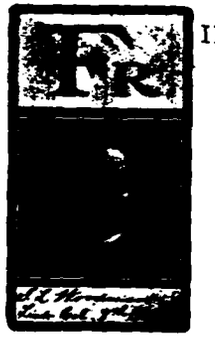
Onward, yet onward, the blazing roof
Echoes in flame to the cavalry hoof:
And fleeing forms in the midnight air,
Revealed by the war-pyre's ruddy glare,
Tell the story in fear displayed,
Of the woeful, terrible Grierson's raid.

Onward, yet onward, unholden the rein,
Till the Union lines are compassed again
Where a mead of grateful honors is due
For the troopers bold, tried and true:
And history never has deed portrayed
That brighter shines than Grierson's raid.

And rebel mothers their children tell
Of the sudden fear that on them fell,
When swooping down like a bird on its prey,
The Federal troopers came that way—
A sad recital as ever was made,
The memories dire of Grierson's raid

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

By Lieutenant-Colonel S. L. WOODWARD, Seventh Cavalry,*
Late Major and A. A. G., U. S. Volunteers.



FRIDAY, the 17th of April, 1863 (a more auspicious day never dawned), saw a column of 1,700 cavalry march out of La Grange, Tennessee, upon an expedition so mysterious that even the commanding officer did not know, beyond a certain objective, where it was going, or when, if ever, it would return. Some such expedition, with a view of striking terror and upsetting things generally in the heart of the "Confederacy," had been mentioned by Colonel Grierson to his superiors sometime before, and it is likely they thought him visionary and over-confident; but he had already, during the last year, slashed about in the heart of Mississippi and Tennessee among the country's enemies with so much suc-

*Lieut.-Col. Samuel Lippincott Woodward, Seventh Cavalry, is a native of New Jersey, and enlisted in Company G, Sixth Illinois Cavalry, February 1, 1862. On the first day of November of the same year he received the appointment of second lieutenant same regiment; promoted first lieutenant March 16, 1863; appointed captain and assistant adjutant general volunteers July 21, 1863; promoted major February 11, 1865; mustered out of volunteer service September 15, 1865; commissioned second lieutenant Tenth U. S. Cavalry June 18, 1867; appointed regimental adjutant October 1, 1867, serving in such capacity until October 1, 1876, and from September 24, 1883, to September 30, 1887; promoted a first lieutenant December 11, 1867; brevet captain December 11, 1867, for gallant and meritorious service during the raid through Mississippi in April, 1863; brevet major December 11, 1867, for gallantry during the fight at Egypt Station, Mississippi, in April, 1863; promoted captain October 5, 1887; major First Cavalry January 10, 1900, and lieutenant colonel Seventh Cavalry February 22, 1903. He is at present serving with his regiment at Camp Thomas, Georgia.

cess that he was justified in the confidence which he reposed in himself and the superb body of men which he commanded, and which shared the confidence of their commander.

As a diversion in the rear, to assist Grant in his operations against Vicksburg, as well as to divide the "Confederacy" and cut communication between Pemberton in Vicksburg and Bragg in middle Tennessee, it was finally decided to turn Grierson loose. His superiors never dreamed of the success which finally crowned the venture, or even expected to ever again see Grierson or his command.

The command, consisting of the Sixth and Seventh Illinois and Second Iowa Cavalry, with a light battery of six guns (Company K, First Illinois Artillery), attached to the Sixth Illinois, at date of starting were so badly mounted that it was necessary to dismount the brigade wagon train and use the mules to complete the mount of one regiment. All, however, were eager to get away, and a wail went up from those who were necessarily left behind to guard the camp.

A simple narrative of events as they transpired is all that can be written, and I must confess myself powerless to make the narrative as exciting and startling as were the events themselves.

The command was furnished with five days' "light rations," consisting of hard bread, coffee, sugar and salt only. No vehicles or other means of transportation were taken, and the only wheels in the command were the six very light field pieces above mentioned, drawn by two horses each, the ammunition for which was small round shot and canister. The arms were Sharp's carbines with paper cartridges, each man carrying about a hundred rounds, and sabers. The commanding officer and his staff, which consisted of but one officer (the author), carried a few sandwiches for the first day's luncheon, trusting to Providence from day to day for subsistence. Sometimes it was chicken and sweetmeats; at others, tainted bacon and hoecake.

Soon after starting, a detachment of volunteers, about ten in all, was organized as scouts and spies. They were dressed generally in such odds and ends of clothing as they picked up in the country, so that they readily passed among the inhabitants as citizens or Confederate soldiers, sometimes appearing as clergymen. One was slightly deformed, one leg being shorter than the other, so that he was not suspected of being in any way connected with the army. His name was Samuel Nelson. Such arms as they carried were concealed under their clothing. From the peculiar and delicate nature of their duties, as well as from the amount of judgment it was necessary they should possess and the latitude with which it was necessary to invest them, it was desirable that none but men of nerve, untiring energy and steadfast integrity should be employed. It was found that some who first volunteered for this duty did so for the purpose of plunder. The detachment was thoroughly purged of this class, and finally consisted of as fine a set of men for duty as could well be assembled in any command. They were placed under the direction of Quartermaster Sergeant Richard W. Surby, of the Seventh Illinois Cavalry. These men were kept, singly or by twos, well out on the front and flanks, often not appearing at all for a day or two. They were at times as much as twenty-five miles from the column. So completely did they veil the movements of the column, that everyone approaching was interrogated, all possible information obtained from them, and finally, they were confronted with the muzzle of a pistol before they had any knowledge of the presence of the command. Every day scouts, couriers and pickets of the enemy, as well as private citizens, were captured by them, and dispatches, letters and all kinds of valuable information obtained. Of course there were occasions when these men were compelled to disappear from the front, and the "advance guard" proper took the initiative.

Colonel Grierson's orders simply contemplated his reaching and destroying the railroad running east from Vicksburg, through Jackson to Meridian, and from thence towards the Confederate army in Middle Tennessee. That accomplished, his movements were entirely at his own discretion—in fact, his orders abandoned him in the heart of the enemy's country. It would have been impossible to formulate orders to govern the actions of the command thereafter. Every scheme and route of travel for the return of the command to

the Union lines was carefully studied and the guiding spirit could only be governed by events as they occurred from day to day.

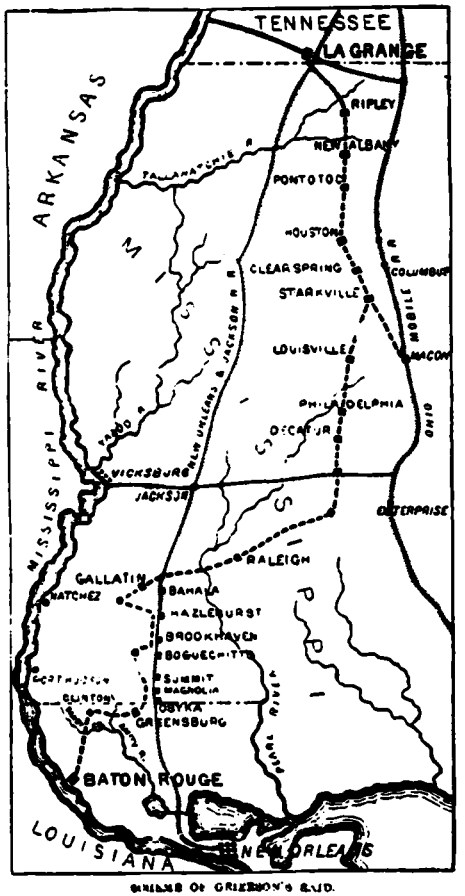
The march of the 17th of April, the day of starting, was uneventful, the system of espionage in the surrounding country (most of the inhabitants being hostile) being such that no surprise was possible. Moreover, the activity of this brigade of cavalry around La Grange during the winter had been so great that no considerable command of the enemy was within one day's march. This first day the command marched thirty miles, encamping about four miles north of Ripley, Mississippi. A small party of the enemy appearing here, were pursued across the fields and three captured.

On the second day, the Tallahatchie River was crossed by three columns at as many different points, as here some opposition was expected. One battalion of the Seventh Illinois struck the river at New Albany, found the bridge partially destroyed and on fire, were fired upon as they approached, but by a vigorous charge drove the enemy away, repaired the bridge and crossed. The remainder of this regiment and all of the Sixth Illinois crossed at a ford two miles farther up the stream, and the Second Iowa, under Colonel Edward Hatch, crossed four miles still farther east.

The command then moved south on parallel roads towards Pontotoc, Mississippi, the Sixth and Seventh Illinois encamping together on the plantation of Mr. Sloan, and the Second Iowa about four miles to the east. It was necessary to march on two or more roads in order to obtain necessary forage and other supplies, as well as to present an imposing front. During the day the advance was several times fired upon by small scouting parties of the enemy, and by vigorous pursuit, several were captured. About thirty miles more were passed over by the command on this day, some detachments traveling farther.

Mr. Sloan was a well-to do planter with a large plantation, a rude log dwelling and a large quantity of corn and bacon on hand. He was profuse in his professions of loyalty to the United States government and in protests against our use of his corn and bacon to feed the command. In his

lamentations, which lasted during the entire night, he insisted that, as we were bringing his family to death by starvation, he would be thankful if we would end his misery by killing him. About daylight, worn out by his whining,



ROUTE OF GRIERSON'S RAID.

Colonel Grierson called his personal orderly, a man of large stature, dark complexion and sinister expression, enhanced by a fierce mustache, and directed him, as Mr. Sloan desired to be executed, to take him out behind the barn and perform the operation. Mr. Sloan immediately discovered new at-

tractions in life and begged that the order be countermanded. About the time the command was moving out, on the morning of the third day, his desire for a longer residence in this wicked world was again weakened when he discovered his mules, which were found concealed in a swamp, being driven past the house by some of the troopers. The mules were required to replace some of the broken-down stock with which the brigade had left LaGrange. During the night the rain fell in torrents.

On the morning of the 19th, a detachment was sent east to communicate with Colonel Hatch and make a demonstration towards Chesterville, where a regiment of cavalry was being organized. This accomplished nothing except to communicate with Colonel Hatch, and create the impression among the people that the whole command was coming that way. Another detachment was sent back to New Albany, where they met and engaged about two hundred of the enemy, killing and wounding several and dispersing the rest. Another detachment went, at the same time, northwest towards King's Bridge on the Tallahatchie, where it was reported that a regiment of cavalry was being organized. This command, hearing of Grierson's proximity, had left in the night going west. The object of these detachments, was, in a measure, to prevent the concentration of any force in the rear and to carry the impression that the object of the expedition was to break up these organizations. Upon the return of these detachments, the command moved south, and was joined by the Second Iowa about noon, the whole command moving to Pontotoc. Here the advance guard, one troop, charged through the town, separating by twos at the different cross-streets, had a brisk skirmish with a detachment of the enemy, killing one, wounding and capturing several more, and scattering it to the four winds. Here was also captured a large mail, from which some valuable information was obtained, the camp equipage, books, records, etc., of Captain Weatherall's command, and four hundred bushels of salt. The salt was scattered in the street and the command marched over it. We then moved south on the road to Houston and encamped five miles out, on the plantation of Mr. Daggett. During this day the command proper covered about thirty miles, and the several detachments from five to twenty more.

At 3 o'clock the next morning, April 20th, 175 of the least effective portion of the command, with one gun of the battery, all the prisoners and captured stock not needed by the command, were sent back to LaGrange. They marched through Pontotoc before daylight, in column of fours, making as much noise as possible, to convey the impression to the drowsy inhabitants that the whole command had retreated. The commanding officer of this detachment was directed to send a single scout west to strike the Mississippi Central Railroad south of Oxford, cut the telegraph, and, if possible, destroy a bridge, thus preventing any troops that might be along the line of that road from following the command or using the road to get in its front. Having seen the return detachment safely off, the command started before daylight, and moved rapidly southward, passing around Houston, and bivouacking at dark eleven and a half miles southwest, on the plantation of Benjamin Kilgore, on the road to Starkville, marching this day forty miles. The command left the road before arriving at Houston, and passed through farms and woods, avoiding the town, partly to mystify the inhabitants as to its intentions and to avoid their having any conversation with the troopers. The men were instructed that in their intercourse with citizens they should convey the idea that we were Confederates en route to Vicksburg. There was not much difficulty in deceiving the most intelligent of the citizens, as they never dreamed of a "Yankee" venturing so far into the heart of the "Confederacy."

On the fifth day, April 21st, about 6 o'clock A. M., we proceeded southward, and after two hours' march struck the road leading southeast to Columbus, Mississippi. Here the Second Iowa Cavalry, about 500 strong, with one gun of the battery, under Colonel Edward Hatch, were detached, with orders to proceed eastward, strike the Mobile & Ohio Railroad at the nearest practicable point, march south along it as far as Macon, Mississippi, destroying the road, telegraph, and government property, thence make a circuit to the east and

north, through western Alabama back to Columbus, Mississippi, capturing it if possible; thence northward to Okalona, Mississippi, again striking the Mobile & Ohio Railroad at that point, and after inflicting as much damage as possible, to return by the most practicable route to La Grange, Tennessee. The principle object of detaching this regiment was to draw the attention of such troops of the enemy as were south and east of us from the main column, and convey the impression that the whole command had gone east. Colonel Hatch struck a very considerable force, larger than was anticipated, had some hard fighting, and did not succeed in destroying the railroad; but as a diversion it was highly successful, as otherwise the troops with which he became engaged would have hung upon the flanks and rear of the main column and endangered its success. Colonel Hatch returned safely to La Grange, with small loss, and enough captured animals to fully mount a regiment of infantry on mules and replace those of the brigade train.

The small detachment which was sent back through Pontotoc the day before under Major Love, of the Second Iowa, also reached La Grange in safety.

Under cover of Colonel Hatch's movements to the southeastward, the rest of the command, Sixth and Seventh Illinois, 950 strong, and the remaining four pieces of artillery, proceeded rapidly southward through Starkville, where an important mail and considerable government property were captured. From thence the march was south towards Louisville, Mississippi, through a dismal swamp, where the horses alternately waded and swam, until, four miles south of Starkville, a plantation was found above water and the command encamped in a violent rain storm. As there were no tents, the men sheltered themselves as best they could in outhouses and fodder stacks, but all were thoroughly drenched. In crossing this swamp, as well as others, and swimming streams which were encountered, the artillery ammunition was removed from the limber boxes and distributed among the men to be carried on their horses. All the ammunition, both for the artillery and small arms, was destructible by water, and it was necessary to exercise great care for its preservation. It was dark when the camp was made, and the day's march had covered at least fifty miles.

The next morning, April 22d, a battalion was detached to proceed to Bankston, where a large tannery and shoe factory was located. It was most effectually destroyed and a Confederate quartermaster was captured. He was shipping a supply of shoes for his command at Port Hudson. The property destroyed at this place probably aggregated $500.000, and was of incalculable value to the enemy.

DESTROYING BRIDGE.

Upon the return of this detachment, the column continued its march to Louisville, nearly the entire way through a dense, overflowed swamp, the Noxubee River bottom. No road was discernible, and the column was simply following the "blazing" on the trees, when, by chance, a young doctor of the neighborhood appeared and was pressed into service as a guide. He was very reluctant to render the service, and it was soon discovered that he was fearful of incurring the displeasure of his neighbors for "assisting the Yankees." He was assured of protection and released as soon as we had cleared the swamp, before he was seen by any of his neighbors, and presented with a mount very superior to the one he had. Our sincere hope was that the

original owner of the mount might not discover it and have him hung for a horse thief. He guided the column around the heads of some deep sloughs and ravines, into which it would have otherwise marched blindly, and probably have drowned men and horses.

A strong detachment was sent in advance to Louisville, an important town in that country, to take possession and capture any Confederates who might be there, seize public and guard private property, and assure the inhabitants of our peaceful intentions so far as their families were concerned. The news of our approach having reached the town a short time in advance, many had hurriedly left, carrying what they could of their valuables. The column moved quietly through the town without halting, and those who remained expressed surprise and gratification that they were not robbed, outraged and their houses burned, as they had been led to believe would be the case. A detachment from the rear of the column replaced that which had been sent in advance as a guard to the town, to drive out straggling soldiers and prevent messengers from leaving to carry news of their presence to enemies in front.

Not knowing what success had attended Colonel Hatch's column in striking and destroying the Mobile & Ohio Railroad, and it being deemed of the utmost importance not only to break this road and the telegraph, but also by demonstrations upon it to hold troops of the enemy, for its protection and prevent them from operating on our flanks and in front, Captain H. C. Forbes, of the Seventh Illinois Cavalry, a brave, intrepid and confident officer, with his troop, thirty-five strong, was detached April 22d, before we reached Louisville, to proceed against Macon on the railroad, where it was known there was a small garrison, and if possible surprise and capture it, destroy the road and wires and prevent the news of our movements from reaching Vicksburg, Mobile and other points where there were troops which could be sent by rail to intercept us. In order to strike Macon and the railroad, it was necessary to cross the Okanoxubee, a stream impassable except at the only bridge in that vicinity. This bridge Captain Forbes found destroyed and was unable

to accomplish the main object of his expedition, but otherwise it was invaluable, as will appear. Captain Forbes was given authority to exercise his own discretion as to whether he would rejoin us (which would require very rapid marching) or return to the Federal lines in Tennessee.

Upon arriving at Louisville, Captain John Lynch, of the Sixth Illinois Cavalry, with one man volunteered to attempt the perilous task of secretly destroying this railroad and telegraph. They were arrayed in citizens' clothing, and traveling all night towards Macon, arrived within sight of their objective early next morning. Reinforcements from Mobile had been scattered along the road at vulnerable points, in anticipation of attempts at its destruction, rendering it impracticable for Captain Lynch to accomplish his purpose. After interviewing the Confederate pickets near Macon and obtaining important information as to the strength of the garrison and distribution of troops along the road, they made excuses for leaving and returned safely to the command, reaching it at Philadelphia, after an unprecedented ride of about 200 miles in about forty-eight hours.

After leaving Louisville, the main column encountered another swamp, in crossing which (as it was compelled to) in the dark several horses were drowned and the riders rescued with difficulty. We marched until midnight and encamped ten miles south of Louisville, having made about sixty miles since the last camp. Near Louisville a mail coach was captured, with an important mail and some Confederate money.

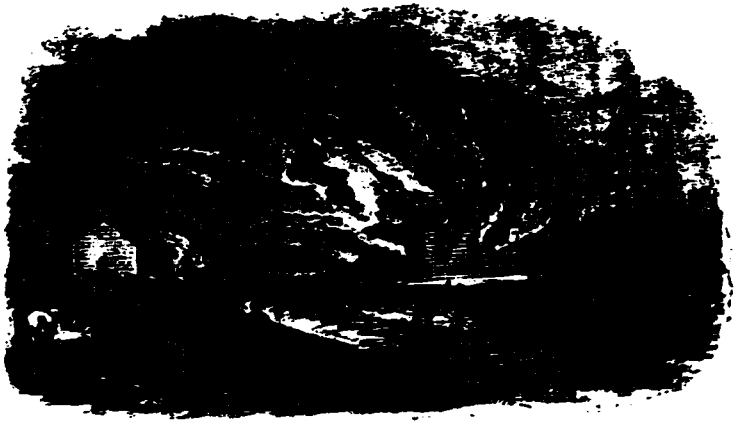
At daylight the next morning, April 23d, the column took the road to Philadelphia. Six miles north of this town the Pearl River was to be crossed, and the only crossing was a bridge, which it was important to capture. The scouts approached carefully, and when near it met an old gentleman whom they interrogated as to the condition of the bridge and as to whether any force was guarding it. From him they learned that a small guard of citizens was at the bridge, that a few planks had been removed and combustibles prepared to burn it on the approach of the "Yankees." He stated that his son was a member of the guard. After learning the lo-

cation of his residence, he having in the meantime had his suspicions confirmed that the scouts were not what they seemed to be, he was directed to go to that guard and save the bridge, under penalty of having his house and possessions destroyed. He was also warned that it would be best for himself and the others if they would surrender. He proceeded on his mission, protesting his ability to save the bridge, but not being so sure as to the surrender. His movements were watched until he reached the bridge and communicated with the guard. They immediately retired, leaving the bridge intact. The command followed promptly, moved through Philadelphia, thence about five miles southeast on the road to Enterprise on the Mobile & Ohio Railroad, to convey the impression that it was the intention to attack that point or Meridian, and halted to feed and take a short rest. We were now approaching the goal of our efforts, the Southern Railroad, and it was necessary to make rapid movements, as well as to take every precaution to veil them. Our movements so far had been so rapid, and so much ground had been passed over by night marches, that we were practically ahead of all information and in very little danger of an attack from the rear.

At 10 o'clock that night two battalions of the Seventh Illinois under Lieutenant Colonel Wm. D. Blackburn were sent to move rapidly through Decatur, thence to the railroad at Newton Station. The main column moved an hour later, and more leisurely. It was known that there was a Confederate hospital at Newton, and it was also reported by a citizen in Decatur that a considerable force was supposed to be there, and that a cavalry force had passed east between Decatur and Newton a few days before.

At early dawn the scouts reconnoitered Newton Station from an eminence near, and from a citizen in the suburbs learned that the hospital attendants and patients were the only troops there. They also learned that trains from both directions were soon due, and locomotive whistles were heard in the distance. There was no telegraph office at this point. Colonel Blackburn galloped into town, surrounded it and threw out pickets to prevent anyone from leaving; a man

was hidden near each switch to close it as soon as a train had passed. He had barely time to do this and conceal his men and horses when a freight train of twenty-five cars came rolling in. Before it had fully stopped, men were in the cab with pistols at the engineer's head. The train was then rapidly sidetracked and the command concealed as before. This was scarcely accomplished when another train appeared. This was treated as the first had been. It being learned that no more trains were expected, the work of destruction was



DESTROYING RAILWAY.

begun. The first train captured was loaded with railroad ties and bridge timbers, bound towards Vicksburg. The other one was composed of one passenger and twelve freight cars; four of these were loaded with arms and ammunition, much of which was fixed for artillery; six contained commissary and quartermaster's supplies, and two the private property of citizens escaping from Vicksburg, in anticipation of its speedy downfall. Several passengers were in the coach. These discovering that the train was "held up," disposed of their money and valuables as they deemed best. Money, watches and other articles were thrown out of the car windows into a swamp by the side of the road. All private property was removed from the cars, and the owners came

to the commanding officer to plead for its preservation. They were informed, much to their surprise, that we were not making war upon private citizens or unnecessarily destroying their property. Those who had thrown valuables into the swamp were much chagrined at their own actions, and with the assistance of soldiers, these were recovered and returned to their owners. One man had thus disposed of a wallet containing about $6,000.00.

After removing the private property to a place of safety, and distributing to the hospital and citizens such articles of food and clothing as would serve for their immediate comfort, the trains were burned. When the flames reached the ammunition, it was easy to imagine that a first-class battle was in progress. The main column, which was about five miles distant, received this impression and galloped briskly to reinforce Colonel Blackburn's command. When about two miles from the station, a courier was met with information of the status of affairs.

As soon as the main column arrived, strong detachments were sent along the road east and west to proceed eight or ten miles each way and destroy all bridges, trestles, water tanks, etc., as well as the telegraph. This latter was rendered useless by cutting the wires in places where foliage was dense, bending the ends into a loop and connecting them with a piece of leather; this destroyed the connection, and it was exceedingly hard to find the break.

After completing the destruction of the trains, as well as other public property stored in the town, such as large quantities of quartermaster's, subsistence and ordnance stores (among the latter being five hundred muskets), paroling the patients and attendants in the hospital, as well as all able-bodied male citizens, about seventy-five in all, the command moved south about four miles and halted for a short rest and to feed the animals. At this point the battalion, which had been sent east from Newton, rejoined us, having effectually destroyed a number of bridges and a great extent of trestle-work over the Chunky River and its intervening swamps. After resting about three hours the command moved south to Garlandville, a pretty, quiet village, in the midst of a beautiful country. As we approached this place we were met by a considerable company of old, grey-haired men, beyond the age for conscription, who fired upon the advance guard, wounding one man and killing a horse, after which they fled precipitately. The advance guard pursued and captured most of them and brought them in as prisoners to the commanding officer.

The column marched quietly into town, guards were disposed so as to prevent any one from leaving and to prevent any possibility of houses being pillaged or the inhabitants interfered with. The only house subjected to search was the postoffice, where an important mail was captured. The letters in these captured mails were generally from Confederate soldiers in different parts of the country to their parents, wives or sweethearts, and contained camp and garrison news, from which much could be gleaned in a military sense, or they were from the loved ones at home to the soldiers, detailing neighborhood news, and were often fraught with heart-rending tales of suffering and privation from the actions of conscripting officers in hunting, even with bloodhounds, men who were at heart loyal and were "hiding out" to avoid service in the army; and of the seizure of farm products and other results of their toil and that of the negroes for the subsistence of the army.

The venerable men who had fired upon us and had been captured by the advance guard were brought before Colonel Grierson. They were surprised that their houses were not already in flames, as well as at the good order which prevailed among the large number of soldiers who swarmed in their principal street, dismounted and remaining near their horses. Colonel Grierson gave them a quiet lecture, to the effect that they had been very badly fooled by the leaders of the "Southern Confederacy," and that in pursuance to such instruction they were making fools of themselves in attempting to oppose his force. It was explained to them that the United States was not making war upon women, children, or private property; that the object of all such movements as this was to break up the Confederate armies, acquaint the citizens with the desire and intention to establish the United

States government throughout every State, and return them to their normal condition of obedience to lawful authority. These old citizens were profuse in their expressions of gratitude. Apparently they had experienced the first dawn of light. They acknowledged their mistake in attempting to oppose us, and were outspoken in expressions of disgust at the deception practiced upon them by the leaders of the Confederacy. One old gentleman volunteered his services to guide us for a distance on the road we wished to travel, and said that he had a son in the Confederate army whom he should take the first opportunity to reclaim, and that hereafter his prayers would be for the United States army. From captured mails and information received through scouts and other sources, it was very evident that the Confederates were massing everything available in our rear, from both east and west, to intercept the command if it returned to La Grange, as they anticipated. Colonel Grierson's orders carried him to this Southern Railroad, and the principal object of the expedition was to destroy it and cut communications between the east and west. This accomplished, he was abandoned to his own discretion and resources as to the route to the Federal lines. The tension to which the men had been subjected for the past five days, marching as they had day and night, with rest for only an hour or two at a time, during which heavy scouting and guard parties were necessary, made it important that there should be some relaxation. For the last forty-five hours, from early dawn April 23d until after midnight of the 24th and 25th, the command had been almost constantly on the march or engaged in some immense labor and excitement incident to the destruction of railroads, bridges and other property, paroling prisoners, picketing roads, and taking every precaution against surprise and disaster. During this time over one hundred miles had been covered by the main column and detachments. Prisoners were being hourly captured (officers and soldiers at home on furlough, or on detached service conscripting), and the country abounded in deserters fleeing from arrest and able-bodied men hiding out to avoid conscription.

After a short delay at Garlandville, the column marched southwest about ten miles, passing through the little village of Montrose, and encamped about two miles west on the plantation of Mr. Bender.

Before reaching this place, the writer approached a pretty little house almost hidden by foliage a short distance from the road, in quest of information, and also in search of forage and supplies for the hungry command. The house was lighted, but there being no response to his knock he entered and found a warm supper on the table, but no human life visible. The occupants had doubtless heard the command approaching and precipitately fled. A note was left on the table, expressing thanks for the hospitality and regrets that it could not be accepted. A guard was left until the column had passed to prevent any possibility of pillage.

It was decided to make an easy march the next day, so as to recuit the weary little command, obtain all possible information as to movements of the enemy, to intercept it, and decide as to the best route to regain the Union lines. It was seriously contemplated to swing back to the east, cross the Mobile & Ohio Railroad and return through Alabama to the line of the Memphis & Charleston Railroad in the vicinity of Corinth. It was understood that demonstrations would be made by Federal troops from different points on that road to assist the return to Tennessee.

On the morning of April 25th the column did not move until 8 o'clock, and after a march of five miles, finding sufficient forage, which had been very inadequate for the last two days, a halt was made until 2 o'clock P. M.; in the meantime, small detachments were sent north to again threaten the Southern Railroad at Lake Station and other points, with a view of drawing troops of the enemy for its protection and prevent their following. The command marched about twelve miles farther southwest towards Raleigh, and encamped about dark on the plantation of Dr. Mackadora. From this point Samuel Nelson, the scout with the short leg heretofore mentioned, was sent northward to strike the railroad, destroy the telegraph, and if possible burn a bridge or trestle. He started about midnight, and when within

seven miles of the railroad he encountered a regiment of Confederate cavalry from Brandon, Mississippi, in search of the "Yankees." Being questioned, he informed the commanding officer that "he had, for a short time, been a prisoner in their hands." Having misdirected and seen them well on the wrong road, he returned rapidly to camp with the news.

After leaving Garlandville the country generally was poor, sparsely settled, and provisions and forage very scarce. Officers and men subsisted for several meals upon improperly cured bacon and corn-meal without salt. It was necessary, too, to issue very short rations in order to leave a few days' subsistence for the inhabitants, who owned no slaves, and whose husbands and sons had either been conscripted or were hiding to avoid conscription. The sentiment was decidedly adverse to the war.

It was ascertained that strong detachments had been made from Vicksburg and other places and distributed along the railroad from Jackson to Lake Station, so that it was imprudent to make further attacks upon the road. There were also rumors that a battle was expected at Grand Gulf, though we could obtain no definite or reliable information as to the movements of General Grant around Vicksburg. When we left LaGrange he was on the west side of the Mississippi, about Milliken's Bend and Young's Point, wrestling with the problem of passing Vicksburg by a canal.

The command having had one night's rest, with food and forage in abundance, was in good condition for another dash still farther into the heart and against the resources of the "Confederacy." So it was decided to make a rapid march, if possible, catch a ferry and cross the Pearl River south of Jackson, the capital of Mississippi, and strike the New Orleans, Jackson & Great Northern Railroad about Hazelhurst, and after destroying as much as possible of that road and diverting reinforcements which might be going to Vicksburg, or against General Grant, wherever he might be, endeavor to coöperate with him, should he be upon the east side of the Mississippi.

The situation was exceedingly critical for Grierson's command. If Grant's army was well established on the east side of the Mississippi, of course it had an objective point or refuge with the chance of coming in upon the flanks of any troops who might be opposing him. If he were still on the west bank the only hope was to run the gauntlet of all the force in the country between here and Baton Rouge, about 300 miles away, with the stronghold of Port Hudson intervening, but the nearest point east of the Mississippi held by the Union forces.

On April 25th, the command left Dr. Macadora's at 6:00 o'clock A. M., crossed Leaf River, a precipitous stream, burned the bridge in the rear, thence through Raleigh, capturing the sheriff of the county with $3,000.00 in Confederate money on his person, thence to Westville, and halted after dark about two miles west on the plantation of Mr. Williams, having marched over fifty miles. The darkness was intense, the rain fell in torrents and the men were drenched.

The sheriff, as well as other prisoners who were in our hands, had thus far been deceived as to our identity, having been led to believe we were a brigade of Confederate cavalry en route to Vicksburg. The sheriff was induced to entrust his funds, which were tied up in a bandana handkerchief, to the adjutant-general for safe keeping until his services should no longer be required. He and others were taken along, ostensibly as guides, but in reality to prevent their carrying news in advance.

Horses and men were fed at Mr. Williams' place, it being the intention to halt here only long enough for this purpose. While a number of the officers and our quasi prisoners were seated around a long table in Mr. Williams' dining room partaking of the first meal since early morning, a soldier appeared at the door and asked if Colonel Grierson was there. His boisterous voice and manner attracted the attention of all; being told that Colonel Grierson was present, he immediately delivered himself of the following speech: "Captain Forbes, of the Seventh Illinois Cavalry, sends his compliments to Colonel Grierson, and requests that he stop burning bridges behind him so that he (Forbes) can catch the com-

mand." The prisoners by their manner immediately showed their enlightenment as to our true character. A guard was quickly posted at every door and window in the house, with orders to let no citizen pass out. The courier was taken outside and cautioned to be more careful of his speech in the presence of citizens.

Captain Forbes had left the main column five days before and it was supposed that he had availed himself of his discretion and returned north, and the arrival of this courier was the first intimation that he was following it. A detachment was sent back at once to meet Captain Forbes and give him the necessary directions to assist him in joining. He rejoined the column while it was crossing Pearl River, and his return caused as much joy to the officers and men as did that of the biblical "Prodigal Son" to his father.

As previously stated, Captain Forbes was unable, with his small force of thirty-five men, to reach Macon or strike the Mobile & Ohio Railroad. He therefore made all possible demonstration against the road, captured a number of prisoners, paroled and turned them loose with exaggerated ideas of his force and intentions, proceeded rapidly southwest, striking the trail of the main column at Newton Station. The people hereabouts were so paralyzed that they could give him no definite information, but carried the impression that the command had gone to Enterprise, an important garrisoned station on the Mobile & Ohio Railroad south of Meridian. He proceeded with all dispatch to that point. As he approached the town, he discovered that it was held by a regiment of the enemy, the Thirty fifth Alabama, whereupon he raised a flag of truce, which was duly acknowledged, entered the place and demanded its surrender in the name of Colonel Grierson. He was questioned by the commanding officer, Colonel Goodwin, as to the whereabouts of Colonel Grierson, and being told that he was a short distance away preparing to attack, Colonel Goodwin requested Captain Forbes to take a note to Colonel Grierson, of which the following is a verbatum copy: "Colonel Goodwin's compliments to Colonel Grierson, and requests one hour to consider his demand for surrender." He took this means to gain

time for reinforcements, two regiments, to arrive, which he knew were en route under General W. W. Loring, and which did arrive within the hour. Captain Forbes was only too glad of any excuse to withdraw, which he did in good order, until he had gotten well beyond the town, when he made haste to ascertain the route taken by the main column, and followed it as rapidly as possible.

The reports received by General Loring when he reached Enterprise were that the force which threatened the place was 1,500 strong, at last accounts had fallen back three miles, and he was then on the road pursuing them. In truth, the only part of Colonel Grierson's command which had approached within thirty miles of Enterprise was Captain Forbes' gallant little troop of thirty-five men. Captain Forbes made most unprecedented marches of over sixty miles per day, swimming streams, and finally joining us, as stated, while we were crossing Pearl River at Georgetown. One of the scouts who accompanied him, William Buffington, had been killed from ambush and one man wounded. These were all the casualties which occurred to his troop. When near Raleigh, a little town which the main column passed through on the morning of the 26th, he heard that it was occupied by a small force of armed citizens or partisan rangers. He charged into the town, surprised them at dinner, as they supposed the "Yanks" had all passed, captured the entire party of twenty-nine, with their horses and arms. The captain, horses and equipments were taken along; the rest were paroled and the arms destroyed.

As soon as the command had been fed, about 10 o'clock P. M. two battalions under Colonel Prince of the Seventh Illinois, were sent rapidly to Pearl River, about fourteen miles, to secure the ferry. They started in the darkness, rain and mud, with no guides, and only Surby's scouts, to get information in advance of the column. The rest of the command rested about two hours longer, and started at midnight.

Pearl River is a wide, deep and rapid stream with precipitous banks, navigable for good sized vessels and unfordable. Colonel Prince reached it about two o'clock on the morning of April 27th, found a rope ferry, with the boat on

the opposite side. One man who had a powerful horse, volunteered to swim the stream and secure the boat. He did not succeed, and landed with his horse in some quicksand a distance below, from which he and the horse were rescued with difficulty. Finally the ferryman on the opposite bank was awakened, and not knowing who his customers were or their number, brought the boat across. It was a small affair, not capable of carrying more than half a dozen horses, and unsafe, so it was decided to carry men and equipments across in the boat and drive the horses in, a troop at a time, and force them to swim. Men were stationed on the opposite bank to catch them as they came out. In this way the whole command successfully crossed by 10 o'clock in the morning.

On arriving at Georgetown it was learned that a steamboat, manned with artillery and barricaded with bales of cotton, was up the stream and likely to return at any moment. As soon as a battalion and the artillery had crossed, they were sent up the river and placed in ambush, with directions to give the gunboat a warm reception should she appear. They were spared this diversion.

In leaving Mr. Williams as we did, in the night, amid darkness and rain, all animals were ordered to be taken, and the citizens were to be left behind, supposedly with no means of leaving, except on foot. By an oversight one of the commanding officer's orderlies, who was riding a fine gray horse, had gone to sleep in a haystack, leaving his horse saddled, tied to a tree in the yard. As soon as the command had left, the horse was discovered by the sheriff before mentioned, who immediately mounted and made a circuitous route to gain the front of the column and give notice of its approach. He rode rapidly to a crossing of Pearl River north of the ferry the column was approaching, gained the residence of a brother of the man who owned the ferry, who sent a messenger with a note to his brother that "the Yankees were coming to his ferry," that he might remove or destroy the boat. When the messenger, a little negro boy arrived, most of the command was across and the owner of the ferry, who had been led to believe they were Confederates, had been sitting for more than an hour with the

adjutant-general on the bank of the stream watching the progress of crossing, and giving all the information he possessed as to the whereabouts of Confederate forces. He was a physician, a man of means, apparently, and intelligent. He proffered breakfast for the officers, and as fast as they could be spared from their duties they proceeded to his house, a few hundred yards from the landing, and accepted his hospitality. The amount of romancing the adjutant-general had to indulge in during the prolonged conversation to keep him from discovering our true character, was fabulous. When he read the note the negro boy presented him, the expression of his face was a study. Suffice it to say, that the interview abruptly terminated.

As soon as Colonel Prince had crossed with his two battalions, he fed and proceeded rapidly to Hazelhurst on the New Orleans, Jackson & Great Northern Railroad, about fourteen miles distant. This was one of the points from which all supplies were shipped to Grand Gulf and Port Gibson, both of which were strongholds of the enemy. The scouts were kept well in advance, so as to interview and arrest any persons they might meet before the column appeared Several detachments of citizens were captured, who, hearing of our proximity, had assembled to give resistance. One detachment of ten or twelve were found at a gunsmith's shop having their dilapidated arms put in order. The scouts succeeded in capturing all of them.

When within four miles of Hazelhurst two of the scouts were directed to proceed rapidly to the station and send a dispatch to General Pemberton at Jackson, Mississippi, to the effect that the Yankees had come as far as Pearl River, found the ferry destroyed, and left in a northeasterly direction, thus conveying the impression that we had abandoned the idea of going farther west or south and would return whence we came. The dispatch was safely delivered to the operator, who immediately sent it, and the scouts were about to leave when the sheriff who had escaped the night before, rode up, recognized them and gave the alarm. The scouts beat a hasty retreat, firing promiscuously at the sheriff and some Confederate soldiers and citizens who were loung-

ing about. The column was rapidly approaching, and in the excitement the loungers and operator precipitately fled, the latter taking his instrument. He did not take time, however, to countermand the dispatch.

The advance guard, as usual, dashed into and through the town at a charge, enveloping it, capturing as far as possible all who were fleeing, and picketing all roads. A train which was approaching from Jackson and had arrived within sight of the town, succeeded in escaping.

Sentinels were, as usual, stationed about to secure public and guard private property, and the terror of the citizens was soon allayed. A large quantity of ammunition and other military stores were found here in cars, destined for Grand Gulf and Port Gibson. The cars were run out of town to prevent damage to the houses, and with their contents burned. A large frame building in the center of town caught fire soon after the command entered, probably through the carelessness of the inmates, but by well directed efforts of the troops the flames were extinguished without great damage. The railroad and telegraph were destroyed for some distance north and south of the town, after which the command started northwest to Gallatin, thence southwest, encamping at Mr. Thompson's plantation, about four miles from the town. About thirty-five miles had been covered since the march was resumed the night before, besides the crossing of Pearl River and the destruction of property at Hazelhurst.

Jackson, the capital of the State, which had been seriously threatened the past six days, was only twenty-five miles away, and it was evident that the country was thoroughly alarmed and that troops were moving from every direction to intercept the raiders. Scouts and vedettes were continually appearing on the front and flanks of the column and the advance was kept busy with efforts to kill or capture them. Soon after leaving Gallatin a considerable train was discovered in advance, drawn by oxen. It soon fell into our hands, and the cargo proved to be a sixty-four pound rifled cannon, with all the machinery belonging to it, about 1,500 pounds of powder and other stores, en route to Grand Gulf. These

were soon destroyed, the gun spiked, otherwise disabled, and upset in a quagmire, and the oxen killed.

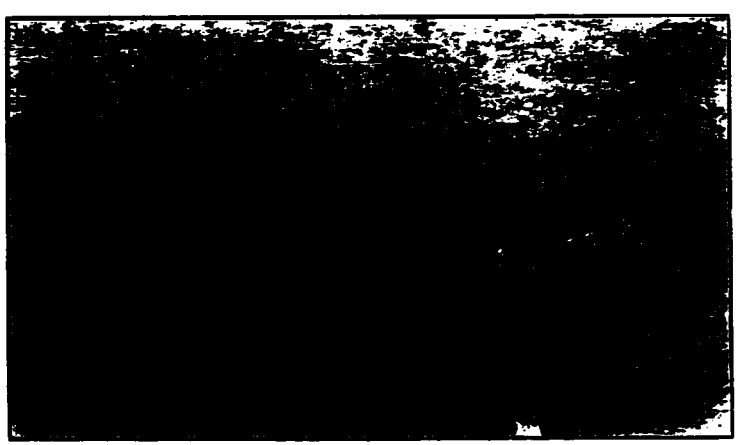
The next morning, April 28th, the march was resumed at 6 o'clock, west and southwest, without any definite objective, relying on information as to the movements of Grant's army about Vicksburg and of the navy on the Mississippi. After proceeding a short distance, it was decided to make another dash upon the New Orleans, Jackson & Great Northern Railroad and still further destroy it, thus not only creating a diversion in favor of the main column should it be decided to go to the Mississippi River, but also to more effectively sever communication between Vicksburg and Port Hudson, the two great strongholds of the enemy. Accordingly Captain George W. Trafton, of the Seventh Illinois Cavalry, an officer of extraordinary good judgment and nerve, was sent with a battalion southeast, to again strike the railroad at Bahala, a station about twenty miles south of Hazelhurst and destroy everything thereabouts which could be of any use to the enemy. The great success of this expedition and its immense value to the main command will be reverted to.

After Captain Trafton had started, the column moved southwest towards Union Church. While feeding and resting on the plantation of Mr. Snyder, about 2 o'clock P. M., with pickets, as usual, out in every direction, those on the road towards Union Church, about two miles distant, were fired upon. The command immediately moved out and developed a considerable force. The advance charged and drove them through the town, wounding and capturing a number. Reports of the dash and daring of the "Illinois Cavalry," as it was called by the Confederate authorities and people, seemed to have preceded it. The enemy left precipitately and gave no further trouble. They were a detachment of Wurt Adams' Mississippi Cavalry, "the pride and boast" of that country. The troops bivouacked in and about the town and awaited the return of Captain Trafton. He returned about 3 o'clock on the morning of the 29th. His march to Bahala had been made without special incident. He found that a detachment had been stationed there burn-

ing charcoal and collecting supplies for the Confederate army, but had been withdrawn the day before to Osyka, a large base of supplies farther south on the railroad.

[*To be continued.*]

NOTE.—General Benjamin H. Grierson is a native of Pennsylvania, and entered the army as a volunteer aide-de-camp on the staff of General Prentiss May 8, 1861. The following October he was appointed major Sixth Illinois Cavalry, and promoted to its colonelcy April 12, 1862; brigadier general of volunteers June 3, 1863, for gallant and distinguished service: brevet major general volunteers February 10, 1865; major general volunteers May 27, 1865; mustered out of volunteer service April 30, 1866. Colonel Tenth U. S. Cavalry July 28, 1866; brevet brigadier general March 2, 1867, for gallant and meritorious service in the raid through Mississippi in 1863; brevet major general March 2, 1867, for gallant and meritorious service in the raid through Mississippi in 1864; brigadier general April 5, 1890; retired by operation of law July 8, 1890. Present residence, Jacksonville, Illinois.



THE ARMY TEAMS IN THE NATIONAL TROPHY MATCH OF 1903.

BY CAPTAIN ARTHUR THAYER, THIRD U. S. CAVALRY.

AN editorial that appeared in the *Army and Navy Journal* of September 12th, after the result of the national trophy match was known, and the remarks of a number of officers of the army, have determined the character and scope of this article. The editorial referred to rather ridiculed the idea that the system of target practice in the National Guard should be made to conform to that of the regular army, since the national match showed that the National Guard under its own system developed better shots than the regular services. The remarks of officers referred to were indicative of surprise that the army teams had made such a poor showing. As a counterpoise to the above criticisms, the teams were told before leaving Fort Sheridan for Sea Girt, New Jersey, that the War Department was this year sending teams to the national match as a matter of education to the officers and the men composing the teams; that it was not to be expected, under the circumstances, that the teams would come out on top, though it was hoped that they would give a good account of themselves.

The following will probably explain to many why the War Department was not expecting the greatest things from this year's army teams:

The army rifle and carbine competitions were shot at Fort Sheridan in the last days of August; the army pistol competition was not completed until September 1st.

Before the close of the army competitions it was announced by letter from the War Department that the army

rifle and carbine teams would be sent to Sea Girt to compete in the national trophy match.

In order to bring out one or two points, the scores of the army rifle and army carbine teams in the army competition are given:

ARMY RIFLE TEAM.

Name.	Slow Fire.	Order.	Rapid Fire.	Order.	Skirmish.	Order.	Total.	Final Order
Lt. Townsend Whelan	335	5	224	4	274	4	833	1
Corp'l J. J. Gibney	324	9	211	9	291	1	826	2
Capt. F. L. Graham	351	1	214	7	255	8	820	3
Sergt. Richard Lunsford	338	4	205	11	271	5	814	4
Corp'l A. T. Brown	321	10	208	10	281	2	810	5
Sergt. L. B. Willis	330	7	230	2	248	10	808	6
Sergt. Emmett Hawkins	312	12	217	6	278	3	807	7
Sergt. George Brundage	317	11	214	8	270	7	801	8
Sergt. W. N. Puckett	348	2	230	3	222	19	800	9
Sergt. J. R. Rankoff	332	6	195	12	271	16	798	10
Sergt. Archie Denbery	345	3	229	5	230	17	795	11
Sergt. L. H. Apirian	325	8	235	1	232	16	792	12

This team was selected from a total of twenty-nine competitors.

The scores of the carbine team in the same competition are as follows:

ARMY CARBINE TEAM.

Name.	Slow Fire.	Order.	Rapid Fire.	Order.	Skirmish.	Order.	Total.	Final Order.
Sergt. R. S. Kelly, 7th Cav.	317	5	231	1	203	5	751	1
Sergt. W. F. Patchin, 8th Cav.	312	8	204	4	227	2	743	2
Corp'l J. E. Logan, 10th Cav.	328	2	194	8	219	3	741	3
Capt. H. La T. Cavenaugh, 10th Cav.	331	1	203	5	202	6	736	4
Lt. M. C. Mumma, 2d Cav.	301	12	217	3	216	4	734	5
Capt. T. Q. Donaldson, 8th Cav.	313	7	219	2	199	8	731	6
Sergt. Patrick McNally, 2d Cav.	325	3	167	12	238	1	730	7
Capt. J. P. Wade, 2d Cav.	313	6	200	7	199	9	712	8
Lt. C. W. Cole, 9th Cav.	321	4	187	10	194	10	702	9
Sergt. S. H. Thomas, 9th Cav.	310	10	184	11	201	7	695	10
Lt. W. V. Morris, 6th Cav.	306	11	200	6	168	11	674	11
Capt. Arthur Thayer, 3d Cav.	312	9	193	9	167	12	672	12

This team was (fortunately for some of its members) shooting merely for places, since there were but twelve competitors. Sixteen competitors had been selected; four of these belonged to the Fourteenth Cavalry and were ordered to the Philippine Islands just before the army competition.*

The record of the infantry team in the army competition shows (the record of the cavalry team is of no use in drawing conclusions, because of the fewness of competitors) that a member of an army team must be a good shot at three kinds of fire: slow, rapid and skirmish; to be poor in any one means that he cannot make the team; he dare not make himself especially proficient in one class of fire to the neglect of either of the others; in other words, he must divide his time, his ammunition and his practice among the three classes of fire.

The two army teams, having been selected because of excellence in three kinds of fire, and having in their practice devoted probably two-thirds of their time to rapid and skirmish fire, were sent to Sea Girt to compete with teams that had devoted almost all their time to the development of one kind of fire, the kind that was to be used in the national match. Moreover, the National Guard teams have always been fond of long range shooting, and have practiced it to a very large extent. In the regular service there is comparatively little long range practice. The national trophy match was half at long range and included the 900 yard range, one that is now never used in army target practice.

Major F. A. Edwards, Fourth Cavalry, was detailed as captain of the cavalry team, and Major W. L. Buck, Third Infantry, captain of the infantry team; two alternates were

* Incidentally it may be remarked that if there is to be revived an interest in competitions, and as a consequence an interest in target practice, men, when they have earned the right to represent their departments at an army competition, should not be deprived of that right by any ordinary exigencies of the service. It would seem that the four representatives of the Fourteenth Cavalry could have easily followed their regiment to the Philippines after the close of the army competitions. It is not in every man to get a gold or silver medal at a department competition every time he enters such a competition; in fact, in order to obtain one of these medals, the competitor must not only be a good shot, but he must also be shooting up to his best form; consequently the chances of any particular man being sent as competitor to an army competition are never great, and whenever he does reach the required standing at a department competition, he should certainly be granted the opportunity of shooting for the army team. The goal of every competitor's ambition is to become a member of the army team.

attached to each team. The captains looked after the business interests of the teams, and at times assisted the coaches on the range; they gave every assistance possible, and saved the members of the teams and the coaches much annoyance and trouble. Major Buck was assiduous in his attention to the interests of both teams. The members of the cavalry team are indebted to him for many attentions shown them.

The question of a coach for the infantry team was an easy one, because Captain Frank L. Graham, of the Porto Rico Infantry, was a member of that team, and his qualifications as a coach are of the highest order. He had, during many years' practice, shown himself to be one of the very best shots in the country, had had extended experience in all kinds of rifle practice, had been a member of the American team that went to Canada in 1902, had coached a number of successful teams, and had competed many years on the Sea Girt range.

The case of the cavalry team was different. There was no one experienced in competitions or team work, and no one that knew the Sea Girt range. As is usually done in such cases, the senior officer, Captain Arthur Thayer, Third Cavalry, was selected as coach. His experience was limited to three cavalry competitions—1889, 1890, and 1903. His range practice since 1891 was limited to the two years—1896 and 1903.

The two teams, while at Fort Sheridan awaiting departure for Sea Girt, had 2,000 rounds of new ammunition, such as would be used in the national match, to expend in getting into team form; 2,000 rounds for the coaches to determine the individual peculiarities in shooting of twenty-eight men and twenty-eight rifles over six different ranges, three of them long ranges. This gave an average of not quite twelve shots per man per range. As the national match was to begin on September 7th, there were but three days for practice at Sheridan, and as bad and rainy weather intervened, the teams had in reality one and a half days' practice under their coaches before leaving Sheridan, and this proved to be all the team practice that could be obtained before the match.

The team left Sheridan on the morning of September 5th and arrived at Sea Girt about 9:00 P. M. of September 6th.

The composition of the National Guard teams is generally determined upon by an extended individual competition covering the kind of fire and the ranges that are to be used in the match. The very best coaches in the Guards of the States (and these are the best in the country) are selected to coach and work the teams after their composition is settled; each team under its own coaches is put through an extended practice over the course that will be covered in the match; this practice is conducted under variable conditions of weather.

Several of the teams that competed in the national match had been on the Sea Girt range for weeks previous to the match. The Navy began work on its team at Sea Girt in the early part of June, and employed a coach from the National Guard of Pennsylvania, an officer of high reputation as a shot and as a coach. The Marine Corps team was on the Sea Girt range some two weeks or more before the match, and was coached by one of the very best coaches in the country; it was common report that he had enlisted in the corps for the express purpose of coaching the team. The Guard teams nearly all had coaches of national reputation: a large majority of the members of the high standing teams were men of reputation as fine slow fire shots at all ranges and particularly at long ranges. Many of these teams have members who are in the National Guard only to shoot, and do no other duty with the Guard. An officer of the District Guard was heard to say that his team had two such members, and that he believed his team was lighter in this kind of material than any other high standing team. Most of the members of these teams make shooting their fad, and are at it off and on all the year round; they add to their actual range and gallery practice a study of rifles, bullets, powder, rifling, sights, etc. How many officers or men in the army can pick out from a lot of rifles the best shooting ones, without taking them all out on the range and firing each one of them? Or, if a man has been shooting well, then falls off and fails to recover his early good form, how many officers know how to examine the man's gun and ascertain whether it is the gun

that has gone wrong or the man? Every good Guard team has one or more members that can do such things.

It was expected that our teams would get some team practice on September 7th, but this was the day set for the Leach Cup match and the long ranges were closed except for this match. The members of the army teams were entered individually in this match and were thus able to get a little individual practice. This practice was of no material benefit to the team.

On Tuesday, September 8th, the national trophy match began. This match is a team match, twelve men to a team, ten shots per man at each 200, 500, 600, 800, 900, and 1,000 yards, two sighting shots allowed each man at each range, service rifles and service ammunition. The National Guard of each State and of the District of Columbia was permitted to enter each one team, the Navy one, the Marine Corps one, the Army two. The match covered two days' firing; the first day was given up to firing at 200, 500, and 600 yards; the second day, to firing at 800, 900, and 1,000 yards.

Carbine teams were allowed one point per man at 600 yards, and two points per man at each of the long ranges. This allowance is entirely inadequate; the rifle sling is worth from one to two points at each range; the rifle is somewhat more accurate than the carbine (the allowance actually given just about covers this difference); the distance between sights on the rifle is about fifty per cent. greater than on the carbine. These deficiencies of the carbine should be met by a greater allowance than has been given.

On the first day of the match, September 8th, the light was bright, the wind variable both in direction and intensity; on the second day the weather was cloudy, the light grey and dull, the wind variable in direction and intensity.

The scores of the teams and the order of standing is given in the following table:

NATIONAL MATCH.

(Possible at each range, 600; possible total, 1,200.)

ORGANIZATION.	First Day.						Second Day.						Two Days.	
	200 Yds.		500 Yds.		600 Yds.		Total.		800 Yds.		900 Yds.		1,000 Yds.		Total.		Final.	
	Score.	Order.	Score.	Order.	Score.	Order.	Score.	Order.	Score.	Order.	Score.	Order.	Score.	Order.	Score.	Order.	Score.	Order.
Army Rifle	488	6	540	5	445	10	1473	8	464	12	455	4	384	9	1288	6	2761	7
Army Carbine	461	12	487	13	424	13	1372	13	388	4	401	12	380	6	1269	8	2641	12
U. S. M. C.	480	9	526	8	470	6	1485	7	475	8	432	8	380	8	1287	7	2772	6
U. S. Navy	456	13	518	11	449	9	1423	12	428	13	416	11	372	11	1216	12	2639	13
Connecticut	481	8	522	9	440	11	1443	9	467	10	425	8	405	5	1295	5	2738	8
District of Columbia	484	7	535	6	512	2	1534	4	495	2	449	5	395	10	1339	2	2873	4
Georgia	492	5	516	12	431	12	1439	11	467	11	425	9	395	10	1287	10	2696	10
Massachusetts	501	2	530	7	522	—	1553	2	480	3	458	2	385	15	1335	4	2888	3
Michigan	435	14	496	15	338	15	1179	15	388	15	308	15	327	15	823	15	2002	15
New Jersey	510	—	549	2	505	3	1564	1	488	5	485	6	402	6	1338	3	2902	2
New York	497	3	555	—	493	5	1545	3	515	—	458	—	443	—	1443	—	2988	1
Ohio	477	10	546	1	495	4	1518	5	480	7	458	3	331	13	1269	9	2787	5
Pennsylvania	497	4	541	4	473	7	1511	6	470	9	429	13	336	12	1235	11	2717	9
Rhode Island	463	11	519	10	358	14	1340	10	383	14	399	10	350	11	1132	13	2603	11
Vermont	427	15	451	14	408	14	1286	14	395	14	341	14	280	14	1016	14	2302	14

An examination of the table of scores shows that the first four teams in final order were among the first four in each day's work. It will doubtless be a surprise to many to see that the army teams were relatively weaker at mid-range than at long range.*

The individual record of the rifle team in this match can not be given for want of data.

The individual record of the cavalry team is given in the following table:

CAVALRY TEAM IN NATIONAL MATCH.

Order of Shooting.	Name.	200.	500.	600.	800.	900.	1,000.	Total.	Order.
1	Donaldson	36	43	37	39	32	15	202	10
2	Thayer	35	34	39	39	32	36	215	6
3	Cavanaugh	42	44	33	46	34	34	233	2
4	Wade	42	37	42	36	25	32	214	8
5	Thomas	38	44	35	42	32	31	222	4
6	Mumma	37	42	37	45	40	36	237	1
7	Patchin	39	44	38	35	33	29	218	5
8	McNally	37	38	31	40	27	41	214	7
9	Kelly	39	39	28	33	29	18	186	11
10	Morris	41	42	34	44	35	30	226	3
11	Cole	37	45	35	25	37	27	206	9
12	Logan	38	35	23	40	21	27	184	12
Totals		461	487	412	464	377	356	2557	
Handicap Allowance				12	24	24	24	84	
Accredited Totals		461	487	424	488	401	380	2641	

On September 11th was shot the Dryden trophy match; teams of eight men at 200, 500, and 1000 yards, service rifles and ammunition, two sighting shots for each man at each range.

* Many of the expert rifle shots of the National Guard have specially made barrels for their rifles, such as were used by the American team that won the Palma trophy this year. These rifles were barred from the national match by the regulations. It is regretted that the rigid inspection of rifles and of ammunition that was made in the Dryden trophy match was not also made in the national match. It should be remembered that in contests of this kind advantage is taken of every opportunity to make a point; in other words, there is always likely to be more or less "jockeying"; therefore a strict adherence to all the regulations of the match should be exacted from all contestants, and implicit trust should be placed in no one belonging to any team; all should be closely watched to insure a strict compliance with the rules.

The weather was good, light bright, wind light but variable. The match was won out at the 1000 yard range by the Army infantry team, due to the magnificent coaching of Captain Graham. The effect of the mirage at 1000 yards was very great, causing an apparent movement in the targets of as much as twenty feet in a vertical direction and a very decided movement laterally. The scores of all the teams at this range were exceedingly poor. The cavalry team stood very well up to the 1000 yard range; expert coaching at this range would have brought the team out at or near the top, but the coach failed and the team came out at the bottom.

The scores of the teams competing in this match can not be given, as the data is not at hand, but the results will doubtless be published by the War Department.

The individual scores of the cavalry team in this match were as follows:

CAVALRY TEAM IN DRYDEN MATCH.

Order of Shooting.	Name.	200.	500.	1,000.	Total.	Order.
1	Mumma	42	47	28	117	1
2	Wade	43	41	15	99	6
3	Patchin	40	[illegible]	10	96	8
4	McNally	39	39	26	104	5
5	Morris	44	45	25	114	2
6	Cavanaugh	39	43	14	96	7
7	Donaldson†	37	42	29	108	3
8	Thayer†	37	43	25	105	4
Totals		321	346	172	839	
Handicap Allowance					16	
					855	

* Alternates: Cole and Thomas, principals, were sick.

Great credit is due Major J. F. Guilfoyle, the officer in charge of the national and Dryden matches, for the efficient manner in which those matches were conducted in everything that was under his control.

The first national trophy match shows a lack of preparation on the part of the army; the efficiency of its teams will be increased in the future, it is believed, by attention given to the following:

1. No team should be sent to compete in this match with less than one month's practice as a team under a competent coach.

2. The teams should be allowed as much ammunition for team practice as the coaches deem necessary.

3. This competition should bear a greater similarity to the course of rifle practice as it exists in the army, and should include all classes of fire. There is no doubt in regard to the great value of rapid and skirmish fire, and no man should be accounted a fine military rifleman unless he is good at all kinds of fire. If the National Guard will not accept a program for this match that will include all classes of fire, then the War Department should arrange to give its teams abundant practice in the program adopted; otherwise the army teams will always be placed at a disadvantage in these matches.

4. The army teams should be provided with all the instruments necessary for extremely accurate team target work. Each team should have a powerful telescope with cross-hairs, mounted so that it can be set up and made absolutely rigid; micrometer gauges and bullets, or other tools for calibrating and testing rifles; a small armorer's outfit of tools; miniature targets for spotting; camp stools for use on the range; camp furniture to make the members of the teams comfortable in their camp—in short, everything that will conduce to the comfort and efficiency of the teams.

5. Besides the members of the teams and the alternates, there should be attached to each team a captain, a coach, two spotters, a competent armorer or gunsmith, and *at least* two assistants or orderlies. No member of a team should have anything to do at a competition except to look after himself and his gun. To annoy a rifleman who is about to fire by requiring him to run errands or to do any manual labor, such as carrying a box of ammunition or a heavy telescope, is not conducive to big scores.

6. A suitable officer, detailed by the War Department at the time the army competitions are ordered, should make preparations for the proper training and practice of the army teams; he should be vested with authority to order from the supply departments everything necessary for their instruction; from the time the teams are organized he should be on duty with them until after the national match is completed.

Most of the above points are touched upon in the Small Arms Firing Regulations, and it is hoped that the War Department will carry out the provisions of its orders, and in future years give its teams every possible advantage, particularly in this competition, where the reputation of the whole army is at stake. It should be understood, however, that this first national mach was rather hurriedly gotten up so far as the army teams were concerned. In subsequent matches it is believed that considerably more attention will be paid to the preparations of the teams themselves.

In connection with the national match, there has been broached a proposition to bar out teams or members of teams for having been champions in a previous year. Should such a proposition be adopted, it would have a bad effect on the competition: no team winning under such a restriction as to entries could reasonably claim the championship of the United States.

As a rule, a rifleman varies considerably in his score-making powers and on competitions is not infrequently beaten by poorer shots. How often does the man who comes out at the head of the preliminary practice of a competition come out at the head of the record practice? How often has the same man headed the army team two years in succession? At the army competition this year, every department gold medal man, with one exception, was beaten by one or more of his own silver medal men; in the national and Dryden matches the order of members of the army teams was not the same, and in neither of the two was the order the same as in the army competition. If the individual varies so much in his shooting in the same year, how much more will teams vary, shooting in different years. Should any team be able to hold the top place in the national match for several consecutive years, there would be hardly a doubt that the instruction and system of target practice of that team was better than that of the other teams; to get the

best system of instruction and the best results is exactly what we are working for.

To bar a man from competing in a championship event because he has been a champion, will cause all champions to drop the sport and will result in developing a set of novices who, even though called champions, will rarely ever come up to championship class. We had such a state of affairs in the army a few years ago, when distinguished marksmen, after having been once members of the army team, were debarred from further army team competitions; this system worked badly in the army. The same considerations apply to teams. In the case of continuing competitions such as trophy matches, the principle should be, "Let the champion hold his place, *if he can*."

The army needs no protection from the champion teams of the National Guard; all that is needed is that the War Department give the army teams equal advantages in equipment and practice with the competing teams of the National Guard. The army will be short on coaches for a year or two, because of the lack of experience in team shooting; a few national competitions will, however, remedy this defect, and the army ought soon to have as good coaches as can be found in the country. But, whether we have good coaches or not, no army team should ever go into a match except under an army coach and an army team captain. Shooting is part of our business; to send a team to an outsider is an acknowledgment not only that we have no one in the service that knows this part of his profession, but that we have no one who cares to learn.

The national trophy match should take place on a range that is not shot over by organizations that are to compete in the match. Previous to the match no shooting on that range should be permitted any member of any organization that is to compete; but the match proper should be preceded by one day's preliminary practice; to permit any team to put in days or weeks of practice on the range selected for the match, and immediately before the competition, is to give that team unusual advantages over teams that have not had such practice. The range, moreover, should be an open one without

individual peculiarities; if a "tricky" range is used, those who have ever had practice on the range will have a decided advantage over those who have never used the range.

It was not intended in this article to criticise the manner in which the national trophy match was conducted by the New Jersey State Rifle Association, which very kindly gave its range and made the preparations for this year's match. But, as Major Guilfoyle's report has been published in part, and in it criticisms are made on the marking and on the kind of markers employed at Sea Girt, it may be remarked here that to any one accustomed to the careful and methodical marking of an army range, the methods at Sea Girt were decidedly exasperating and did not appear to be productive of that extreme accuracy that should be characteristic of all competitions, and particularly of a competition of such importance as the national match. The army learned nothing at Sea Girt about marking and scoring. At these matches a sufficient number of army officers should be detailed to carry out pit and range regulations very similar to those of regular service in order that extreme accuracy and strict impartiality may result. The various Guard and other teams competing should be required to send officers to act as range officers in sufficient numbers to prevent the army officers from constituting a majority of the range officers. The system in vogue at Sea Girt of marking or not, according to the feelings of the marker, and of charging for every challenge is extremely annoying to the rifleman: the one principle that should guide in marking is that every shot fired from the firing stand should be carefully and accurately marked; if the shot is a miss, the target should be carefully examined before the miss is signaled; in fact, all the rules that have been found necessary on army ranges to insure fair and accurate marking, should also be made to apply to a match as important as the national trophy match.

NOTE I.—The War Department issues pins and badges for the various degrees of proficiency attained in rifle practice; why could not the system of rewards be extended to include the issuing to every man who attains the grade of

sharpshooter an exceptionally accurate rifle? This could be attained by dividing guns into two classes at the armory before issue; the division being made on tests of the guns after their manufacture, and those guns coming up to exceptionally high classification being put aside as high grade guns to be issued only to sharpshooters and expert riflemen; or why not put a few dollars more into the manufacture of guns for issue to sharpshooters and experts, the extra money being put into more careful boring, sighting and testing? There is nothing that appeals to the pride of a good workman more than the giving him fine tools with which to do fine work. The issue of telescopic sights to experts has been decided upon, so that it need not be advocated.

NOTE II.—The man who is to represent his company or the officer who is to represent his regiment at a department competition should be picked out sometime before the competition in order that he may have abundant opportunity for practice, and he should be made to put in a great deal of practice before going to the competition. As a rule the men who have done the most persistent practicing are the ones that regularly do good work at the competitions; they may not come out on top, but they can be counted on for a comparatively good score at any time; the man who has had little practice or who has practiced fitfully may make good scores some days but he is almost sure to break up at some time during the competition. The success of the army in the national trophy match depends largely on the company commanders; to send a good shot to a competition without giving him plenty of practice is like putting a fast horse in a race without giving him any training.

The series of competitions of a season is, in many respects, like a series of competitive races, each successive race having a decidedly higher class of entries than the preceding one and requiring successively greater speed and greater endurance. As the competitor goes through the series of competitions he must be in condition to put forth in each one more strenuous efforts than in the preceding one. This requires him to have great confidence in himself and to be possessed

of remarkable self-control. Confidence and self-control, even in the case of the good rifleman, can be acquired only by hard work and regular systematic practice in all kinds of weather. The amount of practice, however, to be given to any designated man must be determined by experience; some men can have too much practice, other men cannot get enough. All men need sufficient practice to give them confidence in their judgment of wind and weather, and sufficient to enable them to have complete control of the nerves that actuate the muscular system.

It is almost folly to send one man to compete in both pistol and rifle competitions in the same year. Such a competitor carries a double load, the weight of which is borne by the nerves, the part of the body that is most sensitive and most likely give way under the heavy strain of competition work. In this year's competitions, of a number of good pistol and rifle shots that were entered for both competitions, there was but one that succeeded in reaching the army competition in both, and his work at the army competition in both was exceedingly poor.

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

By P. G. LOWE.

THE road from Fort Leavenworth to New Mexico ran through what is now Easton, at the crossing of Stranger Creek; then through Winchester, Ozakee at the crossing of Grasshopper, now Delaware, Creek, four miles north of where now stands Topeka. There it crossed the Kaw on Papan's Ferry, about sixty miles from Fort Leavenworth, thence to Council Grove, sixty miles farther, intersecting the main Santa Fe trail from Independence, Missouri, east of the Grove.

To reach the "Oregon Trail," I quote from General Cook's "Scenes and Adventures in the Army," page 283:

"We followed for two days the trails of former marches, guiding us through the intricate and broken but picturesque grounds which border the Missouri. The third day we struck out boldly into the almost untrodden prairie, bearing quite to the west. The sixth day, having marched about ninety miles, we turned towards the south, crossing a vast elevated and nearly level plain, extending between two branches of the Blue River. Thus without an obstacle for fifteen miles, we reached and encamped upon its banks. The seventh day, leaving the Blue and turning to the northwest, between two tributaries from that direction, we soon espied on a distant ridge the wagon tops of emigrants; gradually converging, in a few hours we met. Here was a great thoroughfare, broad and well worn, the longest and best natural road perhaps in the world."

The above had reference to the route taken by Colonel Reamey in his campaign to the Rocky Mountains and back in 1845.

Sometimes government travel crossed the Missouri River at the Fort, went up on north side to about opposite the mouth of the Platte and thence up that stream. St. Joseph, Missouri, had become an important outfitting and starting point for trips across the plains, and a good road ran southwest from that place, crossing the Big Blue where Marysville, Kansas, now is.

Major Ogden, then quartermaster at Fort Leavenworth, was ordered to lay out a road from that point to intersect this St. Joe road. He employed a lot of Kickapoo Indians as guides, with a negro named Morgan, who lived with them, as interpreter. A detachment of B Troop came in from Fort Kearney with the mail, and with ours, less two men who had deserted, and some infantry recruits en route to Kearney and Laramie, acted as escort to Major Ogden's road surveying party, and a number of officers and their families en route to Kearney and Laramie.

We left Fort Leavenworth on the 2d of April, 1850. The first night out we camped at the springs near where Lowemont, Kansas, is now located. We followed the military road to Santa Fe about eight miles, and from there to the intersection of the St. Joe road about one hundred and twenty miles. We followed the divides on account of excessive wet weather, heading, or crossing near the head of the streams running northeast into the Missouri and those running southeast into the Kaw, crossing the Delaware where Kinnekuk is now, the Nemaha where Seneca is now, intersecting the road from St. Joe between Seneca and Marysville.

Of the officers en route to Kearney and Laramie on this trip, I remember only Colonel Loomis, of the Sixth Infantry, Captain Wharton of the Sixth Infantry and family, and Captain Dyer of the Artillery, who was Chief of Ordnance during the war between the States.

Major Ogden and the Kickapoos left us at the crossing of the Blue and returned to Fort Leavenworth. We arrived at Fort Kearney and joined our troop in due time.

Captain and Brevet Major R. H. Chilton* commanded the post and troop. Of all troops in the service this, *its members claimed*, was the most distinguished. Its first captain was E. V. Sumner, major-general during the War of the Rebellion. It had been continually in the Indian country or Mexico since its organization. It had many traditions of hard campaigns, skirmishes, night attacks by Indians, battles, cold, heat, hunger and feasting, from the Missouri River to Old Mexico, through Texas and all of the Indian Territory from Missouri to Utah and from Minnesota to Texas; and now it was located in the heart of the Pawnee country. At that time the Pawnees were the most dangerous of any Indians on the overland trail to California. Its last battle was the fall before on the Little Blue River where a dozen men were wounded, one fatally, and a dozen or more horses killed or wounded. A number of Indians were killed and many wounded.

Soon after the battle above referred to Major Chilton became aware of the presence of some Pawnees on an island in the Platte about two miles from the post, and took twenty men with him, intending to surround and make them prisoners. His orders were emphatic not to shoot—he wanted prisoners so as to induce the tribe to come in and make terms that would insure peace and safety to the immense emigration sure to move over the trail to California the following spring. After a good deal of skirmishing through tall grass, wild grape vines and willows, Sergeant Martin, Corporals Haff and Cook and Bugler Peel found four Indians on a dry sandy branch of the river and attempted to carry out the Major's instructions by motioning to the Indians to lay down their arms, which they showed a determination not to do. One ran up a dry branch followed by Haff, who soon shot him. Another ran towards a tall cottonwood with Cook after him. At the tree the Indian stopped with his

*Robert Hall Chilton was a native of Virginia and a graduate of the M. A. in 1837. He was assigned to the First Dragoons. He resigned April 29, 1861, to enter the Confederate States army. He was appointed brigadier-general, serving on the staff of General Robert E. Lee as adjutant general. He died February 18, 1879.

back to it ready to fire. Cook had him so closely covered with cocked pistol, not twenty feet away that the Indian was afraid to lower his gun, and Cook parleyed with him by signs to induce him to lay it down, but all to no purpose. Finally his robe dropped from his shoulders. Cook knew this

GENERAL STEPHEN W. KEARNEY.

meant a desperate condition of the Indian's mind, and as he gave his final war whoop and dropped the muzzle of his gun, Cook fired. The Indian fell dead, his rifle being discharged so near the same time but one report was heard. Cook's bullet entered the Indian's mouth without hitting a tooth and came out at the back of his head. Cook was unhurt and

sat coolly reloading his pistol when Major Chilton and half a dozen men rode up, and the Major cried out, "Who killed that Indian?" "I did," said Cook, ramming down his cartridge. "Why didn't you make him lay down his arms?" Poor Cook felt terribly outraged; he had risked his life trying to obey orders, and angrily said, "Why, he wouldn't lay down his arms." At this juncture Bugler Peel rode up, and saluting the Major reported that Sergeant Martin had been killed. Martin was the oldest soldier in the troop, had served with the Major in Mexico, and was a great favorite. Peel reported that after Haff and Cook had left him and Martin, one Indian escaped in the brush while Martin was trying to carry out the Major's orders, and Peel seeing that the other Indian was about to fire, shot him near the heart and he fell on his face, immediately raised himself on one elbow, fired, and shot Martin through the heart, and fell dead. Martin fell from his horse and was borne back to the post to a soldier's grave, a victim of obedience to orders. If he had taken Peel's advice all four of the Indians would have been killed and Martin would have lived to aid in the discipline of the troop.

The percentage of good material for mounted service in our squad of recruits was fully equal to that found in the troop when we joined, all the advantage being in experience and discipline, and my sailor experience led me to believe the latter not very complete. A man ordered to do a thing on board of a ship did not stop to think of the reason why, but moved promptly, if he was not waiting for a "rope's end" to catch him, which, or something worse, was sure to follow the slightest hesitation to obey orders. The life of the ship and all on board might and often does depend on quick obedience. The man who walks the quarter deck is a prince supreme, and subordinates see that his will is executed—no friction and no questioning authority.

However, the troop as I remember it, was more than equal to any I met afterwards during my enlistment. Two of our detachment transferred to the infantry during the first year because of their inability to ride. There was so much old material in "B," that the new was soon moulded into fair

shape. The recruits got horses and drilled industriously. One hour mounted drill before breakfast gave us appetites to eat the slice of bread and boiled pork with pepper, vinegar, and coffee. Boiled beef and soup (bean or rice) for dinner. Plenty of beef, because the contractor killed buffalo instead of domestic cattle, and gave us all we wanted.

And now it was the middle of May. The road was lined with white wagons, herds of cattle, horses and mules en route to California and Oregon. Some stock had been run off by Pawnees, some robberies committed and a few venturesome hunters said to have been killed. Major Chilton sent old Jeffries, the interpreter, into the Pawnee villages to induce the Indians to come in and have a "talk." Jeffries was a negro who came into the Pawnee country when a boy with Mr. Sarpie, or Sarpa, of St. Louis, an Indian trader, and had been there more than thirty years. He was very reliable and useful, because the Indians believed what he told them. A number came in, but a strong band that ranged on the Republican River, south of Kearney, did not come. The main villages on Wood River and Loup Fork, north of the Platte, did not show up. The talk with those who did come in lasted several days, during which they feasted, danced and indulged in sham battles. The chiefs made fine promises, and the Major made threats of what he would do if the road was not left clear for emigration.

Then the troop went in search of the band that refused to come in. Southeast to the Little Blue, about forty miles, south to the Republican, up that river 150 miles, several times in hot pursuit of the delinquent Pawnees, the troop marched and finally brought them to a parley. This was a strong band but had few horses. That is why we caught up with them. Another reason, we were driving them into the Cheyenne and Sioux country, and they were afraid of being caught between two fires. The Sioux and Cheyennes were perfectly friendly with the whites at this time. Major Chilton's movements were with a view of driving the Pawnees in that direction and he succeeded well. Jeffries got the chiefs to come into camp for a talk. The Indians were much frightened, because they were the bad lot, were guilty of outrages, and now they

were where the dragoons had the advantage. Finally Major Chilton held the head chief and another and told them to instruct their people to be at Fort Kearney on a certain day and to notify all the other bands to be there for a "big talk," and if they were not there he would "turn loose" on the whole nation and "wipe them off the face of the earth," a favorite expression of his when talking to bad Indians. The next day we saw the Pawnees going northeast at a rapid rate, and a few hours later met a war party of Cheyennes, the finest band I ever saw—about 300—well mounted and equipped. One would think them all picked men, from twenty to forty years old—perfect specimens of the finest and handsomest Indians on the plains, in war paint, fierce and confident looking—coming down to fight the Pawnees, and if we had driven the latter twenty miles farther west these mortal enemies would have met. The Cheyennes had a band of extra horses; but were without women or other encumbrance. Evidently some Pawnee scouts had discovered the Cheyennes without being seen by them, hence the Pawnees' hurry in getting away. Our prisoners and old Jeffries were kept out of sight in a wagon while the Major held a big sign talk with the Cheyenne chief and a few braves, and persuaded them to go no farther east, but to go north across the Platte to Wood River, where he thought the most of the Pawnees were. This was true, and the Major knew that if worried by the Cheyennes they would be more likely to come in, and seeing their peril from Cheyennes and troops would come down humbly for the sake of government protection. And thus it worked, the Cheyennes little dreaming of the good they were doing.

Major Chilton's movements on this short campaign had been bold strategy, as I view it after so many years, and the fortunate meeting with the Cheyennes helped his cause very much. We were out about three weeks, during which time we traveled about four hundred miles without forage other than grass. In two wagons we carried tents and half rations, so that half of our living consisted of fresh meat—mostly buffalo, of which there was an abundance. We had no sickness except a few cases of diarrhœa and a little fever. The

principal medicines in the Major's "case" were opium, salts and quinine. About seventy men in the party, liable to accidents and casualties of battle, and no doctor. And here I will say, once for all, that with the exception of the trip to Mexico in 1854 and the treaty at mouth of Horse Creek in 1851, in my whole five years of service while on the plains, every summer on a long campaign, liable to battle and always expecting it, we never had a doctor. Let soldiers of to-day congratulate themselves on the liberality of the government, the humanity and Christianity of the Red Cross, and the universal demand that soldiers have every comfort that our modern civilization affords.

Our horses at the end of this trip were, with few exceptions, in good condition. The horse of the dead sergeant, (Martin) the beautiful chestnut sorrel, trained by a level-headed, painstaking soldier, was mine, and the best in the troop.

According to Major Chilton's calculation, in about ten days nearly all the Pawnees were near Fort Kearney, and the ensuing pow wow lasted several days, during which the Indians were made to understand the greatness, goodness and power of the white race, and of the Great Father in Washington in particular, and how wicked, ungrateful and foolish the Pawnees were to disturb the white man or interfere with his peaceful travel through the country in any way—all winding up with solemn promises and a grand feast. Of course I took great interest in this new experience and made the most of it as opportunities offered. I learned much from old Jeffries, and sympathized a great deal with these wily, devilish fellows, who were at war with all the wild tribes—constantly on guard against the Sioux, Cheyennes, Arapahoes, Kiowas and Comanches on the west and south of them. I am sure that Major Chilton's administration of affairs about Kearney settled the Pawnees so far as their hostility to the whites was concerned, with the exception of the lawlessness of small bands of young bucks once in a while along the Little Blue.

And now the road was crowded with emigration west—long trains of wagons, herds of cattle, etc. I got Lieutenant

Stanbury's map and list of distances and copied the distances. One day an emigrant inquired about the route and I handed him my list. He insisted upon buying it of me and I let him keep it. I told Bugler Grant, and we went into partnership. I wrote the guides, he sold them, and we soon divided over $50 between us.

The middle of July three of the best men in the troop—a sergeant, the farrier and a bugler deserted, taking horses and equipments. Corporal Cook and others followed them a hundred and fifty miles west and brought back the horses but not the men or equipments. There was much excitement in the troop, and two weeks later another good man deserted, taking two horses. He seemed to have had a citizen confederate. Cook followed and brought back the horses, but nothing else. Up to this time there had been one sentinel at the stable, which was two hundred feet long and forty feet wide, built of sod, with three doors at each end and one in center of building on each side—open windows on both sides about thirty feet apart. Of course no sentinel could get around fast enough to watch all of these openings in this large building, and this fact at last dawned upon the Major, and thereafter the quartermaster sergeant and one company teamster slept in the stable, and two men—both infantry—walked post, showing that the Major was not trusting his troop. He was doing what ought to have been done all the time, for with the California fever then prevailing, the constant stream of emigrants passing, these horses were too much of a temptation to be resisted by men who would, under any circumstances, desert. There were no desertions from the infantry.

In October, 1850, the troop moved to Fort Leavenworth, and occupied the quarters used by our detachment the previous winter. Major Theophilus Holmes, with four companies of the Seventh Infantry, came about the same time that "B" troop did, and left in the spring. Like all I saw of the Sixth, the Seventh was a well disciplined, well behaved organization.

The Kaw Indians near Council Grove had been committing some depredations—stealing horses and otherwise making themselves troublesome—and in January, 1851, Major Chilton, with about fifty men of his troop went to Council Grove, a hundred and twenty miles, had a "big talk," took four of the principal chiefs of the Kaw Nation prisoners and brought them to Fort Leavenworth. About half of the men on this trip were more or less frost bitten, several of them severely. It was a horrible trip for men so poorly provided for a two hundred and forty mile march in such severe

MAJOR DAVID H. HASTINGS.

weather. Overshoes, mittens, gloves, leggings or other extra wraps were not then provided by the government, nor kept for sale, and men made for themselves out of old blankets, skins, pieces of old canvas and cast off clothing, anything that necessity prompted them to invent for protection from the bitter cold. Not a house between Fort Leavenworth and Papan's ferry across the Kaw, sixty miles, and none between the ferry and Council Grove—the whole country an expanse of snow. Plenty of fuel in every camp, and fires kept burning all night. The horses were huddled to-

gether in best sheltered places and fires built to windward so that the rays of heat would float towards them. Corn was hauled for them, and as there was no hay, cottonwood trees were felled to browse on, the limbs trimmed off and piled before them. Nothing was left undone that could be done under the circumstances for the comfort of men and horses, but with all that there was great suffering.

On the 17th of March, 1851, I was promoted to corporal.

About this time Second Lieutenant D. H. Hastings * joined "A" Troop. He brought with him a fine reputation for long and faithful service, and looked every inch an officer to be respected. He served many years as a first sergeant, won his commission in the Mexican War, where one heel was shot off, and he wore a cork one. A man of iron will and nerve, he was all that a good soldier could wish in a good officer.

The April following Major Sackfield Macklin, paymaster U. S. A., left Fort Leavenworth for Forts Kearney and Laramie to pay off troops, and carried with him the money necessary for that purpose. I never knew the amount, but as there were two companies of Sixth Infantry at Kearney, and one of Sixth Infantry and three of mounted rifles (now Third Cavalry) at Laramie, and the average in each company about sixty men, and when we reached them there would be six or eight months' pay due, the amount carried must have been quite large, though soldiers then averaged but about half as much pay as they get now—$8 per month for mounted privates, $7 for infantry, ($1 per month retained from privates until end of enlistment), corporals $10, sergeants $13, first sergeants $16. The escort consisted of one corporal and seven privates from "B" Company, Sixth Infantry, and a corporal and three privates from "B" Troop, First Dragoons. Of the infantry I remember only the name of the corporal—Barney Dunnigan, a thoroughly good, intelligent, reliable young Irishman; his whole detail was remarkably good. The dragoon detail consisted of Corporal Lowe and Privates Charles McDonald, John Russel and Edward O'Meara. The personnel of the last three was remarkable among enlisted men of those days. They enlisted about one year ahead of me, hence had greatly the advantage in experience. O'Meara had been wounded in the battle of the Blue in the fall of 1849, losing two front teeth knocked out by an arrow that cut his lip badly. He was the only man I ever saw whose beauty was not marred by the loss of front teeth. The scar on his lip made his smile all the more attractive. He was an Irish lawyer; by birth, education and instinct a gentleman. The troubles of 1848 drove him to America; he secured a position as clerk in a law office in New York and seemed to be well started on the road to prosperity, when some of his young college chums, in this country for the same reason that he was, determined to enlist in the army for want of something better, and he went with them. This man, this private soldier, entering upon his third year of campaigning, possessed one of the most genial, kindly and attractive temperaments I ever knew. His reading and travel had made him a most companionable man. With the opportunities now afforded he would have stood an examination and been commissioned. But there were no such privileges in his time. Russel was a Philadelphian, a printer and jolly joker, had been a sergeant, and volunteered to go on this trip to get away from the troop and temptation. He was the oldest of the party, as I was the youngest. McDonald was a New Yorker, of Irish parentage, and was a genius—a fine draughtsman and caricaturist. Not a man of our party escaped his pencil. If these three men lacked anything to insure a bright future, it was the strong will and sound judgment to act independently—to blaze the way and decide their own destiny.

Our transportation consisted of the Major's four-mule ambulance for himself and clerk (Mr. Reed), one six-mule team for the infantry and their baggage and provisions, one six-mule team for the dragoons' forage, provisions and tent and the Major's baggage and servant. The Major had a

* David H. Hastings was born in Ireland, and appointed second lieutenant, First Dragoons, in 1848. He had served as an enlisted man in Company B, Second Infantry, Company K, Third Artillery, and Company A, Engineer Corps. He retired in December, 1863, and died September 22, 1882. He was the father of Mrs. Morton, the wife of Major A. G. Morton, Sixth Infantry.

small tent and fly for himself and clerk, and a small cook tent. The dragoons had one A tent and infantry two. In all, the Major, his clerk and servant, three teamsters, eight infantry, four dragoons, eighteen. Sixteen mules and four horses. Not a very large escort to take so much money 300 miles to Fort Kearney and 300 more to Laramie. As I ranked my friend Dunnigan by a few days in our appointment the Major gave his orders to me. He was a pleasant, even-tempered man, under whom it was a pleasure to serve, and on the whole trip I never heard him complain. Having seen enough of his escort to satisfy himself that all duty would be carefully attended to, he was content.

There was no boisterous rowdyism, but the dragoon camp, with O'Meara in tragedy, "Sallie" Russel in comedy, and McDonald as scenic artist, was the center of attraction. The infantry had several fair singers, every one could tell a story, and the time passed merrily away from dinner, as soon as practicable after coming into camp, until bed time, soon after dark. We were on the road about 7:00 and in camp between 1:00 and 3:00. Our animals had no forage other than grass after the first week. There was much rain during the first part of the journey, roads bad, no bridges over streams and mud holes, sometimes doubling teams and at others hitching lariat ropes on each side of wagon bed and all hands helping to pull, our progress was slow.

After noon of the fifth day we reached Walnut Creek about fifty-five miles northwest of Fort Leavenworth. We had no rain during the day and did not expect to find the creek high, and though it was running bank full and one hundred feet wide, caused by rains higher up the creek, none of us seemed to remember that its bed was very deep. I rode forward to feel the way across, and though very cautious and slow in my movements my horse suddenly began to slide and in a moment nothing but my head was above water. But the noble animal being a well trained swimmer came up as suddenly as he went down and struck out boldly for the opposite shore, which he made safely about one hundred yards lower down. Though I had navigated the quicksands of the Platte and Republican and had been in water

so deep that my horse had to swim from one sandbar to another, this was my first experience in swimming a horse in a rapidly flowing stream, and the venture was so sudden that the good horse-sense of the noble brute under me was my only salvation. In that minute of peril to both of us, I thought of all the rules of action in similar emergencies that I had ever heard, the main point being to cling to the mane and the saddle and leave the horse as free as possible, guiding him only to give the right direction. In this case the current took him on to a sloping bank in the bend of the creek, where he landed easily. If I had expected to swim I should have divested myself of saber and belts, pistol, carbine, and every unnecessary thing, even to outer clothing, and strapped all firmly on my saddle. If the west bank had been steep as the east bank was, rider and horse would have been lost, unless some projecting limb gave me a chance to escape. All was so sudden and so quickly over that my comrades had scarcely time to think, as they expressed it, though they instinctively spurred their horses down the east bank in hopes to assist me. Immediately on landing I discharged my pistol and carbine so that the water would not soak in under the percussion cap to the powder. The Major and the dragoons knew why I did it, but it added to the excitement of others who were without experience.

The Major went into camp to wait until the creek run down. I stripped everything from my horse except the head halter and lariat, and from myself everything except underclothes, and cached them with my arms in some thick brush. Then I looked carefully for a good place to cross. The east bank was such that I must land at the road or my horse could not get out. The current was so swift that if carried below the road I must go down stream. No one could throw a lariat across, and the men took the small ropes from the ends of the wagon covers, knotted them together, tied a stone to one end, carefully coiled the rope close to the bank and stalwart, broad-shouldered Corporal Dunnigan threw it to me. I was afraid to trust the small rope to pull on and told the men to tie several lariats together and to the east end of small rope, which they did, and I hauled them over and tied

to the end of my lariat, and they hauled the rope taut on the east side. I then rode to the edge of the stream some distance above where I must land, the men in the meantime keeping the rope taut and ready to quickly haul in all slack. I stuck my toes in behind the horse's elbow joints, and taking a firm hold of the mane with my left hand, urged the horse with my right, and he plunged in and struck the landing nicely; but he could not have stemmed the current, and, slippery and steep as it was, he could not have carried me out without the assistance of the men at the ropes. The Major stood by and watched carefully to see that no mistakes were made, but did not interfere. By this time the Major's and the infantry camp had good fires. The water was cold that April day, and I was thoroughly chilled. After washing in hot water and putting on dry clothes, I drank hot coffee and ate a good dinner with the infantry, and as my comrades had been devoting their time to me, they too were fed. Of course I was congratulated very much, not the least by the Major and Mr. Reed. I deserved little credit, but rather censure, and said so, for not dismounting and trying the crossing of that swift running stream with a pole or stone on a rope—anything to make sure of what I was undertaking.

There is no place on earth where a man gets fuller credit for every reasonable effort, or where exposure to danger is so liberally rewarded as among his comrades in the army. That little adventure became one of the traditions of "B" Troop, and lost nothing in the telling. McDonald had it down in good shape on paper, and while all three of them would hatch a joke at my expense, it was always in a way that left no sting.

These prairie streams run down as quickly as they rise, and by noon the next day we crossed with little difficulty, more than doubling teams and all hands at ropes, and camped on the west side.

Except continuous rains and bad creek crossings we had no more difficulty until we reached Big Blue River, now Marysville, about 150 miles from Fort Leavenworth. We found it bank full—a wide turbulent torrent, and no prospect of its running down. The Major was anxious to get over and

seemed to think we could make a raft on which to lash one or two wagon beds and cross over a little at a time, and finally swim the animals. I set about getting some dry logs and lashing them together. My comrades, of greater experience, could see no use in our efforts, though they took hold wherever I asked them to, but I worked with energy all afternoon and fell into the river several times. I went to camp thoroughly exhausted and wet; was going to change my clothes, but lay down in the tent and fell asleep. The next morning when I awoke the sun was high. I heard my comrades talking by the camp-fire wondering how I slept so long. My head seemed perfectly clear, but I could neither speak nor move, though in no physical pain. Russel looked in and seeing my eyes open, spoke. Receiving no answer, he came nearer and spoke again; then he was alarmed, and reported to the Major, who came to the tent, spoke to me, felt my pulse, raised me up, put a flask of brandy to my lips, a little at a time, in the meantime a man at each limb rubbing me thoroughly. I made a spasmodic effort, turned over on my side, circulation seemed restored, and soon I could speak. Having been thoroughly rubbed and properly clothed, I could sit up, and before night could help myself in a feeble way. The Major told me not to worry about anything, he would wait. I doubt if any doctor could have treated me better. In the meantime some large freight trains came along, stretched a rope across the river, lashed two large wagon beds together, and in a few days ferried over fifty wagons and their contents, and our little outfit—all the animals, oxen, mules and horses being compelled to swim.

Major Dougherty, of Clay County, Missouri, en route to Kearney and Laramie, where he was post trader, camped near us, and a young negro man belonging to him fell into the river and was drowned. The Major had raised the boy, his mother belonging to him and employed in his family, and he felt keenly the distress that the news would bring to his household.

Having crossed the Blue and left the danger of bad roads and high water behind, we made good time. I had recuper-

ated a good deal, but was weak and feverish. The Major, in the goodness of his heart, made me ride in the ambulance more than half of the time the balance of the way, while he rode my horse to Kearney, where we spent several days. Captain Wharton, Sixth Infantry, commanded the post.

From Kearney to Laramie, 350 miles, the journey was pleasant. At the crossing of the South Platte we met several caravans of trappers and traders hauling furs and hides to the Missouri River. These outfits were more remarkable as showing how much a man can make of a little than for their elegance. These men had picked up broken down and abandoned emigrant wagons, crudely repaired and made a large number of carts and wagons, which enabled them to move great quantities of goods to steamboat navigation, their motive power being oxen that they had found broken down and abandoned or had traded for with the emigrants the year before. This was to them luxurious transportation, for until the heavy emigration of 1849 there had been but few cattle in the country. Heretofore traders and trappers had worked their way down the Platte and Missouri in bull boats during high water in May or June, or packed on mules or ponies. We were fortunate in meeting these caravans at the crossing. Here I learned a good lesson in navigating a quicksand river. We reached the crossing on the south side and camped as the traders' trains went into camp on the north side. The river was quite deep for the Platte, caused by melting snow in the mountains, half a mile wide and from one to four feet deep—quicksand bottom. Towards evening several of the traders rode over to our camp to "try the river," as they said. 'Twas here I first met Major Fitzpatrick, "Tim" Goodale, John Smith, and other celebrities with well established reputations as traders, trappers and Indian fighters. I went with them to their camp. "Now," said Major Fitzpatrick, "if we should hitch up and start to cross with a load without beating down the quicksand, thereby making a firm roadbed, we would get mired in the sand; one side would settle and upset the wagon, or the whole wagon sink; in short, 'twould be impracticable to cross in that way. Now, the way to pack the sand and make a firm roadbed is to travel

over it with a lot of animals until it is well beaten down, and then cross your wagons; the more travel over it the better the road gets. Now, in the morning we will have a lot of men mounted and drive all of our cattle over and back, keeping them as near together as possible, and then we will cross as fast as we can, giving the roadbed no rest, and a good way for you to do with your little outfit will be for you to follow us when we drive the cattle back." And this we did, crossing without trouble.

Fifteen miles from the crossing of the South Platte we entered Ash Hollow and struck the North Platte, up which

we traveled to Fort Laramie, passing Court House Rock, Chimney Rock, Scotch Bluffs, and other interesting points, all of which have been so well described by Generals Fremont, Cook and others that I need say no more than that no one can realize how wonderful they are without having seen them.

The Laramie River is a lovely, clear mountain stream, about the volume of the Little Blue or Pawnee Fork of the Arkansas. The post of Fort Laramie is located on its west bank, above and south of where it flows into the North Platte. Our infantry detachment was quartered with Company G, Sixth Infantry; Major Macklin and his clerk were quartered with Captain Ketchum, commanding Company G and the post, and I was sent up the Laramie where the dragoons and teamsters with all the animals were to camp dur-

ing our stay. Four miles above the post, on the opposite side of the river, which was fordable almost any place, I found a camp, as O'Meara expressed it, "fit for the gods,"—one of the most lovely spots I have ever seen. We owed our good fortune in not being attached to one of the three troops of mounted rifles stationed at the post to the fact that there was no forage except grass, and that was eaten off close to the sandy ground for some miles, and to the fact that most of the rifles were camped out for the purpose of foraging their horses. That was why I went so far from the post and camped on the opposite bank. Here the teamsters had nothing to do but take care of themselves, herd their mules during the day, picket them out at night, and take their turn with the dragoons standing guard. The dragoons had nothing to do except to take care of themselves and horses, and do their share of guard duty. I reported to the Major at the post every day about 10 o'clock.

And now followed one of the most happy months of my life. O'Meara described this camp in prose and poetry that would be fine reading to-day, but alas, in youth how little we think of the future! Of all of our trip there is no record, not even a morning report, as with the troop. That report shows Corporal Lowe and Privates Russel, O'Meara and McDonald on detached service escorting paymaster to Fort Laramie, and that is all there is of one of the most interesting trips I ever participated in. But I can see the camp now, fifty-three years later, in memory, lovely, green and beautiful as ever—an ampitheatre of rugged hills, the pure, clear river with its pebbly bottom running gently by, fringed with willows, orchards of box elders in the bottoms, cedars and pines upon the hills, fragrant flowers on every hand. Any good hunter could bring in a black tailed deer in a few hours, and the river afforded plenty of fish.

All of our party could cook, but McDonald was excellent, Russel made good bread, and O'Meara, well, he was the epicure of the party; the coffee must be ground just so, a certain quantity of ground coffee to a given amount of water; the venison must be seasoned right, whatever that was, and 'twas always good. Everything was clean, tin cups and

plates included. We had new forks at every meal: McDonald insisted on that, and O'Meara whittled them out of tough dry willow—straight sharp sticks. We stretched the Major's tent fly for a dining room, drove down four stakes to lay the endgate of the wagon on, and that was our table; water buckets and boxes for seats. Russel tore a flour sack into squares, hemmed them and put one at each man's plate. "Gentlemen," he said, "must use napkins," and he changed them as often as was necessary. Another flour sack ripped open made a table cloth. Russel and O'Meara did most of the hunting, and we were seldom without venison. McDonald put out the hooks at night and was almost sure to have nice channel catfish for breakfast. I frequently took down a quarter of venison to the Major. Except reporting to him daily I made it a rule not to be out of sight of camp long at a time. I explored every nook for several miles around and reveled in the pure air, the delicious water and the delightful scenery. We moved a short distance and made a fresh camp every few days for cleanliness and good grass. The Major gave me some papers out of the semi-monthly mail, and we borrowed a few books from G Company. We furnished our three teamsters meat and fish. One of them, "Bill" Anderson, was six feet four inches tall, a comical, good natured Missourian. One day I sent him down to G Company with one big buck and half of another. When he found the first sergeant he was on parade at guard mounting, standing at "parade rest." Anderson slouched along down to the Sergeant and said, "See here, the boss sent me down with some meat and I don't know what to do with it: I'm 'feared my mules 'll git skeered when this here drum beats." The Sergeant said: "Well, you run for your mules and I'll see you later." And Bill ran and got there in time to be escorted off the parade ground by Captain Ketchum's order, with the threat to put him in the guardhouse if he was caught there again. This man stayed in government employ, was with me in the Kansas war in 1856 and on the Cheyenne expedition in 1857—served in the volunteers in the war between the States, and died in the Soldiers' Home in 1900, always a faithful, reliable man.

One night there was a heavy storm of rain, thunder and lightning, lasting till morning, when two mules were missing. We had been in the neighborhood two weeks and these mules had not been out of it except when Anderson went with meat or for rations, and no one thought they would leave. O'Meara, Russel and I mounted and circled around awhile without finding their trail. I then told Russel to go down the river and O'Meara up, while I crossed over and struck out toward the post. They were dragging long lariats fastened to picket pins, and the trail ought to be easily found. On an old wood road half way to the post I found such a trail as they would make, but rain had fallen upon it, and if the trail of my mules, it had been made in the night during the storm. I followed it, passing west of the post to the ferry across the North Platte. The ferryman was just up and had not seen any mules. He was a good natured fellow who knew everything and didn't "believe no durned mule would do such a fool thing as ter leave camp 'n all his friends 'n pass the post 'n come down ter my ferry ter swim when ther's er boat waitin' fer 'im." However much I might respect the ferryman's knowledge of mules, the fact remained that I had followed this trail more than three miles. I knew a mule's peculiarity for following a trail when once on it, and insisted on crossing and taking a look on the other side. The ferryman crossed me reluctantly, protesting that I would have my trouble for nothing.

Having landed, I pointed out to him the marks of two ropes with pins attached going up the bank. He insisted that it was something else, and I left him, following the trail with ease for several miles along a broad lodge pole trail made by Indians. It was as easily followed as a plain wagon road. Then the trail left the road and the mules had grazed, zig-zagging here and there, but finally came into the Indian road again, and here their trial was fresh—made since the rain; one or two shoes were off as shown by the tracks. I knew that some of our mules were in that condition, and felt sure that, strange as it might appear, I was on the right trail, and urged my horse forward rapidly for some time, hoping every high point I reached to see the mules. The

farther I went the more mystified I was, for this trail ran west up the north side of the North Platte—straight away from any place these mules had ever been, so far as I knew. Much of the way the trail showed that they were traveling at a trot; and going down some hills there were marks showing that occasionally a picket pin had caught on a tuft of grass and bounded forward several feet, a thing that would not occur at a walk. It was evident they were traveling of their own free will, because there were no other tracks, and if ridden the lariats would have been gathered up and not allowed to drag. As the forenoon dragged along my horse advised me that I was asking too much of him. I had had no breakfast, was feeling keenly the want of it, and while I must do without I must not destroy my horse's usefulness; and so I grazed him awhile, meantime taking off the saddle, smoothing down his back with my hand, adjusting the blanket, washing his legs in a pool of water, and he thanked me, the poor brute, for every kindly touch.

In half an hour I mounted again and started on; and now I settled down to studying my horse's strength and doing all I could within it. The day was lovely, the landscape green and beautiful, the air pure and fresh and not too hot—just right for a long ride. I grazed my horse a little several times, peering anxiously from the top of every rise. Along in the afternoon I found myself on a gradual rise going steadily up, up, for miles, the ridge ahead seeming little nearer for a long time. I knew that when I reached the top of that ridge I would see a long distance unless the country was broken, and so my thoughts and eyes were forward, anticipating the scene that was to open.

Coming up on the level ground my horse stopped, head high, nostrils distended, ears pointing forward, and every muscle strained to the fullest tension—no fear, but eagerness seemed to possess him. In the last ten miles I must have risen 300 feet, most of which I would go down in one mile farther. Then commenced the river bottom extending as far west as I could see, and one mile wide from river to bluff. On this bottom stood an Indian camp extending perhaps two miles long along the river—a nomadic city of

magnificent dimensions. It was a mile to the lower end of this vast camp, and I looked down upon every part of it. Many lodges were just being put up; quite a number were coming in over the hills from the north. Evidently this was a new camp, growing larger all the time, but none of it had passed over the trail that I had followed. Great herds of horses were grazing above and north of the camp. The scene before me was one of great activity, the building of a new city, and under more pleasant circumstances would have been an interesting study, but to me there was nothing pleasant about it. I dismounted and rubbed "Chub's" nose. I felt the need of friendly company, and he was all I had.

My journey seemed to be ended. Here I was upon the trail, my mules probably with one of the Indian herds, but could I get them? And how? I did not believe the Indians would give them to me without a reward, which I could not give, and possibly some mourner who had lost a friend might try to get even by taking my scalp; this was a way they had of doing, and I hesitated. I could not bear the idea of trailing my mules to the very edge of this camp and then giving it up—weakening, as the boys say. But what hope had I of accomplishing anything? My judgment said, get back to Laramie and let the mules go; my pride caused me to hesitate, and the longer I hesitated the firmer my pride held me. In this frame of mind I led my horse behind a low bluff and sat down while he grazed.

It was now probably five o'clock. Suddenly my horse threw his head high as under great excitement. Without looking for the cause I sprang into the saddle. All around me were mounted Indians—twenty or more young bucks—bows and arrows in hand. I was completely surrounded, and to run might insure being riddled with arrows, and so I put on an air of indifference, showed the trail of my mules, and tried to beat into their stolid heads the fact that I wanted them. They let me go through the motions for five minutes with perfect indifference. Finally one of them said, "Kig-e-la." Seeing that I did not understand, he said, "Wa-se-che kig-e-la ton-cha tepe," pointing to the Indian camp, all of which was Greek to me, but which I afterwards learned

meant: "White man go to chief's tepe" (lodge), and I drifted along with them in that direction.

Having arrived at headquarters, the chief saluted me with, "How, how, cola, how!" and shook hands: numerous others did the same. My escort melted away, and in response to his pantomimic invitation, I dismounted and entered his palace, where he invited me to rest on a pile of robes and furs. A squaw took the saddle and bridle from my horse and led him away. After awhile she returned with the picket pin and laid it inside the lodge. Looking where she laid it I saw two others, worn bright from dragging on the ground, and was sure they belonged to the mules. I gave special attention to the dried venison and buffalo laid before me, hardly realizing how hungry I was until I struck that soft couch and food. A squaw brought me some soup, probably dog, but it was good. I had been twenty-four hours and had ridden all day without food. Women and children peeped in to gratify curiosity, and the warriors and braves came and went continually. A circle of apparently distinguished men was formed, the chief opposite me, a pipe was lighted, passed and smoked by all. Whatever nervousness I had felt was gone. I seemed to be taking on the stolidity of an Indian. Seeming to realize that I must be tired, the lodge was soon vacated and in spite of my peculiar surroundings I slept. When I awoke it was dark inside, but bright fires burning outside all over the camp, and from end to end tremendous excitement. This was my first night with the great Sioux Nation, and I knew little of them, but enough to convince me that something exciting had occurred. I sat down outside of the lodge, leaning against it so that I could see a long distance into the camp. The scene before me was one

Sioux.

never to be forgotten—in short, it was a war dance. A war party of Sioux had killed six Crows and brought in their scalps; but it was not all a Sioux victory, for there was mourning for some of the Sioux who never returned.

I will not attempt to describe it. All the demons of the infernal region, with sulphurous torches, horns and cloven feet, nor anything else the imagination can picture could excel the beastly human nature here displayed. Gradually the clans joined in until the main display was near the chief's headquarters; the victors came near and shook the bloody scalps almost in my face as they danced and paraded up and down, beating tom-toms and emitting unearthly yells, whether to honor or to intimidate I did not know, but afterwards concluded that it was neither. The warriors just wanted to show the wa-se-che (white man) by the war dance what they could do, and the weeping and howling of the squaws and near relatives of the dead represented genuine grief. This din was kept up long past midnight, and gradually died out from sheer exhaustion of the actors.

On that couch of furs I fell asleep toward morning, and was wakened by the sun shining into the lodge. I sat up and took an inventory of my surroundings. The old monarch, one squaw, with baby at her breast, and a half a dozen youngsters—boys and girls—were asleep. An adjoining lodge held two or three more squaws and several youngsters of his family; outside was a solitary squaw boiling some meat. From end to end the camp was silent—even the thousands of dogs that had lent their aid to the hellish din during the night were all asleep. I came out and sat down; the old squaw brought me some meat from the kettle on a stick and some of the soup in a cup. I enjoyed it so much that she brought more, and I feasted. We seemed to be the only people awake. Indians never get up early without some special incentive; they want the dew off so that their moccasins will not get wet. Between seven and eight o'clock a couple of bucks came in from a herd driving some horses and mules, and as they drew near I saw mine. Here they came at a rattling gait, my two mules and horse looking little worse for the previous day's fatigue. The old squaw who gave

me breakfast caught the lariat of my horse, led him to the lodge, reached in and pulled out my saddle, blanket and bridle, while the men helped themselves at the kettle. The squaw was going to saddle my horse, but I did it to suit myself, while she chattered and laughed with the men. The people in the lodge came out and a few from other lodges gathered around. The big e-ton-cha looked as if he had spent a rollicking night at the club; his eyes were bloodshot and he looked drowsy. He and the men talked some together; he evidently asked the squaw if I had eaten plenty; went to a pile of dried meat, selected a lot of nice pieces and put them in my holster. Then he shook hands with me and said, "How cola, kig-e-la wa-se-che tepe." "How" was the common salutation on meeting or parting with white men, and all the English most Indians knew; the other words meant: Go friend, the white man's tepe.

I did not stand upon the order of going, but wanted to reward this prince to whom I was under so many obligations. I had on a very large red and yellow silk handkerchief, a luxury I always indulged in on the plains. I often tied it around my hat and brought it around so as to cover my neck and most of my face to keep off the sun and the pestiferous gnats. If not in use any other way it hung loosely around my neck to keep off the sun and wipe my perspiration. Though it cost me $2.50 out of my munificent salary. I could afford it, for it was cheaper than whisky at twenty-five cents a gallon. This handkerchief I wanted to give to the chief, placed it around his neck, pulled out my four-bladed knife and put it in his hand. I was the most thankful of men and anxious to prove it. If any one thing more than another would tempt an Indian to commit a murder or any other bad act, it would be to possess himself of such a beautiful handkerchief. If I were in battle against Indians, I would hide such a temptation quickly, for fear that every effort would be centered upon destroying me to possess it. The chief felt of it, looked at the sun through it, rubbed it over his face and handed it back to me. I opened the blades of the knife; he felt of them slowly and said: "Wash-ta" (good), and handed it back. I pressed them on him, but he only said: "Waseche

washta" (white man good), and declined to accept. I offered the handkerchief to his squaw with the suckling babe, but she laughed, shook her head and would not touch it. I could not pay the nobleman for his hospitality, trouble and protection; I even feared that he thought less of me, this savage king, than if I had gone away with more dignity and less patronizing display. Well, having said "good bye," I coiled the lariat ropes carefully about the mules' necks, fastened them securely, mounted my horse and started. The two Indians who brought in the mules started with me and drove them over the bluffs where I first saw the camp and then said "How," and turned back. I persuaded one of them to stay with me, thinking that he might be of service in case I met other Indians. On we came, down the long slope, making what time I thought my horse would stand, grazing a while two or three times, and reached the ferry while the sun was an hour high. I fully expected my Indian friend to go to camp with me, but he refused and said "How cola." I bought him two loaves of bread from the ferryman, which he tied in the corner of his blanket, and said "Skaw-papoose"—that is, he would save it for them, his wife and child. I tried in vain to press my handkerchief upon him, but he refused, and took another loaf of bread, all the ferryman had.

This benighted ferryman had seen no one from the post, and supposed I had recrossed at a ford some miles above. "Well, dog me! ef them mules aint h—l, I'll never ferry another pilgrim, durn my buttons." I wanted to go through the post to report to the Major, but instead of keeping outside of the parade ground the mules set up an unearthly braying and ran directly in front of the commanding officer's quarters. Of course I must follow them, and as I got there Captain Ketchum ran out and said: "What are you riding over this parade for?" I halted to explain, when he recognized me. I told him how it happened, which was satisfactory, and asked him to please say to the Major that I had returned with the mules and would report in the morning.

I reached camp about dark. Russel washed "Chub's" back and legs, and rubbed him down good. McDonald got hot water, O'Meara rubbed me down in a hot bath, I got on

clean clothes, ate a good supper, rolled myself in the blankets, and told them to wake me in time to get to the post by 10 o'clock. Russel had reported to the Major the day I left and the day I returned; all were considerably worried and puzzled at my absence. No one had thought of looking in the direction of the ferry. Russel had been down the road east of the post eight or ten miles, talked with some traders, and concluded that they had not gone in that direction.

I rode McDonald's horse, reported to the Major next morning and told my adventures to him and Captain Ketchum. A guide and interpreter was called in to listen to my description of the camp, and he said it was over fifty miles from the ferry across North Platte, and several traders familiar with the country, with whom I talked, did not put any lower estimate upon it. The puzzle was, why did the mules go there? It turned out that a lot of troops had been camped there about a year before, and it was believed that these mules belonged to that command and had been taken to Fort Leavenworth in the fall, as all stock that could be spared was taken there to winter. This seemed the only solution to such a freak on the part of these two. Estimating that I lost ten miles in hunting the trail going, would make sixty-five miles the first day and fifty-five the next day—120 miles.

All too soon the time came for us to start on the return trip to Fort Leavenworth, and we left "Camp Macklin," named by me in honor of Major Macklin, with many regrets. We had enjoyed a month of positive pleasure and happiness, the like of which we might not hope for soon again.

At Laramie we were joined by Mrs. Rhett, wife of Brevet Captain Rhett,* of the mounted rifles, and her two small children and a servant, her transportation being a light wagon and four-mule team. Having crossed to the east side of Scotts Bluffs, about fifty miles east of Laramie, we turned south and camped near a trading post belonging to Major

*Thomas Grimke Rhett was a native of South Carolina and a graduate of the M. A. in 1845. He resigned in April, 1861, to enter the Confederate Army. He was Assistant Adjutant General from 1861 to the close of the war. He died July 27, 1878.

Dripps, who was or had been an Indian agent. He was to join us the next morning and travel in our company to the Missouri River. Our camp was made about noon on a plateau where grass was very short. A ravine twenty five feet deep ran by the camp, sixty feet wide at bottom, with steep banks. At the bottom of this ravine was a small spring from which we got water. It also contained fine grass, and in it we picketed our animals.

About 2·00 o'clock there was sharp lightning and loud thunder, evidently a heavy storm some distance in the bluffs, which kept gathering force and coming nearer to our camp. But while the sun was still unobscured by clouds where we were, water which had fallen a long way off came down the ravine, increasing rapidly. We hurried to the animals and got about half of them out and tied to the wagons before the water was ten to fifteen feet deep, and the other animals on the other side of it where we could not reach them, and if their frantic exertions had not enabled them to pull their picket-pins they must have drowned. Before the storm struck us the water was twenty feet deep, and great logs coming down at the rate of twenty miles an hour. The Major and Mr. Reed got Mrs. Rhett and her children into her wagon, we drove picket-pins into the ground and tied ropes to the wagon wheels and had everything as safe as could be made, when one of the most fearful storms I ever experienced struck us. The wind did not blow very hard, but rain with heavy hail came down in torrents. Standing in our tent I dipped up a hat full of the mixture and after the water ran out through a hole, the hat was two-thirds full of large hail. On the slightly sloping ground the water was half way to one's knees, from which may be inferred what a deluge was falling. Fortunately the storm passed quickly, and by 5 o'clock the sun was smiling as sweetly as ever; the creek ran down as quickly as it came up.

We had two horses, mine and O'Meara's, and on them we started to find the lost animals. The storm obliterated the trail, and we had no guide but the direction of the storm. It came from the southwest, and the stock must drift before that pelting hail to the northeast, and in that direction towards a

line of high red bluffs we rode. We must find them before dark if possible, as if they had all night the start we might have a long chase. Fortunately we found them about eight miles from camp on the west side of an ampitheatre of perpendicular bluffs, all together, grazing contentedly at sunset. We managed to catch all of them and take off their picket pins. Excepting a few slight wounds, none of the animals were hurt. We fixed the ropes around their necks and started for camp about dark, where we arrived two hours later.

I had asked McDonald and Russel to keep a bright fire of pine knots, of which they had plenty, so that we could see the light, which was a great help. When the stock was all caught and made safe Bill Anderson said: "Well, I'll be gol durned if they hain't got the last one on 'em." This was one of the best lessons I ever learned, never to camp in a ravine or where the camp could possibly overflow by a sudden rise, never to trust stock where by any possibility one can not reach them. I have seen thousands of camps in attractive places like that ravine, for convenience of water and wood, because the people were too lazy to carry water or wood, and I have almost every year read of some of them being drowned and their outfits destroyed. There was no other incident worth mentioning on the trip, no accidents, no losses and no friction.

We met emigrants continually, in great numbers, en route to California, Oregon and Salt Lake.

Before leaving Laramie, Major Macklin had informed me that soon after we left Fort Leavenworth B Troop had been ordered on a forced march to Fort Adkinson, on the Arkansas River, to relieve D Company, Sixth Infantry, quartered in a sod fort (Adkinson), which was surrounded and threatened by the Kiowa and Comanche Indians. Nothing further had been heard from them. He also informed me that there was to be a great assemblage of Indians near Fort Laramie early in the fall, at which all the tribes that could be induced to come were to meet, smoke the pipe of peace, make treaties between tribes and the tribes with the government, and to wind up with a general distribution of presents from

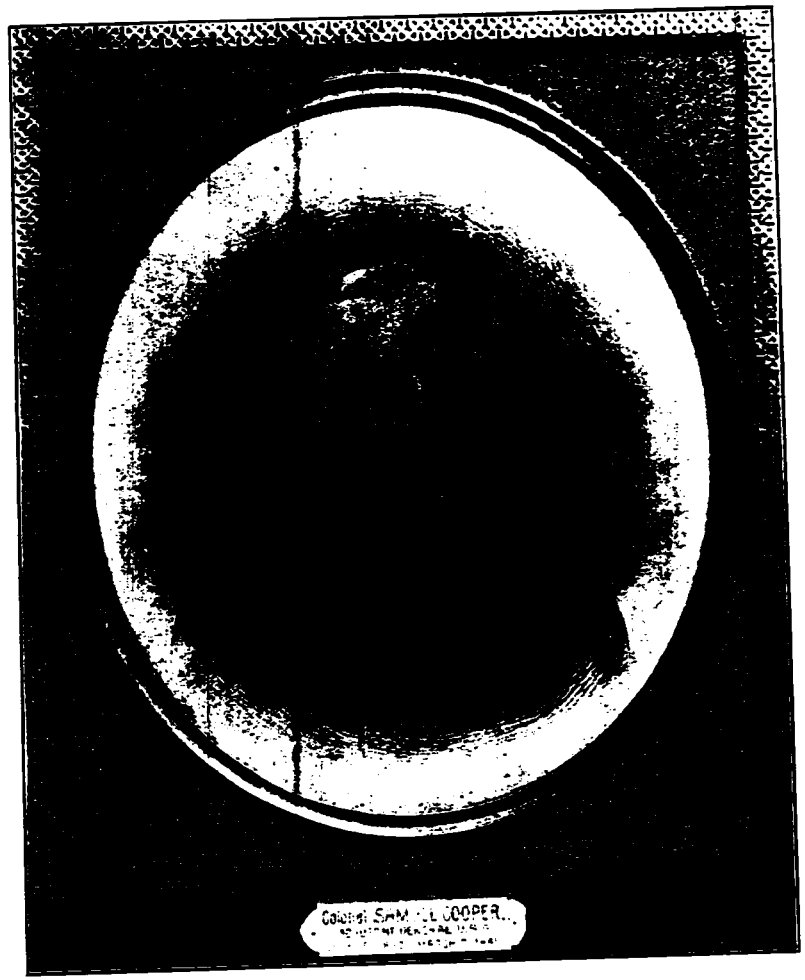
the Great Father. At Kearney we heard the same report and nothing more.

At what is now called "West End," then the dragoon drill ground, the Major halted and made us a little speech, in which he recounted the uniform good conduct of his escort and the pleasure and freedom from care they had given him during the trip. The dragoons had taken upon themselves to look after Mrs. Rhett's camp, pitch and take down her tent, and soon after our arrival at Fort Leavenworth Mrs. Rhett sent for me, and through me sent her thanks and a nice present to each of the dragoons for special kindness and attention to her and her children during the trip.

And now we heard that B Troop, having relieved Adkinson without serious trouble, had been ordered back, and would, after its return, proceed to Fort Laramie.

The infantry part of the escort was at home with its company. I reported to the commanding officer of the post, Colonel T. T. Fauntleroy, and he excused us four dragoons from all duty except the care of ourselves and horses until the arrival of the troop. We took possession of our quarters and stables, and when the troop arrived ten days later we had everything in good order. Sergeant Hooper was now first sergeant. This was a change extremely gratifying to me. He was serving in his tenth year—a level headed, sober, honest, active man, of good judgment and even temper. I looked forward hopefully.

Private Wiggins was drowned in Grasshopper Creek (now Delaware River) on the way out. After everything else was over, the horses and mules had to swim. They were driven into the river, Sergeant Cook and Private Wiggins bringing up the rear, mounted. Both were washed from their horses. Wiggins struck out to swim to shore, which he would have done, but his horse struck him with his feet, knocked him under and he was never seen again. Cook caught his horse's tail and was pulled to shore. Wiggins was an excellent soldier, a man of good habits, and well liked. No other casualties or serious accidents. The forced march out had pulled the horses down some, but they were in fair condition. At stable call the Major inspected the horses of my detachment



critically and found them almost as fleshy as when we started out—not a sore spot on them. As the major expressed it, "no one would think they had been on a long march." We had traveled over 1,300 miles; my horse had traveled eight miles a day for thirty days from the camp at Laramie to the fort and back, 240 miles, besides my trip to the Sioux camp after the mules, 120 miles, making in all more than 1,660 miles. The troop under Major Chilton had traveled 800 miles and the horses looked well, with few sore backs. Two or three horses were changed by the quartermaster, some shoeing done, a little replenishing of clothing, and in a week we were ready for the field again. For my twenty animals six sacks (384 quarts) of corn were taken. One quart each night and morning (forty quarts per day) fed until all was gone, and from that time to the end of the trip grass only. Being used to corn, this two quarts per day kept them up until they became used to the grass and until the early grass gained substance. Major Chilton's command took extra transportation to haul half rations—five pounds of corn for each animal per day to Council Grove; one-fourth rations from there to Adkinson and back.

We were to escort the Superintendent of Indian Affairs, Colonel D. D. Mitchel, who arrived at Fort Leavenworth by steamboat with Colonel George Knapp, of the *Missouri Republican*, and Mr. B. Gratz Brown, correspondent of the *Republican*, and late Governor of Missouri, who was to and who did write up the campaign, the treaty, etc.; in short, a full and well written account from start to finish, and if published to-day would be read with great interest throughout the world. Colonel Cooper, Adjutant General of the Army, was a guest of Major Chilton during the whole campaign to Laramie and back. The Major had my four horses brought up for Colonel Cooper's inspection, and explained to him the service they had performed, and the Colonel seemed surprised at their freedom from sore backs, and their fine condition.

I was questioned, and made this statement: "When near Fort Kearney, on the way out, a Californian en route to 'the States' camped near us and he showed me how he kept a sound back on his horse. In the first place, he had the

California saddle-tree, old Spanish style, high and wide at the withers, and otherwise fitting the back. He used a gunny sack—the course kind, made of loose soft fiber—the old-fashioned corn sack, clean and put on next to the back, and a common blanket between it and the saddle. The claim was that the gunny sack absorbed the moisture without scalding, as would the blanket if worn next to the back. We tried this with great success, always taking care to have a clean sack, that is, wash the sack occasionally and keep the grit or sand out of it." After that the gunny sack was worn by every horse in the troop. Although our "Grimsley" saddle could not compare with the California tree, the sack was a wonderful help.

CHEYENNE.

As I cannot have access to the records which would enable me to give dates, I am compelled to state the events as they occurred throughout the season, one event following another, regardless of dates. It was July when we returned from Laramie, and the troop from Adkinson, and July when we left Fort Leavenworth, and August when we arrived at Fort Laramie. I had been consulted a good deal about camping places because of my recent trip over the road, and now when asked by the Major I recommended "Camp Macklin," and there we camped. The Indians were gathering in great numbers. The plain between our camp and Laramie was filled with Indian lodges, mostly Sioux, but there was a large camp of Cheyennes and Arapahoes. Here and there were interpreters, squaw men (men married to squaws and living with or near the tribe for the purpose of trading). Now, this was an effort on the part of the government to get all the tribes together and have them make peace with each other, swear fealty to the Great Father, and generally to fix up matters so that there should be no friction between tribes, nor between

the various tribes and the government. Runners had for months been circulating throughout the Indian country, from the Missouri River to Fort Bridger and from Canada to the Arkansas. This was in the heart of the Sioux, Cheyenne and Arapahoe country. Thousands came, even from the far northwest, from the upper Mississippi, from headwaters of the Missouri and the Yellowstone. The grand old Sioux Nation with its numerous branches and bands furnished the greatest number; then the handsome, the dignified, the wiry, agile, intelligent and brave Cheyennes in large numbers, and rich in equipment. The Arapahoes were interesting but less numerous. These three tribes were friends and allies, and ruled the country from Minnesota to the Arkansas River and from the Rocky Mountains to a line drawn north and south some forty miles west of Fort Kearney at their own sweet will. They did not want peace with other tribes. Why should they? Their pastures were well stocked with game, the supply of buffalo was unlimited, the way they hunted inexhaustible. They were rich in everything that people of nomadic habits needed, and as to peace, why, what would life be to them without war? Nature supplied all their needs. They did not hunt for the sake of wantonly destroying the lives of animals as did the white man, and how could they amuse themselves? Of what use to live? And how could they hope to raise young men without war? And of what use were men if not warriors? But the Indian Department had become a great branch of the political machine, large amounts of money were appropriated, growing larger annually, and it must be spent. There were many beneficiaries interested—manufacturers of Indian goods, merchants, freighters, officials and hangers-on in large numbers. Whether it led to tragedy or ended in a farce, here was a well laid plan for the largest assemblage of Indians ever gathered at one council or on one treaty ground. The Pawnees and some others were invited but none of them came, presumably because they were afraid to risk it. But the Snakes came. Their headquarters was about Fort Bridger. The Sioux and Cheyennes had promised to make peace with

them, and to take no advantage of them while the treaty was going on.

About noon one bright day, a long line of dust was seen from our camp, looking west, towards Laramie Peak. Soon a long line of Indians came moving slowly down in battle array, arms ready for use and every man apparently expectant, the women and children and baggage bringing up the rear well guarded. It turned out that Major Bridger, the interpreter, had reported to headquarters the approach of the Snakes, and he had been directed to lead them down near to our camp. All the head men of the Sioux and Cheyennes had given assurance that they should not be molested, so down they came, moving very slowly and cautiously, the chief alone a short distance in advance. They were dressed in their best, riding fine war horses, and made a grandly savage appearance. In the absence of Major Chilton down at the post, seeing all this caution on the part of the Snakes, Lieutenant Hastings had "boots and saddles" sounded, so as to be ready whatever happened. Just below us was a large Sioux camp, and the people were showing great interest and some excitement at the approach of their hereditary enemies, and a few squaws howled in anguish for lost friends who had died in battle with these same cautiously moving warriors. When the Snakes reached the brow of the hill overlooking the beautiful Laramie, less than a mile away, and the chief commenced the descent, a Sioux sprang upon his horse, bow and arrows in hand, and rushed towards him. A Frenchman, an interpreter, had been watching this Sioux, expecting trouble, and he, too, mounted his horse and was instantly in pursuit. The Snake column stopped and sent up a wild shout of defiance, the chief moved a few steps farther and raised his gun ready to fire just as the intrepid Frenchman reached the reckless Sioux, pulled him from his horse, disarmed and stood over him. Then ensued a harangue between interpreters and chiefs. The wild Sioux, who sought to revenge himself on the Snake chief who had killed his father some time before, was led back to camp while the Snakes held their ground. Their position was a good one; every man had a good gun, plenty of ammunition,

besides bows and arrows. Not one out of a hundred Sioux had guns, and the Snakes, though not one to five of the Sioux, would have defended themselves successfully, and the battle would have been the most bloody ever known amongst the wild tribes. They had come prepared for treachery, and with their splendid equipments felt full confidence in their ability to cope with any band upon the plains. Having quickly mounted the troop, Hastings took a position where he could overlook the actions of the tribe.

Here I met Bridger the first time. He spoke on behalf of the Snakes, and told Lieutenant Hastings what he already knew, that the Snakes had been assigned a position near his troop and asked where they could camp without interfering with the dragoons. Hastings told him that I knew the ground all about there, and turning to me said: "Corporal Lowe, show Captain Bridger the limits of our camp and give him all the assistance you can." That order was license for me to stay on Bridger's staff until a camp was made. Then and there Lowe became a Snake, and the other tribes were not in it.

I galloped off with the great mountaineer, whose fort I had seen dotted on my atlas at school a few years before I showed him the finest camp imaginable, and he was pleased. I asked him if he had any objections to my staying with him until the camp was formed. "No, young man, these are the finest Indians on earth; stay with me and I'll show 'um to you." Soon the column was in motion, and they went into camp in their own peculiar way. Every prominent point was dotted by a sentinel, quietly wrapped in his blanket, gun ready for use. Bridger said: "Well, you seen that fool Sioux make the run, didn't you?" "Yes sir." "Well, ——," referring to the brave interpreter, whom he knew well, "saved that fellow from hell; my chief would 'er killed him quick, and then the fool Sioux would 'er got their backs up, and there wouldn't have been room to camp 'round here for dead Sioux. You dragoons acted nice, but you wouldn't have had no show if the fight had commenced—no making peace then. And I tell you another thing: the Sioux ain't goin' to try it again. They see how the Snakes are armed.

I got them guns for 'um, and they are good ones. It'll be a proud day for the Snakes if any of these prairie tribes pitch into 'um, and they are not a bit afraid. Uncle Sam told 'um to come down here and they'd be safe, but they ain't takin' his word for it altogether. They'll never be caught napping, and they're prepared to travel anywhere. Awful brave fellows, these Snakes; got the nerve; honest, too; can take their word for anything; trust 'em anywhere; they live all about me, and I know all of them."

I returned to the dragoon camp in a couple of hours, just as Major Chilton, with the Indian Commissioner, Colonel Mitchel, and some others came in, and I was sent back with Colonel Mitchel's compliments to request Captain Bridger, as he was then called, to come over. I delivered the message, and returned with Bridger, who spent some hours with the Commissioner's party. Somehow, I had conceived a great liking for and felt great confidence in Bridger. The acquaintance had been short, but he impressed me as a master in his line, and when I related to Sergeant Hooper and others what he had said to me, all seemed to partake of the same feeling, and whatever anxiety was stirred up by the incidents of the day quieted down. While conceding his courage, no one admired the judgment nor the treachery of the Sioux, who fully expected to arouse his tribe to battle, and but for the brave interpreter he might have done so, though sure death awaited him. The attitude of the Snakes, the cool, deliberate action of the chief, the staunch firmness of his warriors and the quiet demeanor of women and children, who were perfectly self-possessed—not a single outcry from that vast parade save the one cry of defiance that went up spontaneously as the

PUEBLO.

chief raised his gun to take aim at the Sioux. The scene was impressive, as showing the faith that band of warriors had in each other; the entire confidence of their families in them; the self-reliance all through. It was a lesson for soldiers who might never again see such a grand display of soldierly manhood, and the lesson was not lost. Every dragoon felt an interest in that tribe.

Major Chilton told me to report to Captain Rhett, which I did, and he very cordially thanked me, and through me my comrades, for kindness to his family while en route to Fort Leavenworth. He impressed me very much—was a good officer and a perfect gentleman. He could show kindness to an enlisted man without the risk of invoking undue familiarity.

Colonel Mitchel and his party left for the fort before sunset. As our camp was rearranged, we were between the Snakes and the other tribes, and half of the troop on guard. Every half hour was called thus: "Number one, — o'clock! All's well!" Morning dawned on peace and quiet. There had been some anxiety for fear the Sioux would make a general break. Bridger told me some time afterward that if they had they would have found every Snake ready. In about a week after the incidents above related we moved thirty-four miles east of Laramie to where Horse Creek flows into the North Platte. It was a better camping ground for this great mass of Indians because of more room, grass and water. Horse Creek came in from the southwest, and on the north side of the Platte was another creek coming in from the northwest, so that the camps could spread out.

Being in command, the Major placed his own troop and Captain Ketchum's company below the mouth of Horse Creek. This remained headquarters. Two troops of mounted rifles, now Third Cavalry, were a short distance above. One troop remained to garrison Fort Laramie. The Snakes followed us on the march down, and camped near us. One thing was plain: if there was any trouble between troops and Indians, it would not be between troops and Snakes, and the Snakes in numbers and efficiency were largely in excess of all the troops, so that in case of trouble

they were our best dependents. Strategically the arrangement was excellent. The mounted rifles averaged about sixty men to each troop, "B" troop about seventy-five and "G" Company, Sixth Infantry, about seventy-five—270 soldiers. Considering that there were within fifteen miles of our headquarters more than 60,000 Indians, of whom probably 10,000 were fighting men, ours seemed a slim array of troops. In fact, if there was any disposition on the part of the Sioux, Cheyennes and Arapahoes to destroy us they could have done so in an hour if given a chance to camp around us. But this was not done. Our camp was formed with great care. The Sioux, Cheyennes and Arapahoes were allowed to camp anywhere on the south side of the Platte not occupied by troops above the mouth of Horse Creek and anywhere on the north side of the Platte or on streams coming in from the north. Horse Creek and the south side of the Platte below it was reserved for troops, transportation, parade and treaty grounds. Snake Indians and such other visiting tribes as might come in. Lines of sentinels were placed, inside of which no one might come without permission.

Major Chilton was a man well fitted for a command of this kind. He was bold, vigilant, unyielding, self reliant, quick to comprehend an emergency, and so vigilant that he could not be surprised. No people on earth will discover a commander's weakness quicker than Indians; to hesitate or to show fear of results in their presence is fatal. On the other hand a bold front, to keep them at a distance, treating them well as long as they behave themselves, and drawing the line at the slightest enroachment—to locate them and say: "Thus far shalt thou come, and no farther," is the only policy practicable. It will apply in many places in dealing with men other than Indians. Of course Major Chilton had experienced advisors in abundance if he chose to ask advice. Colonel Mitchel, the Commissioner of Indian Affairs, had spent many years with the Sioux of the Upper Missouri. Then there was Bridger and Fitzpatrick with their great experience, and always reliable and any number of long-haired mountaineers—a large percentage of them worthless char-

acters—but many traders, trappers and guides of good, well earned reputations. Captain Ketchum, commanding Company G, Sixth Infantry, had been stationed several years at Laramie, and few men knew the Indians and the country better than he.

This camp, and incidents connected with the treaty was well written up at the time by Mr. B. Gratz Brown, heretofore referred to, and published in the *Missouri Republican*. So far as I know, no other paper had a correspondent on the ground. To-day such an event would draw reporters from most all of the leading papers in the country, including the illustrated papers; the whole camp, including daily incidents, war dances, squaw dances, sham battles, etc., portraits of the principal chiefs and the officials would be seen in these great periodicals, and all the reading public would be familiar with it.

We remained a month in this camp, awaiting the arrival of the ox train that brought the presents from the Missouri, they having been first brought from St. Louis by steamboat to Fort Leavenworth. During the time we were waiting the Commissioner was getting a list of all the head men and the number in each band, and ranking them according to their power and influence, judging by the number of followers; then taking an invoice of the goods to be distributed parceling them off to each band, turning them over to the chief or sub-chief for distribution.

This listing of the bands was an immense job, and the distribution must be made with as little partiality as possible. The chiefs having been given rank according to influence and following, they all sat in an immense circle, smoking with great dignity and passing the pipe, meanwhile some orator entertaining them with a bombastic account of some of his or his tribe's adventures. This part of the entertainment was equal to a political convention waiting for the committee on resolutions to report Amidst the grunts of approval as the oratory went on a chief was called in to headquarters and soon returned decked off in full major general's uniform from head to foot. There the line was drawn by the Indian; he still wears his moccasins—he could not walk

in boots—wearing a saber, medal with the head of the President on one side and clasped hands on the other, he carries a document with an immense seal and ribbon thereon—enclosed in a large envelope, that he may show all comers what the Great Father thinks of him—what rank and power he wields among his fellowmen. This and his medal he values more than all else. They give him the entree to the camp of the emigrant, who must, perforce, have confidence in and feed him since he comes with these proofs of the love the aforesaid Great Father has for him. Then follows another major general with decorations substantially the same. Having exhausted the list of major generals, then followed the brigadiers, then numerous colonels, lieutenant colonels, majors, captains and lieutenants—as Bill Anderson said—"Till yer can't rest," all with medals of some kind and all with a paper—"Certificate of Character," Corporal Ferguson called it. These papers had been prepared, probably, in the Indian office in Washington, with a blank space left to fill in the name. Then there were great numbers of braves—a multitude who were entitled to and received some distinguishing mark in the way of medal or other decoration or paper.

Several days were given to this "dignity business" as McDonald called it, and then followed the distribution of goods. In this the roll was called as before, and the pile turned over to the head man, who shouted out his instructions and parceled out the goods, and strange to say there seemed to be little wrangling or dissatisfaction. In each case the goods were packed on ponies and taken to the camp where they belonged. The provisions were given out last and in great quantities, and the feasting and good humor was general. The daily scenes and incidents of our stay there were of the greatest interest, often very exciting; sham battles were a feature daily, and they showed their prowess to the white men, and one tribe to another, with all the savage energy of their bombastic natures. No human being can out-brag an Indian, and they spend hours in oratory over the most trifling occurrences, and often tell monstrous lies in their illustrations.

The presents having all been distributed, the feasts being over, the long talks ended, the great orators having ventilated themselves, while the white dignitaries listened and grunted their approval with the dignity becoming the representatives of the Great Father in Washington, the great camp began to disintegrate, band after band began to move out, until all but a straggling few, camp scavengers who hang around to pick up anything left behind, were gone. The Sioux moved in many directions, some for the far north and northwest, others for various points for winter quarters. The Cheyennes seemed to keep well together and moved off up Horse Creek, the Arapahoes soon following. The Snakes were amongst the first to move, and though the head chief and a few others had talked a little in their turn to the Indian Commissioner, their story was soon told. Few complaints, as Bridger told me, were made, and they had no bombastic threats nor false promises to make. All they wanted was to be left alone, but would endeavor to care for themselves; they had never injured the white people and had no desire to do so. Every Sunday the Snakes had church service. They had a minister who had been with them twenty years; preached to them in their own language; several times I heard him. Bridger interpreted to me, and I could readily understand why every one of those people listened to him with close attention. He taught them true Christianity, kindness, brotherly love, honesty, and all the precepts calculated to make men better. No orthodox mysteries, no unnatural or miraculous plan of salvation; nothing that they could not understand. "Now," says Bridger, "I don't know nothing about religion as I used to hear it in the States; but me and the Snakes don't have no trouble in believing what he says, and I tell you he just leads the Snakes about right."

Bridger pointed out to me one day a quiet listener, a man thirty-five years old, six feet, about one hundred and seventy-five pounds, gentle face and manner, and told me that this was the most modest and unassuming man he had ever met. A few years before, some Sioux had run off a lot of Snake horses and taken one scalp. This man with others started on the trail. In about a week they all returned except he,

they having separated. Another week and he was given up for dead, and there was loud lamentation amongst his friends, lasting for days. One night in the midst of the weeping and wailing this man rode into camp driving all the lost Snake horses and six more and with six Sioux scalps dangling from his bridle and belt. The story was quickly told. Having struck a "hot trail," he followed it down into the foot hills on the east side of the mountains, until one evening he saw a band of horses and one lodge. He watched; he knew the Snake horses, and found that there were six Sioux. Evidently these six had left the lodge standing while they made the raid 200 miles into the Snake country. Here they thought themselves safe. They feasted around a fire in front of the lodge, and howled and danced around the Snake scalp until midnight, when all went into the lodge and slept. Towards morning the Snake crept to the lodge, ripped it open with his scalping knife and in the darkness killed all, scalped them, and alone managed the herd of horses, averaging seventy-five miles a day until he reached home.

ARAPAHOE.

"Now," says Bridger, "how many fellows can you pick out of your troop that could do what that Indian did and make no fuss about it?" I did not know, had not seen them tried, and gave it up. I thought it an inspiration to meet one who possessed such reckless nerve. I parted with Bridger with regret, and when he shook my hand he said, looking at me keenly, "Young man, don't you stay in the army no longer than your time's out, but come right up to Bridger. Thar's more money in the mountains than in all the rest of the world—gold till you can't rest, and I know where some of it is. Now be sure to come to me. Good bye."

I certainly thought I would, and told him so. His life suited my notion; he was a genuine article with no alloy.

Colonel Mitchel and his party stayed behind and came down with the mounted rifles, while Colonel Cooper came down with B Troop. No incident worth mentioning occurred until coming along the Little Blue one afternoon, Major Chilton wearing hunting clothes and Colonel Cooper in citizen's dress, riding in a little one-horse spring wagon, belonging to the Major, the Major's servant driving. About a mile ahead of the troop four Pawnee Indians stopped them, highwayman style, one seizing the horse's head, the others demanding that the occupants get out and give up everything. The Major seized his shotgun and would have killed two of them but Colonel Cooper stopped him. The Indians did not seem inclined to kill, but to rob. At the critical moment one Indian saw the troop, and they all ran.

When we returned to Fort Leavenworth we occupied our old quarters and stables of previous winter. There was one company of Sixth Infantry and Light Battery G, Fourth Artillery, at the Post.

A few days later a detail of twenty men of B Troop was ordered to go to Uniontown, a Pottawatomie village, a few miles south of the Kansas River and west of where Topeka now stands. We crossed at a rocky ford near Silver Lake and went a few miles south, distant from Fort Leavenworth about seventy miles. Lieutenant Cuvier Grover, of the Fourth Artillery, commanded the detail. At Uniontown we were to guard the paymaster or agent and his money while distributing cash annuities to the Pottawatomies—so much per capita to be paid to heads of families or to individuals of age having no families. We were there ten days in glorious Indian summer. The lists of persons to whom money was to be paid were so complete that the work went on from day to day, with the aid of interpreters, as smoothly as if it were the paymaster paying off troops. I liked these Pottawatomies; all well behaved men, women and children. All had good horses, seemed to be well clothed and fed, lived in comfortable cabins, did considerable farming in a small way, especially in corn and pumpkins. Every cabin

had great quantities of yellow strips of pumpkin hung up to dry. We had seen no vegetables during the last six months, and would steal them if given half a chance. I had charge of the quartermaster and commissary department of our little command, and schemed in every way possible to supply our wants. An influential Frenchman whose acquaintance I made on the way over, who had two Pottawatomie wives and a large family of children—the more children the more money—introduced me to Joseph LeFramboy, fourth chief of the Nation, who lived near Silver Lake, was wealthy and had great influence. He had two wives, one a Pottawatomie and one a Frenchwoman. My French friend made known to this chief, who talked good English, the fact that we had been on the plains the whole season on soldiers' rations and wild meat, and the fact that we probably had nothing to pay with. I asked LeFramboy if the hogs we saw cracking nuts in the woods were wild. He answered, "Yes, so you not let him squeal too much." He soon brought an Indian who pointed out a lot of half grown pigs and said, "Eat plenty." In short, our camp was soon supplied with fresh pig, pumpkin, cabbage and potatoes in abundance. It was too late in the season for anything else. All temptation to steal was removed, and we lived high.

If the reader has never been similarly situated, has never lived for six months at a time on bread, rice, beans—no other cereals and no vegetables—a little sugar and coffee, not half what soldiers get nowadays, bacon and such game as could be killed, he has not the slightest conception of the excellence of pumpkin sauce, with salt and pepper, flavored with a little bacon grease, boiled cabbage, mashed potatoes, baked potatoes, potatoes baked in the ashes by the campfire, eaten with salt or a thin slice of bacon broiled on a stick. Of all the army of to-day probably not one ever had our experience and never will have. I sent Lieutenant Grover his dinner every day in our best style. He sent back his thanks and asked no questions, but I told him how nicely we were being treated. Our rest at Uniontown was a great relief from the everlasting march, march, day after day, until horses and men were weary, oh, so weary. In going to Union-

town, our stay there, and return, we had enjoyed two weeks of absolute peace, and were sorry when we had to return.

And now the winter was before us, and we hoped for rest —rest that every man and every horse needed. To sum up the summer's campaign: I had ridden one horse twice to Laramie and back—2,600 miles; eight miles a day for thirty days at Laramie, 240 miles; to and from Sioux camp, 120 miles; to and from the Pottawatonie payment, 140 miles; total, 3,100 miles, besides considerable riding about from our camp to the Snakes, etc., that the others did not do. McDonald, Russell and O'Meara had ridden 360 miles less, making them 2,740 miles. All the balance of the troop had been to Adkinson and back, 800 miles, and to Laramie and back, 1,300 miles—2,100; and sixteen of them had been to the Pottawatomie payment, 140 miles, making for them 2,240 miles. The horses that went first to Laramie were exceedingly leg weary, but looked well and were sound. All the horses, with the exception of a few slightly sore backs, were sound. All they needed was rest, feed and good care, and they got it. The grooming, leg washing and rubbing down with strips of gunnysack that they got was something that any lover of horse flesh might be proud of. The dirt stalls that they stood in were kept level, each man held accountable for the condition of his own stall.

An officer said to me when talking of this campaign, "Well, you did not have any mounted drill for some time after that!" In a week we drilled an hour mounted in the forenoon and on foot in the afternoon, but we drilled carefully; went through the evolutions, saber exercises and pistol practice at a walk; in a few weeks a part of the time at a trot, and in a couple of months all of the gaits, never missing mounted drill every forenoon when weather and ground was suitable on week days, and, except Saturday, afternoons on foot, with inspection mounted on Sunday morning. One hour drill each time. In case of rain or snow we drilled on foot in quarters. Our horses were ridden to the river for water morning and evening before corn was fed to them which, with the hour's drill, gave them good exercise. They always went to water at a walk. I saw other mounted troops go yelping

down the hill in outrageous disorder, running races up the hill after watering. B Troop was as orderly and well behaved going to and from water as if on parade; talk was free but no noise. I can say the same for Captain Hunt's Light Battery G, Fourth Artillery. We used the watering bridle bit (snaffle), surcingle and blanket, but no saddle, going to and from water.

And now we were settled down in comfortable quarters for those times. A bed sack, refilled with prairie hay (Arnold called it prairie feathers) once a month, and a pair of soldier blankets, with overcoat, or anything else one could utilize for a pillow. If the government allowance of wood was not sufficient, we took a company team, made a detail, and hauled more from above the post. Indefatigable commissary and quartermaster Sergeant Cook managed our rations and forage so that men and horses fared well. We got vegetables and apples from Missouri. Nothing of the kind was then furnished by the commissary. Cook got some barrels and had them sawed in two for bath tubs, which we could use in the dining room between retreat and tattoo. The troop moved about so much that there was little company fund, and from our small pay we "chipped in" for nearly all the extras.

A Thespian Society was formed, and our troop furnished the lion's share of actors, among them Jim Glennon, Warren Kimball, Forrest, etc. Officers and their families had as much fun out of it as did the men, and the performances did a great deal of good. Our troop raised money for a ball, and I was treasurer. We wanted things that must be gotten from Weston, and I made the purchases. Mr. Ben Bishop, who was first sergeant of "B" Troop before I joined, was now in the cattle business, doing well and living in Weston, gave me much assistance and took me to the "Weston Club" for dinner, where I was introduced to a lot of gentlemen who would be a credit to any town of 10,000 people, whose friendship I retained. Most of them are now dead—Dick Murphy, Joe Murphy, Perry Wallingford, Merrit L. Young, George Belt, Charles A. Perry, etc. Weston was a wonderful business place—fine stores and heavy stocks of goods. It was

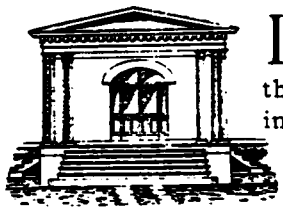
at that time the best business town between St. Joseph and St. Louis except Lexington.

Our ball came off, and was a great success from the soldier's standpoint, and did a great deal of good. The men were on their good behavior—their pride was appealed to, and even the roughest seemed to rise a little higher and to think better of themselves.

[*To be continued.*]

METHOD BEST SUITED IN THE UNITED STATES ARMY FOR IMPARTING PRACTICAL INSTRUCTION IN SECURITY AND INFORMATION TO THE NON-COMMISSIONED OFFICERS OF A COMPANY OF INFANTRY. INCLUDING A SCHEME FOR PROGRESSIVE EXERCISES IN THE SUBJECT.

By Lieutenant E. K. MASSEE, Seventh U. S. Infantry.



IN the proper instruction of noncommissioned officers the reason *why* a thing should be done is not of so much importance as *how* and *when*, so, for the reason just cited, more satisfactory results can be obtained in the instruction if the subject be taught from a standpoint of practice rather than theory, and not extended to work of the officer but limited to duties which, in active service, would be performed by noncommissioned officers.

In the United States army we have no book for noncommissioned officers dealing with security and information, so that the indoor instruction should be in the form of lectures taken from our text-book, supplemented with such illustrations and questions as may seem fit. "The Service of Security and Information," by Colonel A. L. Wagner, U. S. A., is the authorized text-book, used in connection with the examination of officers for promotion, therefore I shall enter into no discussion of that subject, but will aim to confine myself strictly to giving what appears to me the best method of imparting to the class under instruction such parts of the text-book as refer to and can be understood by the average noncommissioned officer. For example: In the manner in which a patrol would reconnoiter a wood, I shall not give in this paper how a wood should be reconnoitered, for that is given in the text-book, but shall merely state that the class would be instructed how, meaning of course that the in-

structor would describe to them the manner which is described in the text.

The best time for this instruction is during the school season, set aside by the department commander, usually from November 1st to May 1st of each year, but any other time may be used, preferably such a time that a lesson indoors may be followed the next day by practical work outdoors. Indoor work should be about one hour in duration, while outdoor exercises should be from two to four hours.

The indoor instruction should be carried on in a room well supplied with blackboards, tables, chairs and such writing material as will be needed. The room should also be provided with a large topographical map of the post, reservation, or place where the company may be stationed. It would be best not to have more than one day's work inside without having a day or more of outside work, going on the principle that the average noncommissioned officer can better understand acts than words, and that two or more days' work inside without any outside exercises would tend to confuse him, while one day of instruction indoors, supplemented the following day by outdoor work, would tend to permanently fix the instruction in his mind.

In the course to be followed, the instruction of security and information should be divided as follows: Orientation and map reading, advance guard, outposts, patrolling, rear guard and combined exercises.

In the instruction in advance guard, the work should be limited to the work of the various portions of the advance party, and the flankers sent out from the larger bodies.

In the work in connection with outposts the instruction should be limited to the duties of sentinels and commanders of cossack posts, outposts, patrols, detached posts and pickets.

In patrolling the work should be limited to small patrols, and large patrols of not more than one section.

I should aim to keep the class so interested in its work that it will not get restless, and so vary the work that they will not feel weighted down with a lot of instructions they cannot understand.

I recommend the following as a schedule which may be used:

Division.	Indoor Work. Days.	Outdoor Work. Days.	Total Days.
Orientation and map reading	2	3	5
Advance guard	2	5	7
Outposts	2	6	8
Patrolling	4	10	14
Rear Guard	1	2	3
Combined Exercises	3	10	13
Total	14	30	50

ORIENTATION AND MAP READING.

Orientation being the art of determining the points of the compass, at any place where the observer may be, the instruction should begin in the recitation room with an explanation by the instructor, illustrating the various methods by which a man may orient himself.

Every noncommissioned officer should be provided with a watch and a compass, so that the two principal ways of orientation in the day time, viz: by means of the compass and the watch used with the sun, could be made so plain to them that each member of the class, when called upon could repeat to the instructor how he would orient himself. The method of orienting one's self by the map as a means should next be explained, and each member be required to show how, being at any particular point represented by the map, he would orient himself.

This indoor instruction should be followed by two or three days of outdoor work, the instructor going out with the class to different parts of the surrounding country and requiring the noncommissioned officers to orient themselves by the various methods explained inside.

The indoor instruction in map reading should include the conventional signs and symbols, use of scales and use of horizontal equivalents, then the class can be taken to some place represented by the map, orient by means of the map, and from that point notice carefully all features, natural and artificial, and notice the symbols representing it on the map; note the general direction of the roads and follow with the eye the outline as given on the map; pace off distances and compare the result with distances as represented

on the map, and observe everything which will be an aid to properly understanding a map, so that each one may act understandingly when a map of unfamiliar country is handed him for his information in connection with the work. The use of the map should be carried on through succeeding instructions.

ADVANCE GUARD.

The indoor work in this subject should be limited to a brief outline of the general principles of advance guard followed by an explanation of the distinct duties of noncommissioned officers. The instructor should show by diagrams the proper distances which separate the component parts of the advance party, their distance from the support, and the functions performed by each, and when this is thoroughly understood he should draw, on a part of the map representing open country, the position of a support, and have each member of the class mark on the map the proper position of the advance party, with point and flankers, and the position of the flankers sent out from the support.

The class should then be thoroughly instructed in the signals as given in the text-book, and such others as may be contemplated, so there may be no doubt that all the members of the company will employ the *same* signals in future work, and not be hampered by a varied system of signaling.

This is followed by exercises in the terrain, choosing, if practicable, the same part of the ground as was represented by the part gone over on the map. For this instruction the class should be divided into four parties, one representing the main part of the advance party, one the point and the remaining two the flanking groups. In case of a small class in attendance the groups may be filled up with privates until there are five men in the point, four in the part of the advance party following, and four in each of the flanking groups. The location of the support should be designated by a squad of soldiers, and the advance party and flankers made to keep their proper positions relative to the support, which moves along any desired route. The instructor should go where he can best watch the movements of the groups,

correcting such mistakes on the spot as he sees fit, or making note of the mistakes as they move along, and assembles them upon return for such criticism as he may have to give.

The same sort of instruction is then gone over on the maps and terrain, this time using uneven ground, the outdoor work in this being more extensive than in open country, as no two parts of uneven country afford the same examples for work.

OUTPOSTS.

The indoor instruction in outpost duty should consist in giving to the class a general description of outpost work, illustrated by diagrams, and then in giving them thorough instruction in the duties of sentinels, commanders of outpost patrols, cossack posts, detached posts and pickets, and the class should commit to memory the eight essential things which a sentinel should know, as given in the text-book.

In the outside work, a part of the class, under the immediate command of the instructor, could be posted as sentinels, their positions shown them, and their instructions given them, then the remainder of the class could visit them in the same manner in which a visiting patrol would visit the sentinels, and the noncommissioned officer on post should repeat his instructions and, in addition, report what has happened within sight of his post, after which the part of the class posted as sentinels could form a patrol with the remainder posted as sentinels. In this manner the class would become perfectly familiar with the duties of sentinels, and would be better fitted to ascertain in the future whether or not a sentinel was properly performing his duties. This same method could be extended for instruction in outpost patrols, cossack posts, detached posts and pickets, increasing the force by adding privates until there could be out at the same time the above mentioned posts and patrols, posted and patrolling as in active service, and this outside work should be continued until each noncommissioned officer thoroughly understands the outpost from the duties of a sentinel to those of a picket commander.

PATROLLING.

The instruction of the class in patrolling is the most important part of security and information, for in nearly every division of the subject it is his work as a patrol commander that a noncommissioned officer has to deal with more than any other duty. While the greater part of patrolling is taught by exercises in the terrain, there is a great deal which can be taught by means of patrolling on the map. For this purpose it is better to provide smaller maps so that each noncommissioned officer may have one in his possession, or in the absence of smaller maps, the large one may be used; in either case the work being begun by each member being given a certain location on the map and told to describe the ground in certain directions from it, or being given the work of explaining by what route he would travel from one point to another without being seen by a supposed enemy situated at a third point, or how he would march his patrol over certain ground when the enemy was supposed to be in a certain locality.

The instructor, before work is required on the map, should explain the formation and movements of patrols under varied circumstances, the different kinds of patrols with their purposes the orders which a patrol commander should know, and the inspection and instruction of the patrol, all of which the class must try to remember, but the last two parts of which it should learn verbatum. The instructor should go over the conduct of a patrol when reconnoitering the enemy, questioning of inhabitants, employment of guides, reconnoitering of cross-roads, heights, defiles, bridges or fords, woods, enclosures, houses, villages, cities and towns, and the enemy in position and on the march. The class should commit to memory the number of troops of the different arms which pass a point at a given gait in a given length of time, also the space occupied by the different branches of the service in different formations, as well as the signs of troops as shown by dust, and any other signs which will be of value. He should instruct the class in making out of reports in a proper manner, and if time admits, the making of a hasty sketch. All of which should be illustrated,

and each member of the class called upon to go over on the map what has been explained, and no field work should be given until each member is able to make out a proper report from data supplied by the instructor on the blanks supplied for the purpose.

In the exercises in patrolling in the terrain the greatest patience must be used by the instructor, and he should at all times remember that what may seem clear to him may be clouded to others.

It is best at first for the instructor to act as patrol commander, approach a place on the ground well fitted for illustration, explain how it should be reconnoitered, have the movement executed by the class and then, going back to the original place, turn the command of the patrol over to a member of the class and have him execute the same movement, then pass to the next feature of the ground and do as before, continuing such instruction until the members of the class all understand how to reconnoiter the varied positions and over varied ground.

After this, each noncommissioned officer could be given a small patrol, with specific orders to accomplish certain ends, and should, in the presence of his instructor, repeat to the patrol his orders, inspect the patrol, and give them such instructions as may be applicable in the case, then he should move out with his patrol, take up such formation as may be called for, taking into consideration the nature of the ground and the strength and position of the forces of the enemy, and send back at the proper time such reports of his or the enemy's movements, or description of the ground or sketch of same, as may be called for by his orders or necessitated by his movements or watchfulness.

The work can thus be extended through the duties of the commanders of small and large (not over one section) reconnoitering, exploring and expeditionary patrols, first over comparatively well known country, then over unknown and uneven country, first in the day time and then at night the latter including the finding of one's way at night by means of stars, moon, compass, or trail marked out in the day time.

REAR GUARD.

Instruction in rear guard work should be carried on in the same manner as advance guard.

COMBINED EXERCISES.

Work should now be taken up, combining all that has been taught in the various divisions of the subject, having the enemy represented by men in different colored uniforms, using the noncommissioned officers in practically the same capacity as they would be used in active service, and not hampering them with many instructions, but allowing them as great latitude as possible in carrying out the specific instructions which may have been given them, and judging from their movements, messages, reports and sketches, how well they have carried out the spirit of their instructions.

Having a force opposed to them will always stimulate them to better work, and, especially when one platoon of a company is working against the other in the field exercises a healthy rivalry will result which will be of the greatest benefit to all, and not only afford a certain amount of relief to the soldiers, from the monotony of their ordinary post work, but, in compelling each side to keep a better watch about them, will give the noncommissioned officers a better insight into the service of security and information, which is the object aimed at, and which is the reward of the instructor for his patience, skill, and painstaking efforts.

GENERAL YOUNG'S CAMPAIGN IN NORTH LUZON.

By Lieut. Col. GEORGE F. CHASE, Twelfth U. S. Cavalry.
Formerly Captain Third Cavalry.

The American cavalryman, trained to maneuver and fight with equal facility on foot and on horseback, is the best type of soldier for general purposes now to be found in the world. The ideal cavalryman of the present day is a man who can fight on foot as effectively as the best infantryman, and who is in addition unsurpassed in the care and management of his horse and in his ability to fight on horseback.—*President's message to Congress, 1901.*

NO attempt can be made in a short article to give a detailed account of the operations of General Young's cavalry brigade in Northern Luzon in the fall of 1899, nor to express any but the most general appreciation of the services of the officers and men engaged.

It is thought, however, that a short account should be made in the CAVALRY JOURNAL of these purely cavalry operations—operations the success of which was doubted by many of our best officers, but which it is believed were, in their execution, up to the best standard of rapid cavalry work of the Civil War, if they did not indeed establish a new standard for the rapid surrounding and pursuit of an enemy in an unknown region, amidst a strange people, regardless of the unprecedented difficulty of climate and country, and with complete abandonment of base, communications and supplies of all kinds. An attempt will be made, therefore, to give a general outline of the operations which resulted in a few weeks in the whole of Northern Luzon being overrun with cavalry after a series of running fights, mounted and on foot, often against troops well intrenched, and in the complete scattering of Aguinaldo's large army, the capture or destruction of many of his forces or much of his munitions of war, including his staff and family, while the dictator himself barely escaped, almost alone, as a fugitive through the moun-

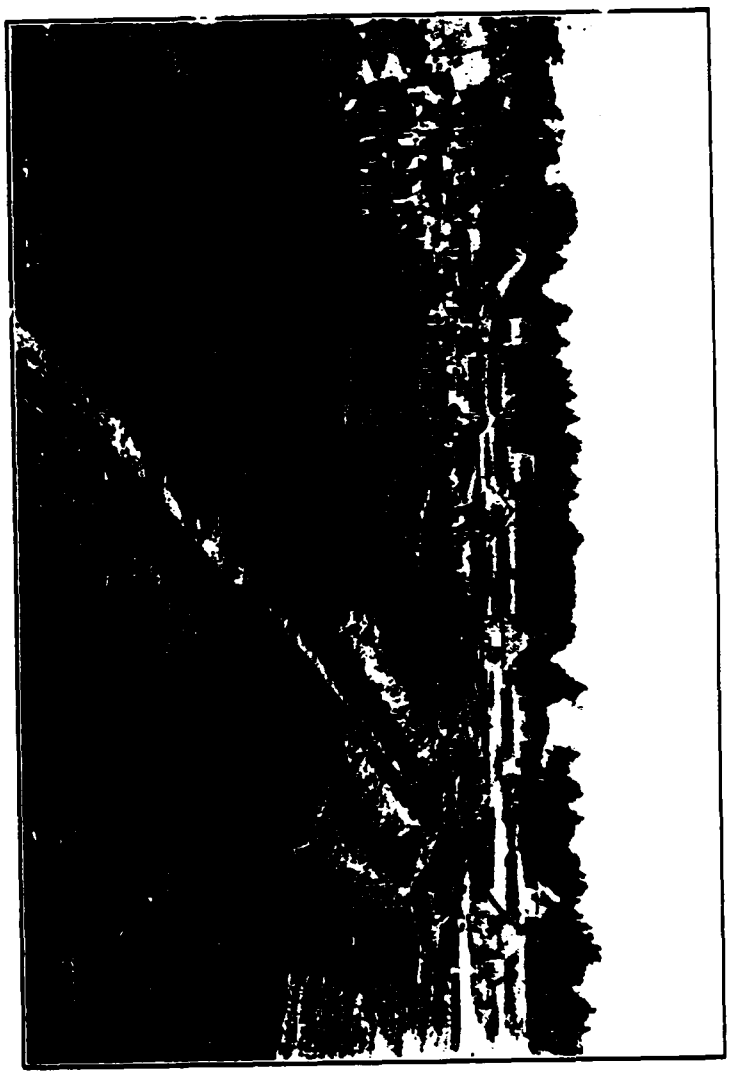
tains, his government completely destroyed, his prisoners released, and organized opposition to the American forces being at an end.

The city of Manila had been occupied by the American forces since its capture, August 13, 1898, and between them and the forces of Aguinaldo there had been open warfare since the attack on Manila of February 4 and 5, 1899. Outside of the city itself our troops had control of but little of the island, which was in the main occupied by the insurgent army of seventy-five thousand to one hundred thousand men. They controlled the whole of the southern portion of the island, their outposts being near Manila, which itself was in constant fear of an uprising, so that on the arrival of our cavalry the men, without waiting for their horses, were hurriedly taken from the *St. Paul* and occupied, from the night of October 4th until about October 14th, a line not more than three miles from the gates of the walled city, to resist any attack that might come from the south.

The insurgents had the entire northern portion of Luzon, their capital being at Tarlac, where Aguinaldo's large army faced the forces of General MacArthur, who occupied Angeles, about twenty miles distant. Angeles is on the railroad and but a few miles from Manila. The insurgents occupied also the extreme northern points, a brigade holding the Cagayan Valley, while they held about 5,000 Spanish prisoners in the extreme northwest, hoping for high ransom from Spain, and Gilmore and the other American prisoners were kept well out of our reach at Vigan.

It will be seen, therefore, that but a small portion of the island was controlled by the large American army upon the arrival of the cavalry. Our forces consisted mainly of infantry, with some field artillery, but one small squadron of cavalry having been sent to the scene of action.

The use of cavalry was questioned. It was argued that horses could not be transported so far, that they could not stand the climate, that there was no way to forage them, and that in any event the narrow and muddy roads, the swamps, rice fields, dense forests and tropical jungles would prevent mounted troops from being effective. A distinguished army



TRENCHES NEAR GULF LINGAYEN.

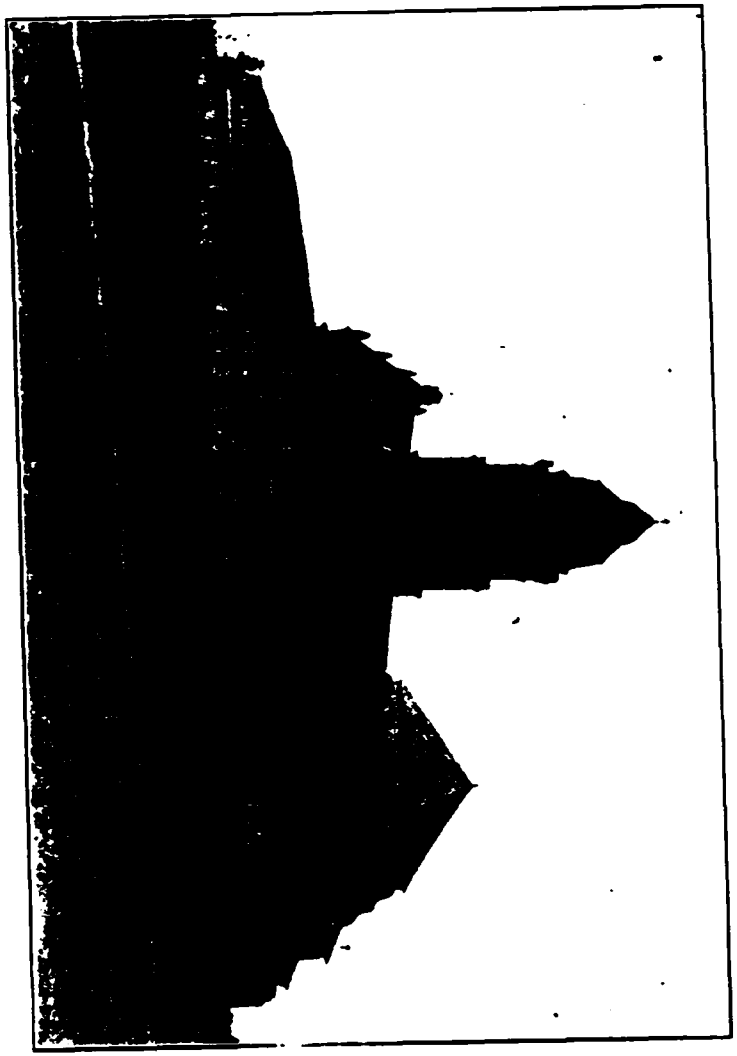
officer said, "You had better send ducks than cavalry to the Philippines."

General Young, on the contrary, maintained stoutly that cavalry of all troops would be most effective in the destruction of Aguinaldo's power, saying, "If four millions of people can live there, if cattle, horses and buffalo can live there, our cavalry can take care of itself," adding, "Give me two regiments of cavalry with pack transportation, and I will march from one end of the island to the other and break the back bone of the insurrection." He was strongly supported in his conclusions by those of us who had seen service under all climatic conditions in the United States, with and without forage. We had seen horses subsisted upon the native grasses of the West for months at a time in active service; we had seen them thrive upon cottonwood bark and brush after the destruction of the grasses by fire, and we had little fear as to the capacity of the cavalry to sustain itself in this new field of operations.

The horses of the Third Cavalry were shipped from Seattle on the *Garonne* and the *Athenian Victoria*, and I was directed to take charge of their loading and shipment. We sailed from Seattle August 24, 1899, and finally after some difficulties too numerous to mention here, arrived in Manila Bay October 3d, having lost five out of our thousand horses. We traveled via Dutch Harbor and Kobe, unloading our animals at both places; another time they should be taken direct without any stop. The Fourth Cavalry embarked at San Francisco and arrived at Manila about the same time.

General Young's brigade was made up of the Third and Fourth regiments of cavalry, the Macabebe scouts under Batson, Ballance's battalion of the Twenty-second Infantry, Castner's scouts and a mountain battery.

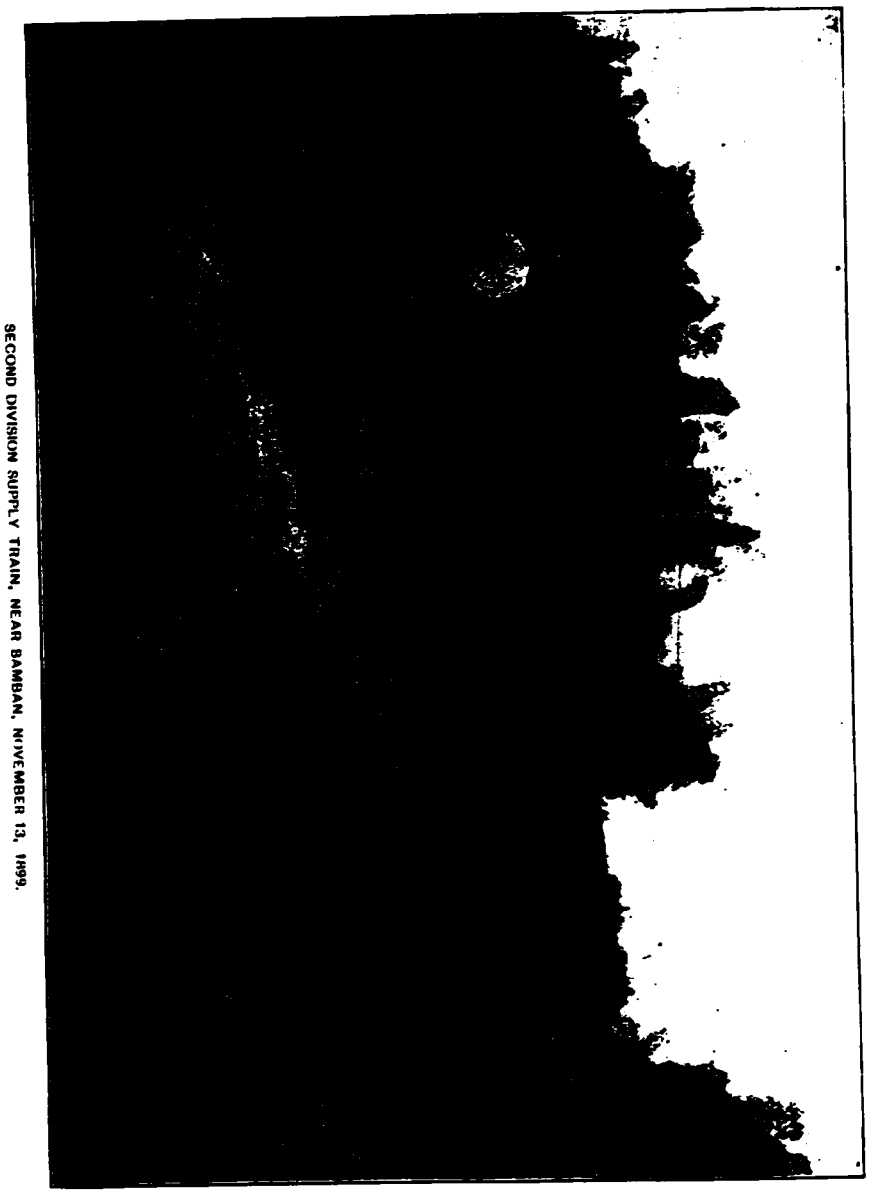
The plan of campaign was for the cavalry to turn Aguinaldo's left flank and to block the passes in the mountains leading over into the Cagayan and other valleys; General Wheaton's brigade was to go by transport from Manila to Dagupan and to form a junction with Young at Tayug, while MacArthur was to advance along the line of the railroad to the north.



CATHEDRAL AT LINGAYEN.

Young's troops occupied Arayat, and it was determined to move from there to San Isidro, and establish a base of supplies, shipping provisions from Manila to Calumpit by rail, thence up the river by cascos drawn by small tugs. Accordingly camp was broken at Arayat on October 17th, and the head of the column marched to Cabiao. Moving from Cabiao on the 18th we encountered strong opposition in front of San Isidro which was captured after a seven-hour fight and held by our troops. Here it was determined to move further up the Rio Pampanga and establish a temporary base at Cabanatuan. On the road the enemy were encountered strongly entrenched at Taboatin River. The position was attacked by Ballance's battalion and turned by Troop "D" Third Cavalry and Castner's scouts. The bridge over the Taboatin River had been destroyed by the enemy, which fact we had learned the day before by a military reconnaissance which I had made. I was ordered to cross, but found owing to deep mud and steep banks it was impossible to do so near the road. Sending out small parties to seek a possible crossing, one was found two miles above, and we so effectually turned the position that the enemy threw down their arms and escaped in the jungles between us and the main force. From Santa Rosa the command moved into Cabanatuan without resistance. While here it was learned from a captured letter that Aguinaldo was already getting restless and that he had ordered a large supply of war material to Bongabong, a point eighteen miles north and east of Cabanatuan. Aguinaldo's intentions were to concentrate war material at Bongabong, as he had stated "The American troops will never go there."

On November 2d, General Young ordered my troop of the Third Cavalry, and T. R. Rivers' troop of the Fourth, to march against Bongabong, and capture it if possible; if not, to occupy the insurgents and send for reinforcements. On the evening of the same day, after a forced march and swimming two rivers, we completely surprised and captured the town and destroyed a large quantity of powder, lead, reloading tools and insurgent uniforms, twenty insurgent cavalry horses and two Filipino flags, which General Law-



SECOND DIVISION SUPPLY TRAIN, NEAR BAMBAN, NOVEMBER 13, 1899.

ton said were the first taken in battle. It was one of the many side trips that told heavily on my horses—three of them died the next day. It was not thought of sufficient importance to hold this point, and the troops returned to Cabanatuan.

Here General Young determined to block the passages leading from Tarlac to Bayombong which Aguinaldo had determined on as his new capital. He sent his scouts and some troops of the Fourth Cavalry to occupy Aliaga and Talavera. The former place was captured after considerable resistance, the latter after light resistance on the part of the insurrectos. Pushing north from here, General Young's troops next occupied San Jose. From here he despatched a portion of the Fourth Cavalry to Carranglan to the northeastward, sending Colonel Wessels with a portion of the Third Cavalry to occupy Lupao. He himself went to Lupao, and pushed on to Humingan and through San Quintin and to Tayug, taking with him the Macabebe scouts and some troops of the Third Cavalry.

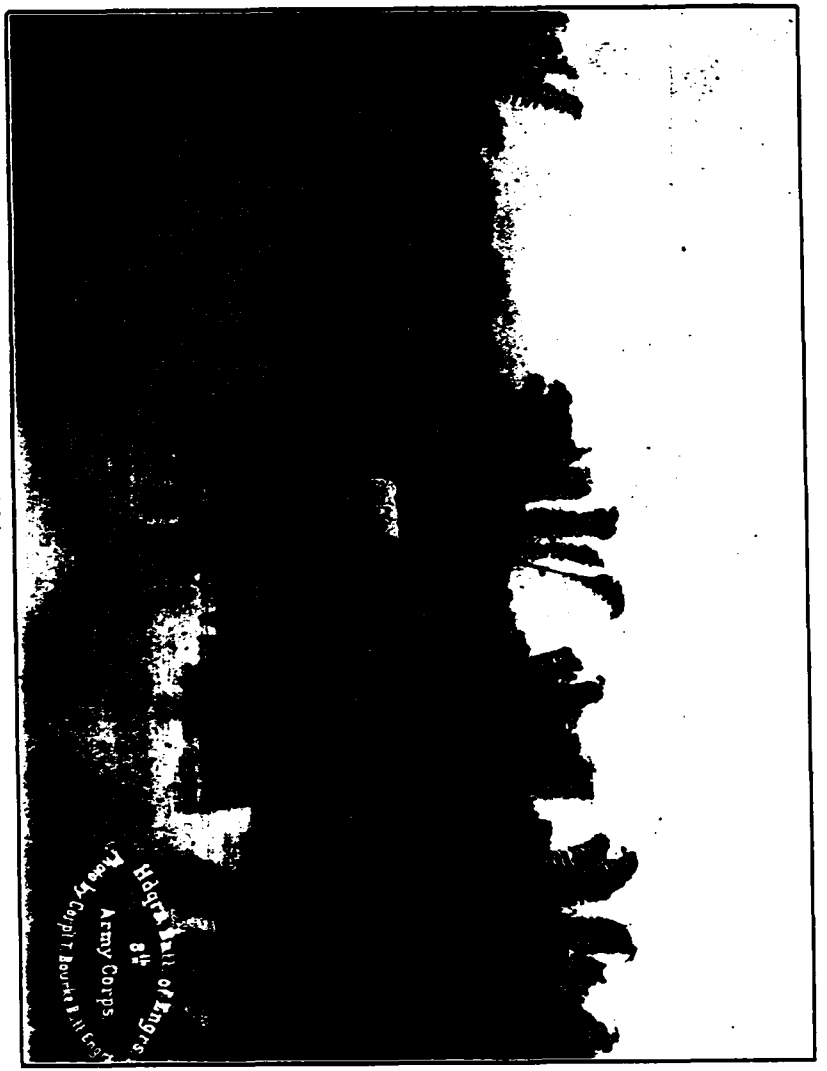
The cavalry had now completely blocked Aguinaldo's passage to the east and northeast and our advance parties were almost in his rear. General Young did not find any of Wheaton's forces at Tayug, at which place he and Wheaton were to connect, but at Tayug he captured another letter written by Aguinaldo himself indicating that his treasure and certain valuables would be sent to St. Nicolas and over a mountain trail to Bayombong. Troops were pushed out to San Manuel and Binalonan and a troop dispatched to capture the treasure. One hundred thousand dollars in money were taken and added to the large quantity of stores captured at Tayug on the night of November 12th.

It was learned at Tayug that Aguinaldo with a large force was at Urdaneta, and General Young decided to attack him without delay with the Macabebe scouts, the mountain battery and my troop of cavalry, having sent two troops the day before to reconnoiter the position. At Asingan, however, he learned about noon of the 13th that Aguinaldo had evacuated Urdaneta and gone north in the direction of Pozorrubio. . Thinking that Aguinaldo had changed direction and

FERRY AT SAN ISIDRO OVER RIO CHICO.

gone to San Manuel and would proceed possibly to St. Nicolas in his endeavor to get to the eastward, General Young sent my troop to San Manuel, with a view of intercepting the insurgents should they have taken that road. We found that the insurrectos had not been at San Manuel and had not therefore passed to the east. We immediately pushed on west to Binalonan, where two other of our cavalry troops under Major Swigert were found, and where we heard again that Aguinaldo had gone in the direction of Pozorrubio. Though our horses were very jaded and the men very tired, General Young decided to proceed at once for the attack. The guide led us, however, on the wrong road, and we went to Manoag instead of Pozorrubio. Here six companies of the enemy were attacked and routed by three troops of cavalry mounted, a large amount of ammunition and baggage being captured.

From this point two troops of the cavalry were sent to Pozorrubio on the morning of the 14th, while Young with his escort went to Tayug, hoping to get his reinforcements up and move forward against the main army of Aguinaldo, which he had reason to believe was now aiming for the road leading to the west coast of Luzon. The Rio Agno had risen so that he found it impossible to cross it at Tayug and the next day he marched back to Binalonan. Here it was definitely learned that Aguinaldo had passed through Pozorrubio and was moving north. General Young determined to follow and proceeded by the trail to Alava, where he arrived on the night of the 18th. He found at Alava a large number of abandoned carts, the animals having been taken out and used as pack animals to transport Aguinaldo's baggage through a mountain trail leading to Tuboa. We pushed on from Alava over this trail, learning at Tuboa that Aguinaldo with his escort had gone to Aringay. He was therefore now on the main high road along the west coast. We immediately followed, and found Aringay strongly fortified, the trenches being occupied by insurrectos on the opposite side of the river. The Macabebe scouts deployed immediately making a frontal attack, supported by my troop, dismounted, and we drove the insurrectos from the trenches,



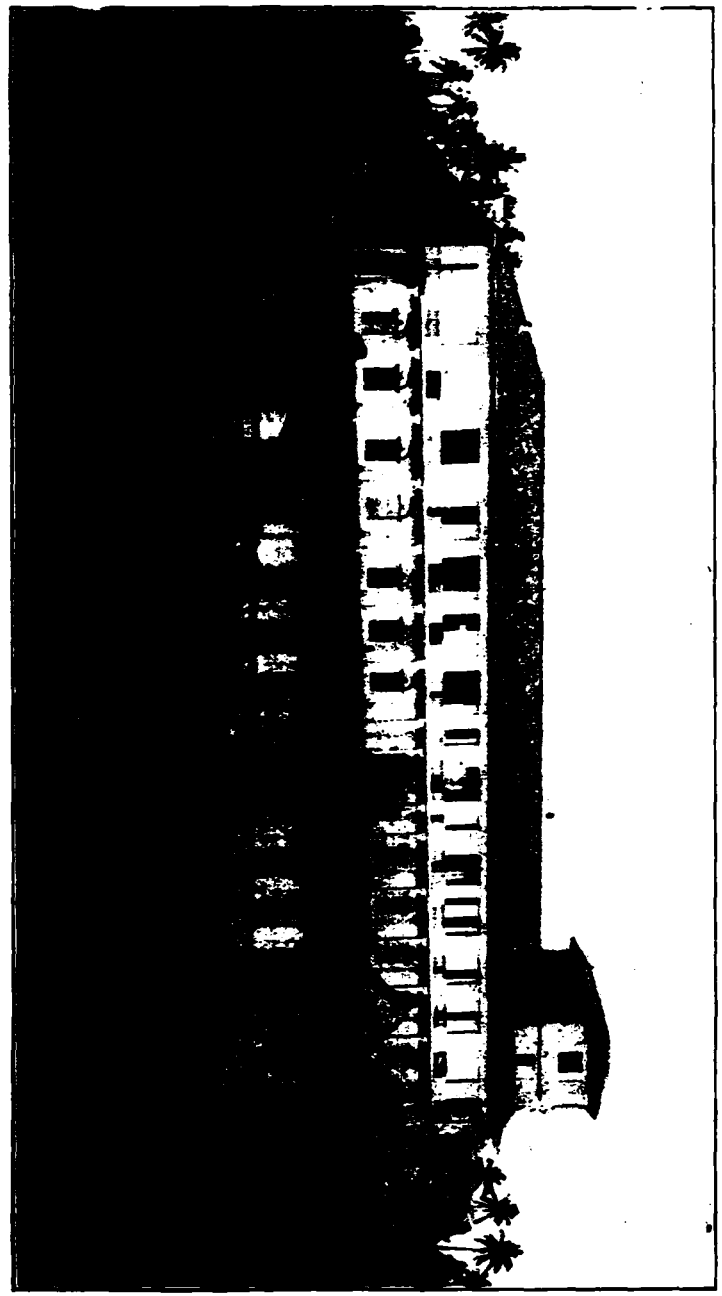
FERRY AT ARAYAT.

taking the town of Aringay at nine o'clock on the night of November 19th. Here we met with a serious loss in the wounding of Lieutenant Batson, who commanded the Macabebe scouts.

We had been long without rations, clothing and medical supplies, and were particularly in need of horseshoes. Many of our horses had been left behind on account of their feet being worn out. San Fernando therefore become of first importance, so that on the morning of November 20th orders were issued for the movement northward on the main road leading up the western coast in the direction of San Fernando. During the morning the gunboat *Samar* was sighted and communication had with her by signals. The Macabebe scouts were leading on the road until the sighting of the gunboat, when it was ordered that my troop of the Third Cavalry should take the advance.

At Baoang, some six miles from San Fernando, an insurgent trail turned to the eastward leading up into the mountains. The Macabebes were ordered to halt at Baoang, which was found to have been heavily entrenched by the enemy but the trenches evacuated. A portion of the insurrectos had taken the trail referred to and a portion had gone up the road to the northward. The gunboat *Samar* anchored off Baoang. This left a small portion of two troops of cavalry, sixty-four men in all, with one officer, to proceed against San Fernando, without hope of support or reinforcement.

It was known that San Fernando was heavily entrenched. I learned with the aid of field glasses that the trenches were three miles distant and that they were oocupied. I was determined to attack regardless of the difference in numbers, strength and position. The main trench which crossed the road directly in front was 125 yards in length. The insurrectos stood shoulder to shoulder prepared to meet the attack. The cavalry command was formed in column of fours mounted and moved directly against the trench. At 1,500 yards the enemy opened fire with Mauser and Remington rifles. The column moved up to within 400 yards, dismounted to the right to fight on foot, and a party was sent to flank the enemy's position. They then retired to the next

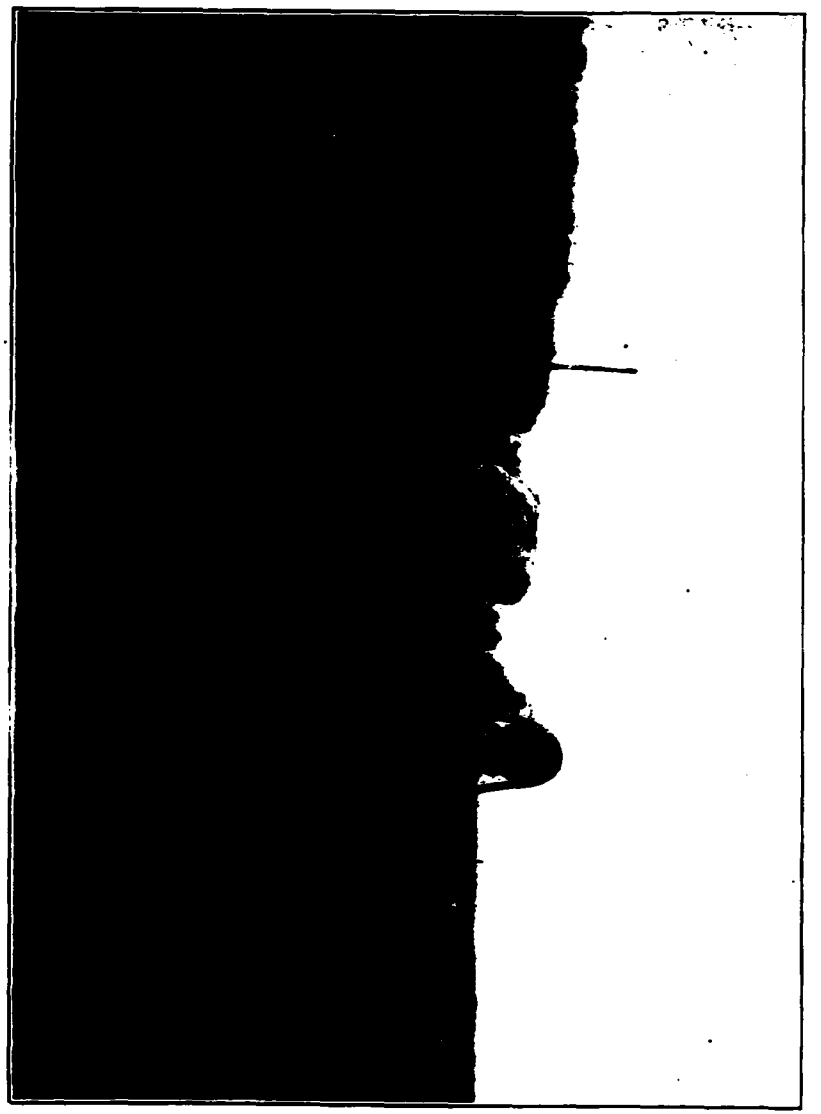


SECOND DIVISION BASE HOSPITAL, DAGUPAN, LUZON.

trenches on the hills which commanded the approaches to the city. Having carried the first trench, the troops under a rapid fire of the enemy advanced against the newly occupied trenches. After an engagement of fifty-five minutes the enemy were driven from the town and it was taken possession of by the cavalry, while the gunboat *Samar*, hearing the firing, came and anchored in the little harbor, and we received from her the first rations we had seen for three weeks. It was learned from prisoners that there had been 400 insurrectos in the trenches of the town, commanded by Gregoric Del Pilar. The scouts who had followed the trail up into the mountains returned to San Fernando on the 21st.

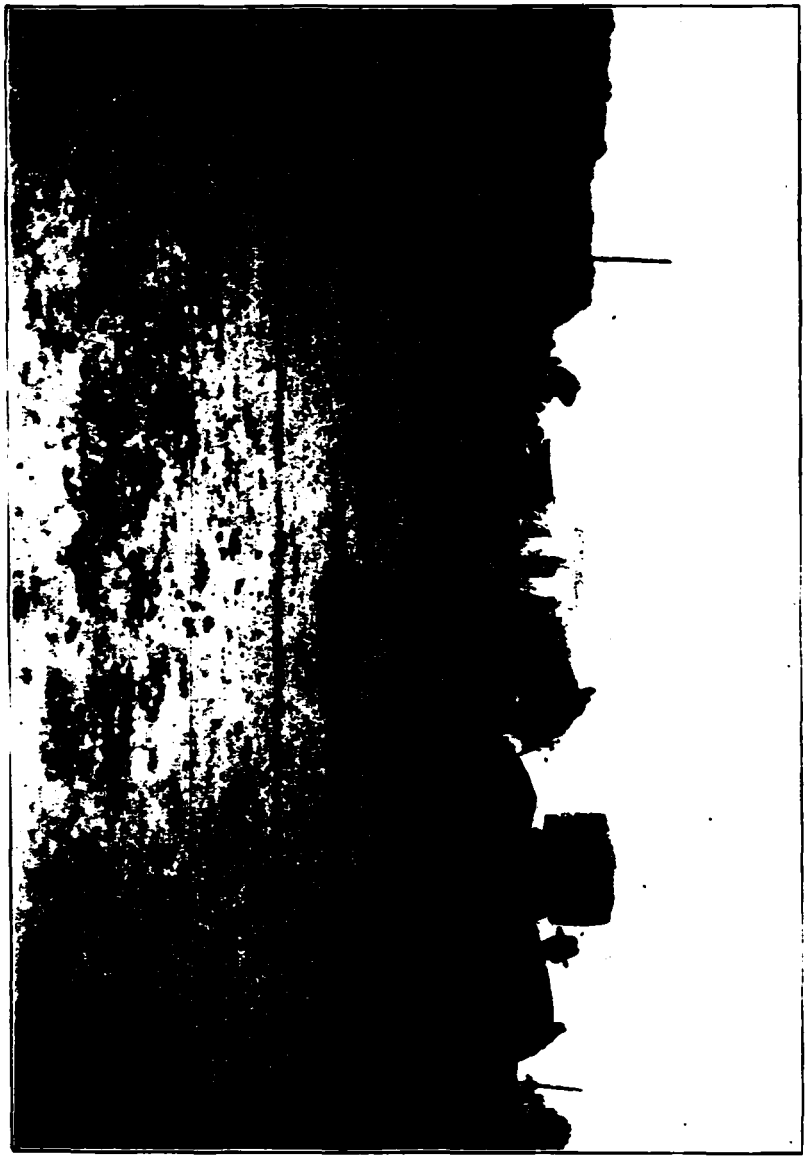
The command remained at San Fernando until the 23d, when it moved forward to Namagacan. Through the constant endeavor to obtain information as to the whereabouts of Aguinaldo and his forces it was learned that he had separated his troops and had taken a portion as his own command and had gone to Cervantes, to the northeast, and that General Tiño with the rest of his command had proceeded northward on the sea coast road with a view of holding the Spanish and American prisoners.

General Young now decided to interpose between Aguinaldo at Cervantes and Tiño who had gone in the direction of Banguet. The trail leading in the direction of Cervantes was said to be impassable for horses, and it was therefore determined to send in this direction, with a view of capturing Aguinaldo, and also to prevent a junction between Tiño and him, an infantry battalion under Major March, that had joined us en route. The cavalry, consisting now of two troops of Major Sweigart's squadron and my troop, which was the escort to the commanding general, with a battalion of infantry commanded by Lieutenant-Colonel Howze, moved northward on the main road and occupied Sevilla on the 27th. Candon was occupied next on the 28th, 29th and 30th, and up to December 2d. On the 3d of December we moved to Narvacan where it was learned that Tiño's main force lay strongly entrenched, defending Tangaden Mountain over which the trail to Banguet lay.



PACK MULES, LOADED—REAR VIEW.

On the morning of the 4th of December the march was taken up and the trail followed until we came to Tangaden which we found strongly fortified and defended by one thou-, sand of the enemy. Preparations were at once ordered for an attack. A battalion of infantry sent to the left, a troop of cavalry to the right, dismounted, and the escort troop ordered to attack in front. After several hours of hard climbing, Penn's battalion of the Thirty-fourth Infantry succeeded in carrying the left flank, gaining the enemy's rear. A general advance was made and the enemy driven from their position and the trenches taken possession of by our troops between 7 and 8 o'clock in the evening. This resulted in the release of a large number of Spanish prisoners which were held in the vicinity of Banguet. Colonel Hare, of the Thirty-third Infantry, had joined us during the battle, and he and Colonel Howze of the Thirty-fourth, with a battalion of each of their regiments, took the mountain trails, pursuing Tiño and the American prisoners, while General Young and his cavalry moved down to Vigan. After occupying Vigan, obtaining supplies, and having our horses shod, Sweigart's squadron was pushed on to Laoag, one troop advancing as far as Bangui. During this time Captain McCalla, of the Navy, had taken a number of his ships and appeared in front of Aparri and demanded its surrender. Aparri surrendered without resistance, delivering to Captain McCalla 600 stands of small arms and a number of modern breech-loading cannon. Castner's scouts and Bachelder's battalion of infantry in the meantime had crossed the mountains and moved down the valley of the Cagayan, driving everything before them. Howze and Hare pushed into the mountains and succeeded after long and arduous marches in releasing Gilmore and the American prisoners. March, in the mean time had pressed Aguinaldo closely, attacked his escort and killed his escort commander, Gregoric del Pilar, captured General Conception and his staff, and finally on December 25th, a number of Auginaldo's staff surrendered, delivering into Major March's hands Mrs. Aguinaldo and a number of prisoners.



PACK MULES, LOADED: SIDE VIEW.

Aguinaldo's army having been scattered and driven from the country, and he himself having escaped to the mountains as a fugitive almost alone, the whole of Northern Luzon was now in our hands, and the cavalry had overrun the land that two months before had been occupied by a large insurgent force. Abandoning rations, medical supplies and all hope of reinforcements, the troops had halted at nothing. Swimming rivers, attacking intrenched forces regardless of numbers, they carried the well known flag of their general always forward, no matter what were the privations or the difficulties. Aguinaldo's government having been completely destroyed, his Congress and Cabinet having been captured or dispersed, his treasury and printing presses taken, the military Governor General of the Philippines opened to the commerce of the world the ports of North Luzon, which had, previous to the arrival of the cavalry, been closed for three years; and he issued on January 1, 1900, a proclamation declaring organized resistance to the United States at an end, and directed the organization of civil government in the region which Aguinaldo had so recently held.

It is believed that history may be searched in vain for results so farreaching, obtained so promptly and under such trying circumstances as those following the arrival of the cavalry in Manila.

The campaign in North Luzon is one of the many recent illustrations of the effectiveness of cavalry in modern war, where, owing to the enormous range and precision of modern weapons, front attacks have become impossible, and rapid flanking or counter-flanking movements, with troops able to fight on foot or mounted, have become more and more absolutely essential. The campaign of the English in South Africa suffered from the need of cavalry, and it was only after Lord Roberts had insisted on having an adequate mounted force that he was able to make his rapid and unchecked advance.

We may draw certain conclusions from the operations of General Young's cavalry in the Philippines which will in future aid in the organization of armies:

1st. 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.

2d. 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, carrying his rider over rivers and through mud and jungle long after the smaller ponies had given out.

3d. The superiority of cavalry as a rapidly moving force, capable of fighting on foot or horseback as the conditions demanded, was clearly demonstrated, as it moved with a swiftness and effectiveness combined that could not have been equaled by any other force.

4th. 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.

LOUISIANA PURCHASE EXPOSITION.

By the Department of Publicity.

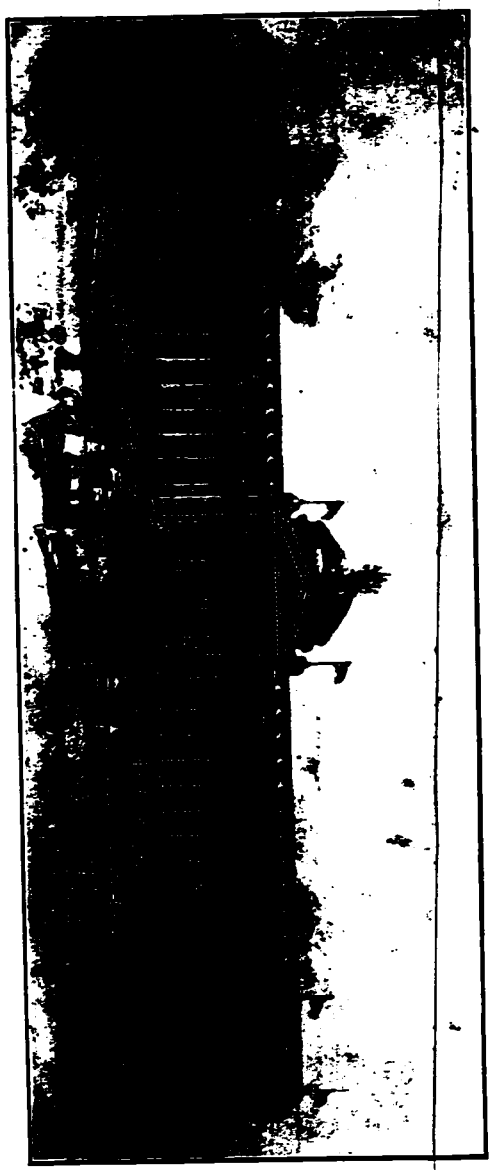
THE Louisiana Purchase Exposition will open April 30th, and there is every promise and indication that the government exhibits, particularly those to be made by the War and Navy Departments, will be completely installed by that time.

These two departments promise the public many interesting features. In many respects it will prove a surprise even to those familiar with the profession of arms. Actual service conditions in the army and navy will be the main feature, thus carrying out the idea of this World's Fair which has as a keynote, education, to the end that the people of the United States may be instructed in the manner in which their money is spent for appropriations.

The Navy Department is preparing to show in the Government Building the most complete exhibit of the workings of the United States navy ever presented at an exposition. A battalion of marines in a model camp on the ground will supplement this exhibit.

One of the interesting features of the display to be made by the army will be a battery of the great twelve-inch disappearing guns employed in coast defense, which are mounted near the Government Building. Mortars of the same caliber are also to be seen. This exhibit will be practically a section of a fort such as the government has been building in recent years for the defense of New York City at the upper end of Long Island Sound and on Sandy Hook. These guns will be operated daily, so far as their general mechanism goes, by a detachment of artillerymen.

An exhibit is to be made by the Navy Department to show the workings of this new maritime power. Perhaps



UNITED STATES GOVERNMENT BUILDING.

The approximate cost of the United States Government Building is $350,000. This great building is 761 feet long, with central and end pavilions 250 feet long. The building between the pavilions is 175 feet wide. A dome ninety-three feet in diameter is a feature of the roof. The interior is free of columns.

its most important exhibit will be a sectional portion of an up-to-date warship, which will show the vessel complete from the bow back a distance of 115 feet, which will carry it to about the first smokestack. It is not the intention to have the reproduction of any particular type of ship, but it will contain features peculiar to all those of the most modern design. The upper and main decks will be shown and visitors will be permitted to view ammunition rooms, engine rooms, and even the stokehold. They will see a modern captain's cabin and his office. They will enter a ward room, and be shown how the commissioned officers of the navy live while at sea, then the steerage, where petty officers live, and after that inspect the hammocks in which the men sleep. Ship's galleys where the food is cooked, will be open for inspection, and so will the dispensary, the sick bay and the floating hospital. The latest type of water-tight doors, which are operated by pushing an electric button, will be seen in operation, and also naval guns of different calibers, the largest of which will be ten-inch breech-loading rifles in modern balanced turrets.

Next in importance to the model will be the exhibition hourly, while the Government Building is open, of biograph motion scenes illustrating the life and duties of the crews on United States naval vessels.

The War Department has also planned to show how arms and ammunition used by the United States troops are manufactured. To do this, a small sectional plant has been established which will show the process of making gun-barrels for small-arms, and also a cartridge-making machine which will turn out gun-cartridges daily so that the public may witness all points in the process of manufacture except the actual loading of the cartridges.

The daily life of soldiers in all branches of the service will be illustrated in the large camps that are to be maintained in the northeastern section of the fair site. There will be stationed all arms of the service. The daily routine of army life will be observed, and a feature will be the daily dress parade. It is proposed to change the different commands every two or three weeks during the Exposition

EDUCATIONAL BUILDING.

The Educational Building is of the Corinthian order of architecture, and cost $310,380. While not the largest in area, its position makes it one of the most conspicuous buildings in what has been called the main picture of the Exposition. The building fronts 525 feet on the main thoroughfare of the Exposition.

period so that opportunity may be afforded to as many army officers and men as possible to be present at the fair.

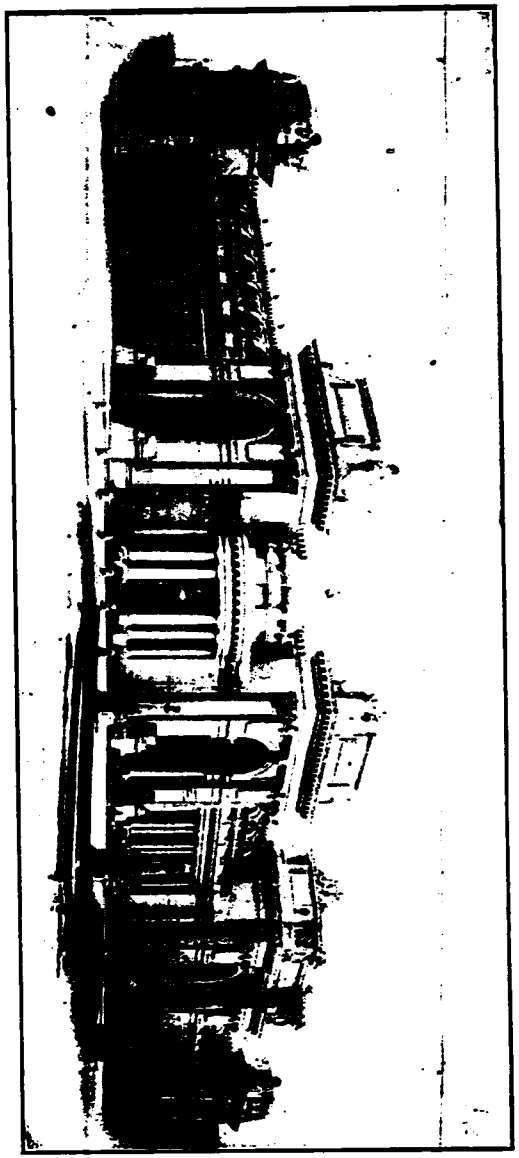
An extremely novel display to be made hourly by the Navy Department while the Government Building is open will be the biograph already referred to. By the means of slides, which have been in process of making during the past year, scenes illustrative of life and duties of crews on U. S. war vessels will be thrown on a twenty-foot canvas. Some of these were taken during the maneuvers off the coast of New England and others on foreign shores. They show gun exercises, the method of equipping landing parties, boat races, fire drill, and assembly for quarters and general muster. In one of these pictures a ten-inch gun is shown at the instant of its discharge, and in another a rapid-fire gun is shown in operation.

By an interesting arrangement visitors to the Exposition will be able to tell each day the exact location of all the men-of-war of the U. S. navy. This is made possible by a map of the world, 8x20 feet in dimension, on which will be plainly marked the principal maritime ports. The ships of the navy will be represented by miniature models, and their positions will be changed from day to day upon the receipt of cable advices.

As the levee construction is under the direction of the War Department, an exhibit will be made of these modern dikes which prevent the inundation of low-lying farm lands during a flood season, and this display will be of peculiar interest to people of the Middle West, who are anxiously awaiting action by Congress for the further improvement of the great interior waterway.

The new buildings of the Naval Academy at Annapolis, now being constructed at a cost of $10,000,000, will be shown by models in miniature, and a collection of photographs will show these buildings at different stages of construction, and also serve to recall memories of the old Naval Academy.

With the assistance of the Smithsonian Institution, the War Department has prepared a unique collection of weapons of war, which will include every known weapon of offense and defense, from the days of rough bludgeons and stone



LIBERAL ARTS BUILDING.

The Liberal Arts Building is built of staff. Its contract price was $475,000. Although following the prevailing style of architecture of the Exposition—the Renaissance—it adheres very closely to classic lines. The long facade, especially, shows a magnificent entrance, almost pure Corinthian.

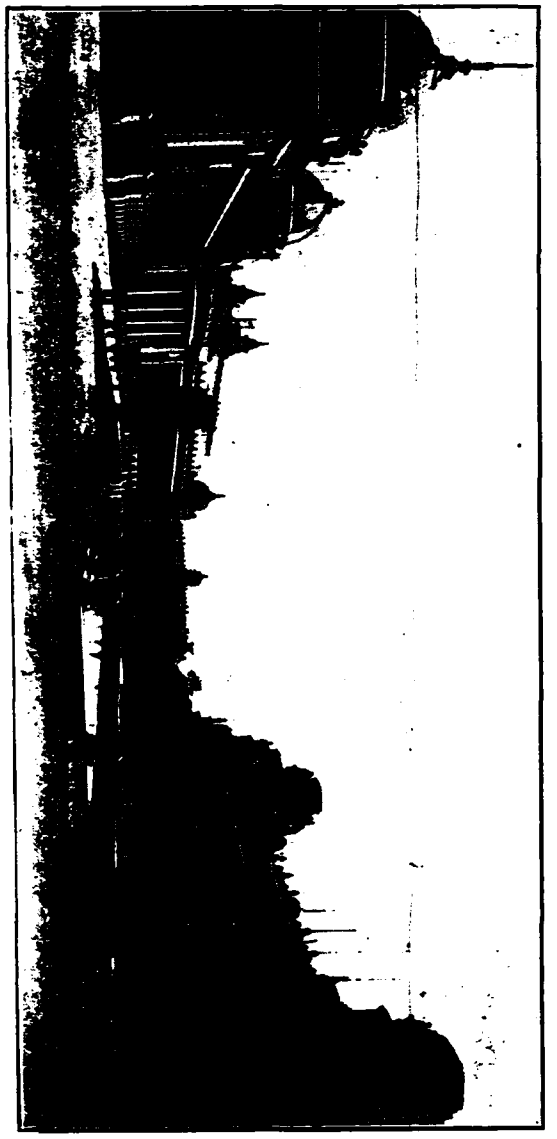
battle-axes to the latest improved repeating rifles, rapid-fire guns, and keen-edged side-arms.

It is expected that during the season the cadet corps of the United States Military Academy will be encamped upon the grounds. The naval cadets from Annapolis are also to enjoy the privileges, provided the government decides to send them, which at this writing is deemed quite probable.

In addition to the cadets from the various schools, uniformed bodies of men from a number of fraternal orders will occupy the barracks, which are under construction on the grounds east of the Olympic Field and Arena and immediately south of the space allotted to the use of aereonauts. The building will be two stories high, perfectly ventilated, and provided with baths. Near by is a large parade ground. In the vicinity is a big military restaurant, where the cadets may obtain excellent meals at a cost of twenty-five cents, eating in long mess halls and in true soldier style.

The plan includes also the encampment of adult military bodies, such as National Guards; but the greatest interest centers in the cadet corps. Among the assignments for cadets already made is the last week of May, for the Western Military Academy of Upper Alton, Ill., Colonel A. M. Jackson, 128 cadets. From far-off New Mexico will come 130 cadets, in three companies, from the New Mexico Military Institute at Roswell, for the first two weeks of June. There will be a band with this corps. Prof. Sidney P. Smythe, of St. John's Military Academy, Dalafield, Wis., will bring his corps for the week beginning June 13th. From the 10th to the 18th of the same month seventy-five cadets from St. John's Military School at Salina, Kansas. The Rev. R. H. Mize is at the head of this institution, and there is still another of that name at Annapolis, Md., to which is assigned the days from June 2d to 12th. Major William A. Thompson, United States Army, will be in command of the 140 cadets.

Four hundred cadets will come from the Mississippi Agricultural and Mechanical College, to begin their encampment June 3d. Prof. J. C. Hardy, president of the college, will be in charge.



ELECTRICITY BUILDING.

The Electricity Building cost $990,000. It has a frontage of 650 feet, and is located on the main central avenue, forming one of the leading elements of the main Exposition picture. It contains 392,000 square feet of floor space. An extensive balcony sweeps around four sides of the building, supplying 100,000 square feet of additional space. One hundred and eighty-five tons of iron and steel were used in its construction.

VARIED INDUSTRIES BUILDING.

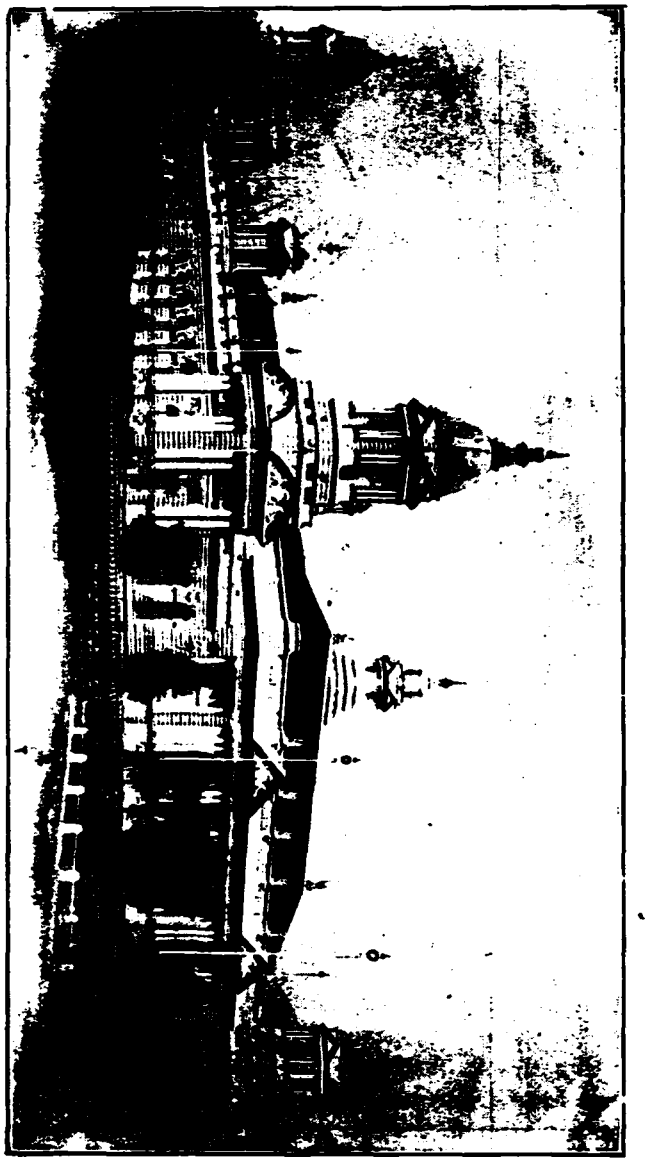
The Varied Industries Building is a magnificent structure on the outer perimeter of the main picture of the Fair. It cost $950,000. The building presents a facade of 1,200 feet, giving 636,500 feet of exhibition space, all on the ground floor.

From the Culver Military Academy at Culver, Indiana, Colonel A. M. Fleet will bring a fine body of cadets, with their excellent band, to encamp from May 23d to June 6th. Kansas Wesleyan College at Salina, Kansas, will send its corps June 6th, under command of Major E. J. Laird. The Southern Normal University of Huntington, Tennessee, Major Frank W. Hess, is assigned for the ten days following June 27th. The corps from the State College of Kentucky, at Lexington, will come a month earlier, 240 strong, in command of Captain George L. Byroade, United States Army.

The largest cadet body thus far assigned a date is that of the Virginia Polytechnic Institute, at Blacksburg, Virginia. There are 600 youths in this organization. Colonel J. S. A. Johnson is in command. They will be in camp from June 1st to 12th.

One of the most picturesque military organizations to occupy the World's Fair barracks is that of the Ninety first Argyle and Sutherland Highlanders, from Hamilton, Ontario, D. H. Edwards commanding. A band of forty musicians and ten genuine bagpipers will accompany the troops.

The man who is arranging for these encampments has the distinction of having served longer as a volunteer soldier of the Civil War than any other man in the service. He is Colonel E. C. Culp, secretary of ceremonies for the World's Fair. Colonel Culp enlisted April 17, 1861, in the Twenty-fifth Ohio Regiment, and served continuously for five years and three months as a volunteer. He is enthusiastic for the success of the cadet encampment plan, which is something entirely new in exposition enterprises.



PALACE OF MACHINERY.

The Palace of Machinery is 525 by 1000 feet. The architectural features are its many graceful towers. The cost of this palace was $511,000. The great power plant, developing nearly 40,000 horse-power, is situated in the western end of the building.

CAVALRY MACHINE GUNS.

By Lieutenant CESBRUN-LAVAU.

Translated from the Revue de Cavalrie,
By Captain CHARLES CRAWFORD, 20th U. S. Infantry.

THE cavalry is exclusively a "horsey" branch of the service, and it would be strange and unfortunate if it were otherwise. The pride of French cavalry in using shock action only is too commendable to admit of the question of curbing the dash so inherent in it and so necessary to the success of arms. For the purpose of maintaining its *esprit* and privileges, it was given in succession those weapons appropriate to the needs of the time for the purpose of opening up a road in spite of obstacles until then unknown. At first the musketoon, then the carbine, then the divisional artillery, came to the aid of cavalry in solving the problem of motion to the front.

Now then, is modern cavalry well enough armed for future fighting? The horse has been discussed from every standpoint. We have had thorough investigation of the saber, the lance and the tactical employment of cavalry; but not so thorough, perhaps, have been the discussions of cavalry firearms, the importance of which continues to increase as conditions change; and when we consider equipments we must always bear in mind that this part of the equipment will remain cavalry equipment, and will put no restraint upon the normal development of the arm.

Machine guns have recently been issued to the cavalry of several foreign countries, and we are thus led to inquire what would be the best course for us to pursue with regard to them. The idea is not a new one; such is the lightness and automatic action of the later patterns of these instruments that they are now able to perform the greatest service for cavalry by simplifying and strengthening the dismounted fire action, thereby enabling the cavalry leader to keep mounted and in readiness for movement almost his entire effective strength.

The progress in Europe of the machine gun question has been exceptional; and we will be very disagreeably surprised some day if we find ourselves facing these instruments not provided for in our tactics—instruments which are the perfection of mechanical art, are wholly practical, not for balloon fighting nor for gold lace exhibition work, but for modern cavalry fighting, and of the advanced twentieth century kind.

The development of machinery goes on continually, while the horse and the man are not without limits in their approach toward perfection. We are forced then to face a future which has hard trials for our horses and puts us in quest of a new weapon of war which meets our needs. Because in 1870 the machine gun in France did not perform the service that was expected of it, we concluded at first to abandon it. Neglected for a long time, little by little it came into fashion again, completely changed it is true, reduced in size, lightened and so perfect that every one wants them now.

The German cavalry made the most skillful use of machine guns during the last maneuvers. Sections of them took part in our own evolutions at Loiret in 1902. The question deserves special study, and is of pressing interest to the cavalry arm.

As to the contention between those who claim that the trooper should always be mounted and those who claim that he should always fight on foot we will offer nothing to conciliate either side. Fighting on foot is a new kind of fighting, and must be more or less of an experiment, and,

since machine guns promote and assist this kind of fighting, principally by allowing nine-tenths of the troopers to stay in the saddle, we think it is essentially a cavalry proceeding to examine impartially something which *permits the work of fighting on foot to be done while the troopers remain in the saddle.*

THE QUESTION IN GERMANY.

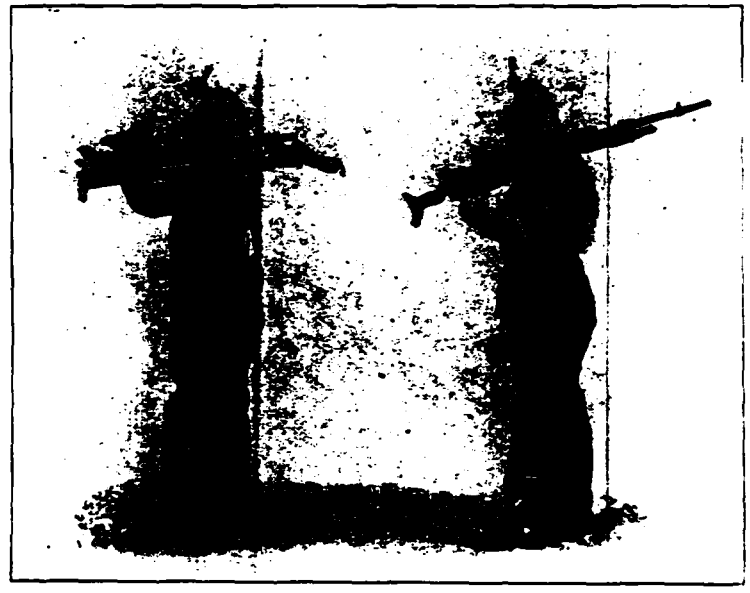
Germany awoke to the importance of machine guns only a few years ago. The unfruitful trials in 1870 with the "Bayerische Feldgeschutz" and later in Africa, notably with the Maxim, made machine guns as unpopular with our neighbors as with ourselves. After important improvements were made on these weapons, opinions changed concerning them. The navy led the movement, and the infantry followed.

In 1899 during the autumn maneuvers batteries of four Maxim machine guns each drawn by two horses went with the chasseur battalions attached to the cavalry corps. From the end of these maneuvers the Emperor William made use of the machine gun, and presented it to one of the regiments of the dragoon guards. In the enjoyment of such high favor the Maxim began to take its place in the German army. Experiments continued actively in 1900, and two four-gun batteries took part in the maneuvers that year. They were attached to the cavalry divisions. In the autumn of 1901, however, machine guns on quite a large scale were used in the imperial maneuvers.

"It was shown during these maneuvers," says the *Militar-Wochenblatt*, "how very useful it would be for cavalry to have machine guns. Their action had an important influence in the successes of this cavalry. While the first day their fire had decided the victory in favor of the division, this same fire enabled it at Czechlan to resist much longer the hostile infantry and artillery, and was still able besides to repulse the cavalry attack made afterward. By the strength of their fire these two detachments of machine guns were used instead of infantry, giving to the cavalry division the necessary support, while their mobility was such that they

followed troops everywhere. While on the march they kept close to the horse artillery, and took position sometimes on its flank and sometimes to the front."

The German military press is somewhat divided in its opinion, although the majority is partial to the machine gun. General Rohne, in an article of December, 1901, says that no one knows what use to make of machine guns, and that commanders of larger bodies of troops, to which a group of these new weapons have been attached, are very often much embarrassed by their presence. Generally speaking they are



more adapted to the defensive than to the offensive. A number of other German authors, among whom are several generals, declare that the machine gun is far from having the fire effect of the infantry rifle or the artillery cannon.

Fritz Honig recommends that they go slow in issuing them, and considers that one detachment to an army corps is quite sufficient. The military correspondent of the *Kolnische Zietung* states "that the new arm is especially useful to defend a certain position with limited forces; their mobility

is such that they can coöperate with the cavalry. It is now certain that cavalry acting in advance of armies will find by use of detachment of machine guns the greater part of the advantages that a certain number of specialists would give it by attaching infantry, a proposition that has always given rise to sharp discussions in the press."

According to statements in authoritative journals in the latter part of 1901, the organization of German machine gun detachments has been changed from those made up for experiment to the following: One section attached to the guard corps; four others to different army corps. The 1902 budget provided for the organization of eight other detachments. Finally at the end of 1902 each brigade of frontier cavalry, the Fourteenth, the Fifteenth and the Sixteenth Corps, were each provided a group of four Maxims. Each of the two infantry divisions of each army corps has for the immediate use of its twelve regiments from fifty to sixty machine guns.

THE GUN.

This is the Maxim. It has been tested in Germany in competition with the Hotchkiss and the Skoda. The piece with the frame on which it is mounted can be carried by two men. It can be set up anywhere an equipped man can go—in a trench, on top of a wall or on a roof.

The guns are used in sections, the use of single guns being prohibited, and may be fired, aiming each shot separately or by firing continuously a section of a belt containing twenty-five rounds; or, if the objective be large, a continuous fire may be employed. The regulations prescribe a drill in which 250 rounds are fired in rapid succession. A range finder is provided for each section.

The German regulations state that in general the sections do not need special support, and can provide for their own defense. To carry ammunition, wagons are used which haul chests of boxes. Each box encloses a belt holding 250 rounds of regulation infantry cartridges. These wagons are to remain behind under cover, each one carrying 15,000 rounds. The carriage on which the gun is transported carries 10,000 rounds, so that there is a supply for each gun of about 15,000 rounds. The ammunition chest used contains about 1,500 rounds, and can be carried by two men. Firing without dismounting the gun from the carriage is done only in emergencies. Four men serve the gun: one gunner, one assistant gunner, and two men to look after ammunition.

PERSONNEL OF THE GROUPS.

The officers are detailed principally from the chasseurs. The noncommissioned officers are taken partly from a body of men specially detailed and partly of men taken from the artillery.

The organization of the groups in March, 1903, was as follows: One captain, commanding group; three lieutenants, chief of section: thirteen noncommissioned officers: one machinist, chiefs of pieces and chiefs of caissons, sixty-three privates, eighteen saddle horses, thirty-six draft horses, six machine guns, three ammunition wagons, one battery wagon.

The machine gun is a complex auxiliary arm, which, by its fire, seconds the effects of the other arms. There is never

any question of using it by itself, but it can be useful to the three arms.

THE MACHINE GUN IN AMERICA.

The Gatling gun, having six revolving barrels, was used several times with marked success during the War of the Rebellion. Attached to the cavalry squadrons, it often helped them greatly. We will speak of but one case: In 1878, in a campaign against the Bannocks and Shoshones, the First U. S. Cavalry, with three Gatling machine guns, were ordered against the Indians, who were advancing against the Umatilla Agency. The American troopers having crossed a wide plain, found themselves facing a bluff on which the enemy had taken position. A frontal attack was impossible, and they were about to be exposed to a heavy fire, when the three machine guns, which had been rapidly pushed forward upon a hill commanding the right of the Indians' position, opened fire. The Indians were forced to retire almost immediately. In 1898, during the Santiago campaign, in spite of the absence of gunners, of spare parts and of tools, Lieutenant Parker seized in eight minutes and a half, by aid of four Gatlings, the position of San Juan, which was regarded as impregnable, repulsed two counter attacks by the Spanish, silenced a five-inch gun at a distance of 2,000 yards by firing on its cannoneers with a single machine gun. During the siege of Santiago the Gatlings again repulsed sorties and night attacks. At the present time (1903) the United States, Mexico, Chili, Argentine Republic, and several other South American powers, have quite a number of these weapons of different systems, which may or may not be used by cavalry.

We cannot leave America without noticing one of the most complete and interesting works that has appeared lately on machine guns. We speak of the book entitled, "Tactical Organization and Uses of Machine Guns in the Field," by John H. Parker, first lieutenant Thirteenth Infantry, commander of machine guns in the Santiago campaign (Hudson-Kimberly Publishing Company, Kansas City, Missouri). This designation is sufficient to enable those readers who care to go to the bottom of the subject to procure the work.

IN ENGLAND.

In England there are many of these weapons which have done good service in the various colonial wars, and they are held in high esteem by the British army. The kinds adopted were at first the Nordenfeld, then the Gardner, and afterward the Maxim. They are issued to infantry, mounted infantry and cavalry. Each cavalry brigade (three regiments) has a section of guns consisting of two Maxims, an ammunition chest and a chest of accessories. The guns are carried on light carriages, drawn by two horses, one of these being ridden by the chief of piece.

The personnel includes one lieutenant, one sergeant, two corporals and nine privates. Two cannoneers are seated on the limber, which holds 3,000 rounds of ammunition. There is a reserve of 3,400 rounds. In time of war the cavalry brigades have two companies of mounted infantry attached, and these companies have their own sections of machine guns.

Captain C. Cather Yorkstown, of the Fourth Bombay Cavalry, says of these weapons: "The tactical employment is very simple. It is an offensive arm at the opportune moment, concentrating an effective fire on a given objective. The chiefs of the guns must be men who have complete self-control. In a fight they are certain to find the target sooner or later, and it is then their own fault if they do not make their presence felt." This cavalry officer, who has had a great deal of experience with machine guns, says concerning the instruction to be given to machine gun soldiers: "Intelligent officers and good troopers can easily learn to load, and fire the machine, and although not specialists, they may even get some knowledge of the technical mechanism. But to know in an instant the cause of a jam or a misfire, to know the remedy, and replace the broken part requires a skilled machinist. We must have experts for this, and we propose that in each regiment a small number of officers and men (the latter chosen if possible from among those who are mechanics by trade) shall be put through a course of machine gun instruction, and examined from time to time so that their skill shall be maintained at a certain standard."

The following instruction should be given: (1) A complete knowledge of the mechanism; (2) Causes and means to prevent jams; (3) What is good and what is bad tactical use of the arm; (4) Care of material, harness, etc.; (5) Setting up the gun, rapid fire, maneuvers, etc.

IN AUSTRIA.

The first tests in Austria were with the Maxim. In 1893 a gun was specially tested for the cavalry arm. The Skoda patent was finally adopted. It has a pendulum system of taking up the recoil, uses a cooler, and fires 300 rounds per minute. This gun was issued in 1898 to the regiments garrisoning mountain and frontier posts.

IN BELGIUM.

In the Belgian army there are a number of Hotchkiss guns mounted on carriages, some of which have taken part in different cavalry maneuvers, and succeeded in following the column without difficulty. The equipment of these guns was very light, and the gaits at which they marched were very fast usually. The men seated on the limber chests had great difficulty in holding on because of the jolting of the carriage. They are now considering pack horses to carry the guns, and will mount the cannoneers like those of the horse artillery.

IN DENMARK.

Tests of the Gardner and the Maxim have been made, but we note especially the study of this subject published by the Danish cavalry officer, M. Scholler, in 1901, which treats of every question relating to cavalry machine guns. Although in a few details we may not agree with him, in general his work can be used as a guide. First he mentions the different kinds of firearms that can be used by cavalry. In arming the trooper with a carbine, cavalry with independent mobility can be obtained; but this plan has the disadvantage of obliging the trooper to dismount to fire. If infantry is attached to cavalry powerful fire effects are obtained, but the cavalry loses in mobility what it gains in

resistance. If the infantry on the march is put in wagons to follow the cavalry, the delay is sometimes remedied, but a long file of wagons will certainly impede the movement of the mounted column; nor can bicyclists follow everywhere in all kinds of weather and over all kinds of terrain.

Field artillery can be assigned to cavalry, and can march rapidly, but at times they must follow roads, and make detours whereby time is lost. Moreover it can not follow small detachments of cavalry. In an advance it must stay with the larger bodies. As to the accuracy of the fire and the other ballistic qualities the machine gun is the equal to any modern portable firearm. The Danish machine is

mounted on wheels, and can be aimed during the firing. It is handled by two men who can fire 600 to 650 shots per minute. On wheels it is always in readiness to open fire, but can be carried on pack animals in such a way that it can be dismounted, and put in action in one minute.

If we estimate the rate of fire of a machine gun at 600 rounds per minute, and that of a man firing the service weapon at ten rounds per minute, a machine gun in effect will equal sixty men. Considering the ease with which the aim of the machine gun can be changed, especially sideways, the ease with which the gunner can rectify errors in

pointing by noting where the shots strike, the fact that he aims from a support and is seated, and that he is an unusually good shot, the fire should be valued higher than that of sixty men, at least at mid ranges.

At very long ranges the fire of the individual soldier is without value because he cannot correct his aim. Here the machine gun has the advantage because the projectiles fired in rapid succession enable the strike to be observed, and consequently at these ranges its value is greater than that of sixty men, especially when the target is small. At very short ranges, on the contrary, the fire effect of a machine gun is not equal to that of sixty men, and account must be taken of the fact that a machine gun must be withdrawn in time to keep it from falling into the hands of the enemy.

As a cavalry support, even supposing that they contain defects, they are nevertheless in two respects always superior to infantry detachments.

1st. They can always follow the cavalry on the march.

2d. They occupy but little space.

The most marked defects are: (1) It is difficult to change their position under fire; (2) They use a great quantity of ammunition.

In recapitulation it may be said:

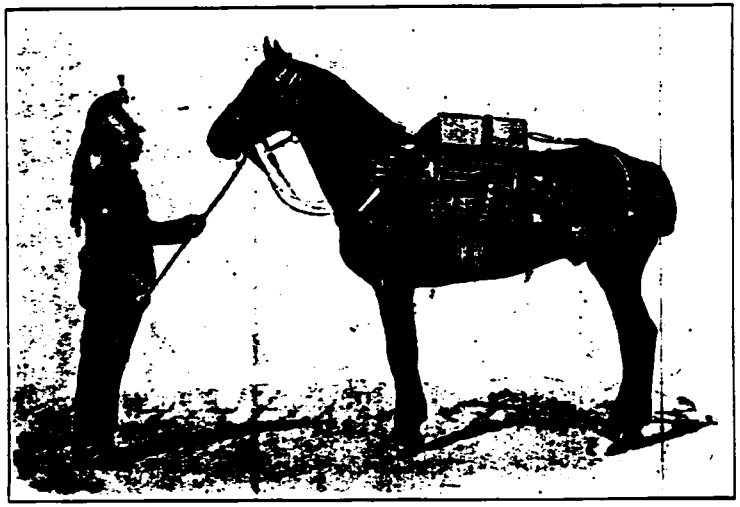
(*a*) In favor of issuing them to cavalry: (1) They increase the offensive as well as the defensive power of cavalry; (2) In most cases they obviate detaching infantry to serve with cavalry and the dismounting of the trooper to fight on foot; (3) When well managed they do not impede the movements of cavalry.

(*b*) Against their issue: (1) Machine guns even when mounted on wheels require the services of a large number of men; (2) To master the intricacies of the machine the instruction of these men requires a great deal of time; (3) They are liable in certain cases when retreating to fall into the hands of the enemy; (4) They cannot fight field artillery; (5) They cannot be used against a dispersed target at short distances; (6) They are costly.

IN THE FAR EAST.

We notice their use here to show how universal is the adoption of these guns.

In China the legation guards have Maxim and Hotchkiss guns. The regular Chinese troops themselves are armed with the Gatling. Japan, always eager for European inventions, possesses a great deal of strength in machine guns. Its officers are always studying the latest models; and the automatic kinds are employed with the important commands.



IN FRANCE.

In 1870 the French army had a great number of de Reffye machine guns. The Emperor said of their use at Chalons, "It is a massacre," and gave instructions that for humanity's sake their use should not be abused. If they did not do what was expected of them it must be attributed to the fact that they were served by ill-trained men, who had but a vague idea of their use and often brought them into action at too great a distance. Their tactical employment was also very defective. Every time they were used at proper ranges either against columns, deep formations or charging cavalry, they caused the enemy enormous losses.

According to the official report of the action of the Thirty-eighth Prussian Infantry Brigade at Mars-la-Tour the battalions of that brigade were forced back to the bottom of the ravine and were nearly annihilated by the machine gun fire from the crest, and it also stopped the attack of cavalry sent to the aid of the retreating battalions.

These machines were rotating guns, had twenty-five barrels, weighed with mount 1,936 pounds, fired a special projectile weighing 833 grains, and discharged 150 shots per minute in volleys of twenty-five each.

If such was the effect of a weapon like this, what will be the result of a modern one firing continuously 600 rounds per minute, and what body of men would be able to face such a deadly fire?

The machine gun now on trial in France is the Hotchkiss, although the Maxim and several other models are the object of study in our garrisons, especially at Chalons. It is expected that each company operating alone or in the mountains will be provided with one gun. Each expeditionary battalion will then have four guns, so that it need not be supported by field artillery, which is clumsy to move and which cannot be taken into some positions. Experiments were made with the Hotchkiss guns in the August cavalry maneuvers of 1902. Like the Germans, we attached them to the horse artillery, and considered them rather as support, a most suitable role for them. Attached to cavalry, they are really part of our system now. Light and handy, they took part during the several weeks of our maneuvers in all the terrain drills and field work, crossing rivers, passing obstacles, easily slipping through woods, and ready for work under every condition of service.

IN ITALY.

In 1856 the Italian government investigated the merits of the Martigny, the Nordenfelt, the Gardner and the Pratt-Whitney. The latter gun was given the preference, and 100 of them were ordered. During the Abyssinian war they were found unsatisfactory and the Pratt-Whitney gun was abandoned. Italy still uses machine guns, however, and more than one garrison in the Alps is provided with them.

IN RUSSIA.

In 1877 the Russians often harassed the Turks with Gatlings. They were used also in the Khiva campaign, where they were taken over mountain roads and through defiles impassable to artillery. At ranges of about 1,000 yards they were used with great effect. By an Imperial decree of 1900 eight batteries of Maxim guns were organized, each battery with four .28-inch caliber guns. Each of the two Siberian army corps has a battery. Five new machine gun companies were organized in 1901, which were distributed to the Fourth, the Sixth, the Eighth, and to the Sixteenth Divisions of European Russia, and to the Third Brigade of Siberian chasseurs. On a peace footing each battery has four officers, ten noncommissioned officers, sixty-five privates, twenty horses, eight machine guns, eight limbers, and eight ammunition wagons. The limbers eaoh carry 4,500 rounds in belts. This organization can doubtless serve with any arm, but do not seem especially qualified to follow companies of Cossacks.

IN SWEDEN AND NORWAY.

Both these countries, after testing several guns, adopted the Hotchkiss, and their armies are now supplied with a large number of these guns.

IN SWITZERLAND.

In spite of its small size, Switzerland can teach the larger countries some things in military art. Its cavalry machine gun regulations attracted the attention of the Germans, and is well worthy of our study.

Their army has four machine gun companies or squadrons, one for each army corps. Each company has four officers, sixteen noncommissioned officers (of which eight are corporals, who are chiefs of piece, and eight sergeants, chiefs of section) and forty-four privates. An ammunition train having one sergeant and seven privates.

All the personnel is mounted except the privates with the wagon train, so that sixty-seven saddle horses are required, as follows: Six officers' horses, sixty-one troop horses, to which should be added sixteen pack horses, and fourteen saddle horses; total, ninety-seven horses.

The material includes: Eight Maxim tripod guns, four ammunition wagons, one baggage wagon, one battery forge.

Each gun is carried by a pack-horse and is followed by another carrying ammunition. The gun horse carries a load of 271 pounds.

Weights of Parts.

Piece with cooler	69 pounds
Tripod	54 "
Water for cooler	16 "
Pack saddle	59 "
Pack frames	29 "
Day's rations of oats	10 "
	237 "

The ammunition pack-horses carry 2,000 rounds in eight small cases, in all weighing 271 pounds, as follows:

Eight boxes, each containing 250 rounds	159 pounds
Pack saddle	59 "
Pack frames	42 "
Oats	10 "
	271 "

The officers and men are considered cavalrymen. Noncommissioned officers come from the cavalry, and officers have had cavalry instruction in the cavalry schools. All can be returned for duty with that arm. Equipment and uniform is that of cavalry, with some distinctive marks.

Tactical Use of Machine Guns.

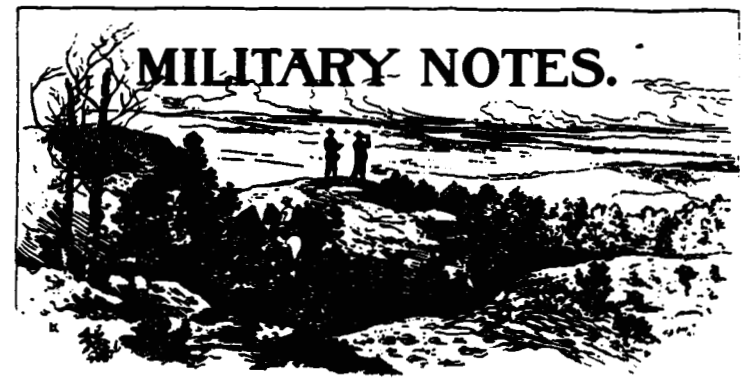
The Swiss regard machine guns as assimilated to cavalry rather than artillery, and therefore they seek to give them the maximum of mobility. Then, too, they are placed under the orders of the brigade commander of the corps cavalry.

The Swiss regulations say that the guns "are to increase the resistance of cavalry." Offering a small target to the enemy these pieces can be easily masked so that it will be difficult, if not impossible, for an enemy surprised by their fire to discover from where it comes. One of the greatest advantages

in having them is that eight of them can be used in the space needed for a hundred riflemen, each piece having a front of four or five men without having any difficulty in hiding.

The cavalry commandant designates the positions to be taken by the guns and the objectives. Cavalry ordered to cover a wide front as when guarding the crossings of a stream or operating in the mountains can station machine guns at the principal points, while most of the troopers may be kept in hand.

Occasions will not be wanting when the shock action of cavalry can be combined with the fire of the guns, surprising the enemy and drawing him under fire. But it is in a fight where the cavalry is acting in conjunction with a corps or a large body of other troops on a terrain little adapted to the use of mounted men that the Maxim finds its greatest field of usefulness. It facilitates pursuit, which is almost exclusively a cavalry task. It can aid in covering a retreat by opening a fire on the flank of the enemy.



CAVALRY ARMS.

By Colonel HENRY T. NOYES, U. S. Army.

As there seems to be a disposition to revive the discussion of the relative merits of the saber and revolver (or pistol), the following remarks on the subject seem to be opportune. As they were read at a meeting of the Officers' Lyceum at Fort Wingate in 1896, they should not be taken as a reply to anything lately written on the subject.

It is not my intention to discuss at length the general subject of cavalry arms, but rather to confine my remarks principally to what should most interest us, viz: the cavalry arms of modern times, and especially those now in use by our cavalry; and if I am so fortunate as to present the subject so as to excite an interest in it, beyond that general interest that we all feel in whatever most intimately concerns our profession, my object will be accomplished. From time to time we see desultory discussions as to the best arms for cavalry, but with no apparent results.

For a proper presentation of the subject, it is necessary to refer briefly to these arms which ancient records give as being used by the cavalry of those times; this principally to emphasize the fact that cavalry of modern times still carries

weapons used by the first cavalry of which we have any record. I refer to the sword (or saber) and the lance; one form of the latter, the pike, is given as one of the weapons carried by the army of Darius some 2,500 years ago. Two hundred years later, Alexander's cavalry carried javelins and short lances (or pikes). Some form of the saber (or sword as it was then called) was carried by both foot and mounted troops, varying in length and weight for the two services. The Romans and Carthagenians also carried them.

Before the invention of gunpowder, cavalry relied upon hand weapons, and their engagements were hand to hand encounters, although some carried projectile weapons, such as slings, bows, etc. Gunpowder changed radically all the former conditions of warfare. Maurice of Nassau is credited with having created the first light cavalry under the new conditions, which he armed with the pistol and saber. Henry IV., of France, organized the first dragoons which carried the lance, sword and short musket. After the Thirty Years' War the cavalry of European armies, except the irregulars of Russia and Poland, had generally discarded the lance for the pistol, and for two hundred years the lance was virtually abandoned, until early in the last century it was again issued to European cavalry, on account of the ravages made on the French in their retreat from Moscow by the Cossacks with their favorite weapon. Some twenty-five or thirty years ago it was again discarded to some extent, only to be again reissued quite recently. During the War of the Rebellion but one troop of Federal cavalry carried lances, and only for about one year.

Frederick the Great, Gustavus Adolphus, and Charles XII. of Sweden, relied more upon the sword than any other weapon for cavalry. Before their time it had been customary for cavalry attacking the enemy to ride up within short range, halt, discharge their pieces, sling them, and then draw their sabers and charge. These great leaders, with their radical changes, achieved great successes. With the crude firearms of those times cavalry could be sure of having to face only one volley while charging the enemy (if cavalry), as the short range of their firearms and the delay incident to reloading enabled the charging party to strike before the second volley; but with the increased range of firearms and increased rapidity of breech-loaders, the conditions are again changed, and to such an extent that to-day it is hardly a question as to what would be the fate of a cavalry column exposed for any length of time to the long range and low trajectory of our modern arms. What may have been advisable in the past would probably be rank folly now.

This much of reference to the conditions of the past to properly appreciate the fact that modern cavalry is now armed with two of the weapons used by the most ancient cavalry of which we have any record, the lance and the sword (or saber).

With reference to cavalry arms of to-day, various authorities give the following equipments:

English—Carbine, saber and some lancers.

German—Carbine, saber and some lancers.

Austrian—Carbine, saber and some lancers.

(Officers, sergeants and trumpeters carrying revolvers.)

Russian—Rifle with bayonet and saber, with the exception of the irregular cavalry, the Cossacks, who still cling to their old favorite, the lance, although they now carry firearms also.

And finally our mounted Indians frequently carry lances made by fastening a bayonet, knife, or sword blade to a long handle. At Rosebud in 1876, several of our men were wounded with these weapons, and some fatally.

We do not need all three of the arms used by our cavalry, in fact one of them is an actual impediment; and which one to discard is the question that naturally arises, and is the problem to be solved. For three successive years ('70, '71, '72), when I was captain of Troop I, of my regiment, I devoted all my energies to making my men expert in the use of their arms. Each of those years we had a summer camp where all the conditions were favorable; at the end of the first summer I was sure that they could not be made expert with all three arms. As the only actual service we were then liable to have was against Indians, I left the saber in garrison the second year; and as my men were fairly expert with

the carbine, I devoted the summer of 1871 to pistol practice almost exclusively, and was surprised at the result; the next summer I continued pistol practice as long as I had ammunition to expend, with equally gratifying result, and from that time to this I have always thought that if I had an enemy to charge I would prefer the pistol to the saber, *if my command was properly instructed in the use of the pistol.*

It can be safely asserted that we all want the carbine. If any argument is necessary. Sheridan's cavalry holding Lee's army in check at Five Forks with their carbines, will furnish it. This leaves us two weapons to choose between, the pistol and the saber; and the relative merits of each as advanced by its adherents, seem to be so varied and convincing, that so far as theory is concerned we feel like agreeing with the last advocate that we hear. While I honestly believe if the vote of the majority of cavalry officers of experience could determine the question, that the saber would be relegated to the past (where it originated and naturally belongs), I am aware that many of our oldest and most experienced officers cling to the saber, and are ready to stake their well earned reputations on it, as still a prime factor in cavalry engagements. No doubt this can be accounted for to some extent by the brilliant achievements of the past, with the glamour of the "Beau Sabreur" thrown in; but an able advocate of the pistol, who is justly notable for what he has done with it, says that most of those who favor the saber do so because they do not appreciate what can be done with the pistol properly handled. I think he is right.

Let us apply a little common sense to this question. On general principles that weapon is most desirable that has the *longest reach;* in other words, of two opposing forces, other things being equal, that one will be most successful which has arms with which the enemy can be injured while still beyond the reach of his weapons. Now the reach of the earliest cavalry hand weapons was but a few feet, the length of the sword, pike or lance. With the introduction of firearms, the reach of the crudest of them was far bebond all former weapons, and just to that extent they were more desirable. Applying this argument to our arms, their

relative efficiency would be, 1st, carbine; 2d, pistol; 3d, saber. An expert with the carbine can disable the pistol man before the former is within range of the latter, and he in turn can disable the saber man before he is within the short range of the saber.

Our Civil War, in which modern conditions obtained, affords some data of interest in discussing this problem. The medical records of the war show that of all wounds treated, only about one-fiftieth of one per cent. were saber and bayonet wounds; in the Crimean War the English and French had two and one half per cent.; in the Schleswig-Holstein War, one and four-fifths per cent.; in the Franco-Prussian War the German records show less than one-third of one per cent. as saber or sword wounds. In commenting on saber and bayonet wounds, the compiler of the medical records of the Civil War says that a large proportion had their origin in private quarrels or were inflicted by sentinels of the guard. And further: "The comparison with the large number of shot wounds, the saber and bayonet seem insignificant. A striking commentary upon the advance of modern military science, and showing that, with the general adoption of long range repeating firearms, the saber and bayonet are rapidly falling into disuse, and the time is coming, if it has not already arrived, when those old and honored weapons will become obsolete." General Robert Williams (late adjutant general), a cavalry officer of experience, in commenting on this subject says: "Owing to the present long range and repeating arms, it is my belief that the lance may be regarded as obsolete, and that the saber will soon become so."

The advocates of the saber are fond of talking about the moral effect of a saber charge. I claim that with expert pistol shots the moral effect will be even greater. This moral effect results from the probable damage such a charge will produce, and no one will question that as a rule pistol wounds are more fatal or disabling than saber wounds, and it is a knowledge of this difference that acts to produce greater moral effect. If any one of us is to be wounded by either weapon, I think we would prefer a saber cut. Now an ex-

pert pistol shot in a charge can fire several shots at close range before he is in close contact where the saber could be used.

A few words about the pistol. If we are to retain it in its present general form, I am in favor of a caliber large enough to take a buckshot cartridge. We do not want a pistol for accurate shooting at long range, but one that will fill the air with missiles at short range. Our object should be to give disabling rather than fatal wounds.

Of one thing we may be assured, that either weapon is of little account in the hands of those not well instructed, and the best argument I have heard against the pistol is that it is more dangerous to friends than to foes in the hands of one who does not know how to use it. My arguments in favor of the pistol are based on enough instruction to make all reasonably expert; we cannot make our men expert in three arms. Let us do the best we can with the two most desirable.

My objection to the saber is against its use in war only. For parade and other show occasions there is no objection to its retention, except the general one, that two arms should be enough for any soldier.

COMPANY TARGET RECORDS.

By Captain W. C. BROWN, First U. S. Cavalry.

The new system of target practice, while affording more varied practice than formerly, is for that very reason more complicated and requires more care on the part of the company commander that it be conducted methodically, otherwise there will be much annoyance and waste of time in taking to the range for this exercise men whose practice in some one or more of the many varieties of firing has been overlooked.

During the practice season there should be on the company bulletin board a tabulated statement of just what the

markman's course comprises, both in instruction and record practice, and for cavalry there should be in addition a tabulated statement of the course in pistol firing.

This has been partially done in General Orders No. 20, Adjutant General's office, series 1903, but we look in vain for some one table which will give *all* the essentials of the complete course.

The writer has prepared for use in his own troop the tabulated statements, which appear below, of the course in rifle and carbine firing, and also that in pistol firing.

Columns have been left in appropriate places for names, totals of scores at the various firings, aggregates and percentages, so that this could be used in keeping a running account of each man's firing record.

Even if this running account be not kept, it is believed that such a table will prove useful, if for no other purpose than to keep daily track of what firing each man has done, and how much he has still to accomplish.

If the running account of each man's record be kept on a tabulated sheet prepared on tracing linen, kept in the possession of one of the company officers, "blue printed" from time to time, and copies sent to barracks for the information of the men, as described in an article on this subject by the writer on page 183 of The Cavalry Journal for October, 1902, all danger of tampering with the target records will be eliminated.

If printed percentage tables be furnished, as they should be to every organization, the keeping up to date of this entire record is a matter of but little labor.

The annual report of target firing is prepared by simply copying the records from the "blue print," or rough copy if no "blue print" be made, rearranging names to correspond with each man's proficiency, as shown by his final average per cent.

This annual report, a retained copy of which is kept in the company, *ought* to be all that is required for each man's record in all kinds of fire. It is here figured out to the fraction of one per cent., and answers all requirements both present and future.

Estimating Distances.—This for the first time is made a part of the record, and the way in which it is done reflects credit on the man who originated it.

The standard required is moderate, but each man who fails to attain it, is very properly dropped one grade.

The tests in estimating distances, however, require a discouraging amount of arithmetical calculation; to obviate this, the writer at this post had recourse to the following:

A buckboard was run over the target range where the distances had been accurately measured and the number of revolutions to such distances as 610, 750, 915, 900, 850, 500 and 535 yards, carefully noted.

Having selected a central point for a convenient place with a slight elevation above the surrounding terrain, the buckboard was run in various directions to the number of revolutions corresponding to the distances given above, at the end of which courses a standing figure target was placed.

This done, the various organizations at the post were marched in turn to the central point above mentioned, and each man's estimate of the distance to the various standing figure targets recorded, men being cautioned to make their estimate in some multiple of five yards.

The percentage table of errors from five to one hundred and fifty yards in estimating these distances was then computed and passed from one organization to another for use in determining by mere inspection and comparison, and without the drudgery of figuring the percentage of error in each estimate made.

The percentage tables are here inserted, not only as an illustration, but for use though affording little variety in the estimation of distance tests.

If this be the system to be followed by the army, it should have in pamphlet form percentage tables for distances as follows: 500, 505, 510, 515, etc., up to 1,000 yards, with the percentage of error computed for each five yards from 5 to 150 yards for each of the one hundred distances. Possibly distances varying by ten instead of five yards would be sufficiently accurate.

In ascertaining the relative proficiency of a company in estimating distances, tedious arithmetical work is avoided, as well as greater accuracy secured by use of these tables.

TABLE OF PERCENTAGE OF ERROR IN ESTIMATING DISTANCES.

610 yds.		750 yds.		915 yds.		900 yds.		850 yds.		500 yds.		535 yds.	
Error.		Error.		Error.		Error.		Error.		Error.		Error.	
In yards.	Expressed Decimally.	In yards.	Expressed Decimally.	In yards.	Expressed Decimally.	In yards.	Expressed Decimally.	In yards.	Expressed Decimally.	In yards.	Expressed Decimally.	In yard	Expressed Decimally.
5	.008	5	.006	5	.005	5	.005	5	.006	5	.01	5	.009
10	.016	10	.01	10	.01	10	.01	10	.01	10	.02	10	.02
15	.025	15	.02	15	.016	15	.017	15	.015	15	.03	15	.03
20	.03	20	.026	20	.02	20	.02	20	.02	20	.04	20	.04
25	.04	25	.03	25	.027	25	.028	25	.03	25	.05	25	.05
30	.05	30	.04	30	.03	30	.03	30	.035	30	.06	30	.06
35	.057	35	.046	35	.04	35	.04	35	.04	35	.07	35	.07
40	.065	40	.05	40	.04	40	.04	40	.047	40	.08	40	.07
45	.07	45	.06	45	.05	45	.05	45	.05	45	.09	45	.08
50	.08	50	.066	50	.055	50	.055	50	.06	50	.10	50	.09
55	.09	55	.07	55	.06	55	.06	55	.06	55	.11	55	.10
60	.10	60	.08	60	.07	60	.066	60	.07	60	.12	60	.11
65	.11	65	.086	65	.07	65	.07	65	.08	65	.13	65	.12
70	.115	70	.90	70	.08	70	.078	70	.08	70	.14	70	.13
75	.12	75	.10	75	.08	75	.08	75	.09	75	.15	75	.14
80	.13	80	.106	80	.09	80	.088	80	.09	80	.16	80	.15
85	.14	85	.11	85	.09	85	.09	85	.10	85	.17	85	.16
90	.146	90	.12	90	.10	90	.10	90	.106	90	.18	90	.17
95	.156	95	.126	95	.10	95	.105	95	.11	95	.19	95	.18
100	.16	100	.13	100	.109	100	.11	100	.12	100	.20	100	.19
105	.17	105	.14	105	.115	105	.117	105	.12	105	.21	105	.20
110	.18	110	.147	110	.12	110	.12	110	.128	110	.22	110	.21
115	.19	115	.15	115	.126	115	.128	115	.135	115	.23	115	.21
120	.20	120	.16	120	.13	120	.13	120	.14	120	.24	120	.22
125	.205	125	.167	125	.14	125	.14	125	.15	125	.25	125	.23
130	.21	130	.17	130	.14	130	.14	130	.15	130	.26	130	.24
135	.22	135	.18	135	.15	135	.15	135	.16	135	.27	135	.25
140	.23	140	.186	140	.15	140	.155	140	.16	140	.28	140	.26
145	.238	145	.19	145	.16	145	.16	145	.17	145	.29	145	.27
150	.24	150	.20	150	.16	150	.166	150	.18	150	.30	150	.28

DISMOUNTED COURSE

INSTRUCTION PRACTICE.

NAMES.	BULLS EYE TARGET "A."														RECTANGULAR FIGURE DISAPPEARING TARGET "K."						
	Slow Fire. Time unlimited.					Time Fire. Thirty seconds for each score.									Rapid Fire. Ten seconds for each score.						
	15	25	50			15		25		50					15		25				
	First Score.	First Score.	First Score.	Total.	Per cent.	First Score.	Sec'nd Score.	First Score.	Sec'nd Score.	First Score.	Sec'nd Score.	Total.	Per cent.		First Score.	Sec'nd Score.	First Score.	Sec'nd Score.	Total.	Per cent.	Average per cent.

RECORD PRACTICE.

NAMES.	BULLS EYE TARGET "A."						RECTANGULAR DISAPPEARING TARGET "K."						
	Timed Fire. Thirty seconds to each score.						Rapid Fire. Ten seconds for each score.						
	25		50				15		25				
	First Score.	Sec'nd Score.	First Score.	Sec'nd Score	Total.	Per cent.	First Score.	Sec'nd Score.	First Score.	Sec'nd Score.	Total.	Per cent.	Average per cent.

MOUNTED COURSE.

NAMES	INSTRUCTION PRACTICE. Figure Targets Standing "H." Five targets at 20 yard intervals, Five yards from track.							RECORD PRACTICE. Figure Targets Standing "H." Five targets at 20 yard intervals, Targets 10 yards from track.							RECORD PRACTICE. Figure Targets Mounted "M."						Average per cent. of two courses
	Right.	Left.	Right Front.	Left Front.	Right Rear.	Total.	Per cent.	Right.	Left.	Right Front.	Left Front.	Right Rear.	Total.	Per cent.	5 targets at 20 yd. intervals, 15 yds from track.	5 targets at 20 yd. intervals, 15 yds. from track.	Right.	Total	Per cent.	Avg. per cent. m'f'd course.	

MARKSMAN'S COURSE.

INSTRUCTION PRACTICE.

NAMES.	SLOW FIRE. Five Minutes for Each Score. 200 Standing. First Score.	Second Score.	300 1st score Sit-ting.	300 2d score Kneel-ing.	500 Prone. First Score.	Second Score.	600 Prone. First Score.	Second Score.	Total.	RAPID FIRE. Twenty Sec. to Each Score. 200 Standing. First Score.	Second Score.	300 1st score Sit-ting.	300 2d score Kneel-ing.	Total.	SKIRMISH FIRE. 30 sec. at 600 400 30 sec. at 300 200 First Run.	Second Run.	Total.	Aggregate.	Per cent. of possible.

RECORD PRACTICE.

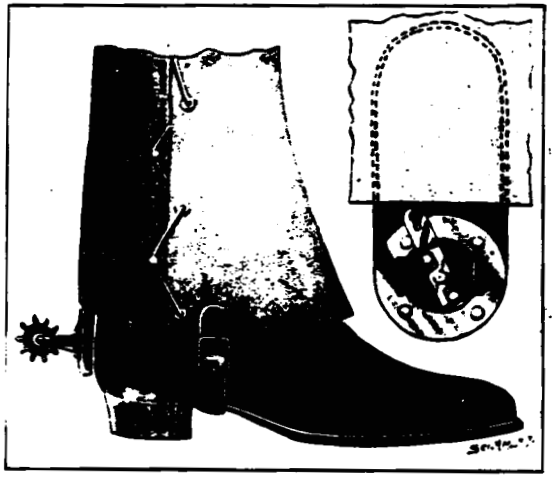
NAMES.	SLOW FIRE. Five Minutes for Each Score. 200 Standing. First Score.	Second Score.	300 Kneeling or Sitting. First Score.	Second Score.	500 Prone. First Score.	Second Score.	600 Prone. First Score.	Second Score.	Total.	RAPID FIRE. Twenty Sec. to Each Score. 200 Standing. First Score.	Second Score.	300 Kneeling or Sitting. First Score.	Second Score.	Total.	SKIRMISH FIRE. 30 Sec. at 600 400 30 Sec. at 300 200 First Run.	Second Run.	Total.	Aggregate.	Per cent. of possible.

* Two sighting shots precede first score.

SPUR ATTACHMENT FOR LEGGINGS.

[From the "Scientific American."]

A recent invention provides an improved detachable spur attachment for leggings such as are used by cavalrymen and other horsemen. The device is so arranged as to permit ready and convenient removal of the yoke and rowel from the leggings whenever the horseman so desires. As shown in our illustration, the design of the spur attachment is very simple. A strap of stiff leather is secured to the legging at the rear, preferably on the inside. A portion of this strap projects below the legging, and carries a metallic disk on which the yoke is removably secured. Thus the spur is held



SPUR ATTACHMENT FOR LEGGINGS.

at about the same position with respect to the foot that spurs are ordinarily held. In our detail view the rowel and part of the yoke has been broken away, to clearly show the simple locking means used for holding the yoke to the disk. It will be observed that two pins are secured to the disk, and project through openings in the base plate of the yoke. A lock bar is fulcrumed centrally on the outer face of the base plate, and is adapted to be swung into engagement with notches in

the pins. One end of the lock bar is extended to form a handle. A pin secured to this extension snaps into a registering aperture in the disk when the bar is in locked position. Now, if for any reason the horseman should find it desirable to remove the spur, he needs simply to swing the lock bar out of engagement with the pins, when the yoke and its rowel may be detached from the leggings. The inventor of this improved spur attachment is Captain William Carey Brown, First U. S. Cavalry, of Fort Clark, Texas, Brackettville. P. O.

Reprints and Translations.

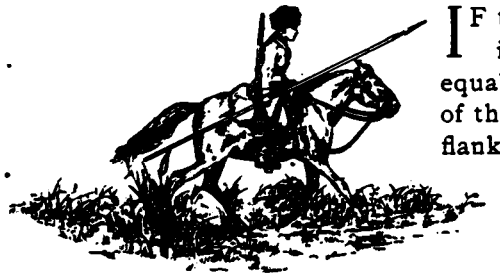
THE RUSSIAN CAVALRY.

By Captain HART.

Translated from the French by Captain C. D. RHODES, Sixth Cavalry, General Staff, U. S. Army.

(CONTINUED)

Of the "Lava," the Charge as Foragers. Peculiar to the Cossacks.



IF two troops of cavalry confronting each other, offer a front of equal extent, it is difficult for one of the two organizations to gain the flank of its adversary. It is there that the charge "*en lava*" will find its most useful application. And indeed the power to extend its front as much as it desires, gives it the ability to envelop the two wings of the enemy simultaneously; and admitting that the latter ought to break through the thinner line which will be opposed to its front, it will be none the less defeated by the concentric attack of the two wings, which will beat back the two flanks and take it in reverse,—that is to say, in such a manner that it cannot defend itself. This maneuver, familiar to cavalrymen of the Don, has always assured them the advantage over their adversaries of equal number; should the Russians count on developing in future this special tactical form of combat, in single rank with intervals more or less great, instruction in close order would still make itself felt. The

charge *en lava* has, therefore, according to the Russians, the superiority of concentric action over the close order, while a frontal attack, center against center, involves the cavalrymen on the flanks in an eccentric movement at the moment of shock. This charge, executed by the Cossacks, owes as much of its efficacy to their individual superiority in the management of their horses and arms and to the moral courage proceeding from the consciousness of their strength and skill, as to their instinct of knowing how to give way at a time suitable for retiring, just after the attack.

The method of instruction for the correct execution of this charge is as follows:

(*a*) The deployment for the charge *en lava* ought to be made with the greatest rapidity, starting from any possible formation, in all positions, and taking into consideration all objectives which may in reality offer themselves, in the presence of the enemy.

(*b*) The charge must be pressed home, entirely outflanking the enemy against whom the deployment is made, either by one of the wings, or both at a time.

(*c*) After the execution of the charge, the cavalrymen will be practiced in rallying with the greatest rapidity in any direction, at a sign from their leader, and in immediately renewing the attack.

(*d*) During the offensive march which precedes the charge, the commanding officer of the *sotnia* will caution the chiefs of platoons on the wings of the movement about to be made in outflanking the enemy; a saber signal ought to be sufficient to indicate the direction of the attack with which they are entrusted.

(*e*) A regiment operating alone, and unsupported by other troops, will preferably employ the formation by echelons. The enemy charging the first echelon will be taken in flank by the second, and if the *terrain* permit of masking the presence of the third, the unexpected appearance of the latter will insure success. The following principles ought never to be lost sight of; they are those which have given to the Cossacks their deserved reputation:

Unite for the attack; divide to escape pursuit; see without being seen; hold to the pace of the enemy; give way to his approach so long as he is not in force; harass him with the persistence of the bee, which obstinately places itself at the point whence it has just been driven.

To recapitulate, the charge *en lava* presents the following advantages. The cavalrymen are deployed with intervals essentially variable, which permits of moving around obstacles: and if necessary to cross them, each horse is made

to jump them, as if he were alone. This allows the cavalry to close with the enemy all at once, and to envelop him (we know the moral effect produced by threat of attack on the flank or in reverse); in fact, all movements, whether for retreat or in any direction whatever, are executed with the greatest independence; the rallies are effected easily in any direction, and the retreats, executed in divergent lines, leave the enemy undecided as to the objective to be taken in pursuit.

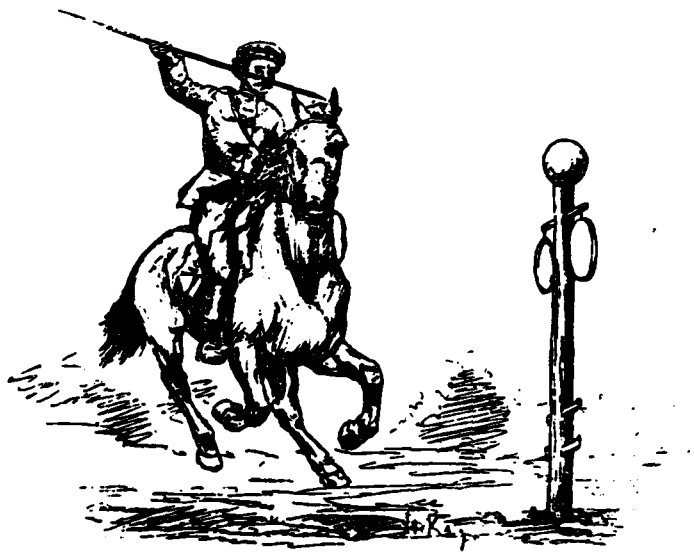
Raids.

The War of the Secession exhibits the employment on a grand scale of masses of cavalry, really independent, moving on a large radius, without thought of their communications, and knowing how to utilize their arms under all circumstances. However, these remarkable experiences passed unperceived in Europe; the latter saw in the American raids a result of the employment of improvised cavalry, composed rather of expert pioneers than of instructed cavalry soldiers. Besides, it was believed that their employment was useful only over the vast tracts embraced in the theater of operations of the American armies, and that these achievements would be impossible in Europe on account of the *terrain*, cultivated, wooded, intersected, and densely populated.

Since then public opinion has fully come to an appreciation of raids; it has been demonstrated that on the battlefields of Europe no cavalry has been at the height of its usefulness in modern campaigns. The exploits of the French cavalry in 1805 and 1806, principally in exploration and pursuit, have never been equaled. One can cite as memorable actions on the battlefield only those illustrated by the Austrian cavalry at Custozza, in shock action against the Italian infantry. The War of the Secession alone has seen realized in the action of two opposing bodies of cavalry what can be demanded and expected from that arm under the conditions of modern war. The raids of the Northern cavalry exercised a predominating influence in crushing the resistance of the Confederates.

The Federal General Sheridan, at the head of 10,000 cavalry, having turned the Southern army commanded by Lee, and cut its communications, did not hesitate to attack it in spite of the disproportion in numbers, and harassed it in a manner to retard its retreat.

It was this maneuver which permitted the Federal army under command of Grant to close with Lee, whose capitulation, all things considered, was brought about in great part



by the foot combats which Sheridan's cavalrymen were able to maintain, prolonged at great length by continued attacks.

From 1812 to 1815 the Cossacks never employed other methods than those of the Americans, and that, too, in the most populous countries of Europe. As for the well known prejudice that Sheridan's cavalrymen were rather pioneers without equestrian instruction than true cavalry, it can be answered that every man who took part in this raid had a mean of four years' constant service, acquired in the saddle before the enemy.

The employment of great flanking raids, utilized with success by the Americans, profoundly impressed the Rus-

sians, as their war customs during the campaigns of the Empire and their expeditions in Central Asia, as well as their predilection for fighting on foot, had well prepared them for these kind of operations. The desire to practice them on a grand scale has been one of the determining causes of the organization given to their cavalry.

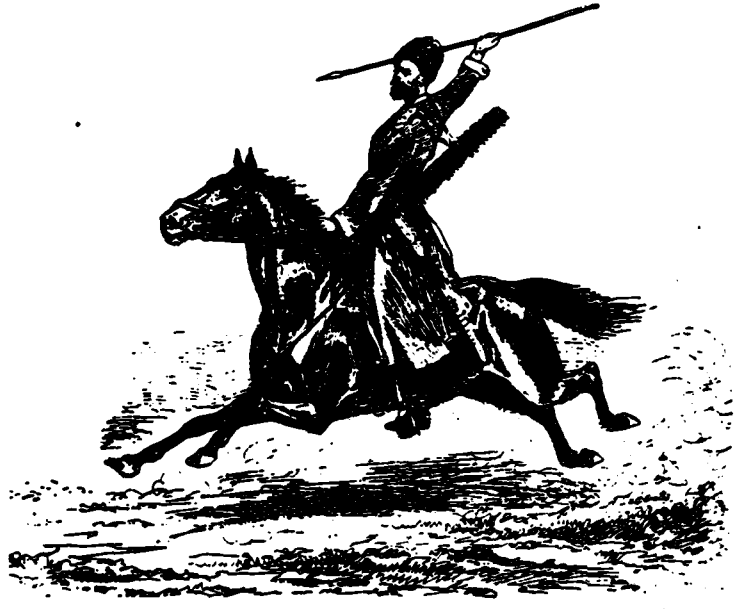
The war of 1877 against the Turks permitted them to make some experiments, the results of which have not al-

ways been favorable, but from which useful lessons could be drawn; nevertheless, the Turkish cavalry did not present the elements of vigor and energy that the Russians would find in the Austrian and Prussian cavalry.

The most celebrated operation of this category is known under the name of "General Gourko's Raid." The corps which he commanded composed at first ten and one-half battalions, forty-four squadrons, thirty-eight pieces of artillery, and a detachment of mounted pioneers (sappers and miners), in the neighborhood perhaps of 8,000 foot soldiers and 4,000 cavalrymen. A support of a brigade of infantry swelled it later to 16,000 combatants. The duration of the expedition

was three weeks, from the 12th of July (departure from Tirnovo) to the 6th of August, the day on which the corps, hurried beyond the Balkans, commenced its retreat.

In the beginning, it was rather an advance guard than a raid, in the true acceptation of the word; for, in military language, the latter operation is an enterprise of great breadth, executed by troops essentially mobile, completely independent, giving no thought to the preservation of communications.



These corps, in their sudden and rapid incursion (of true raids), destroy everything that could possibly sustain the enemy, and cut his lines of communication, especially the railways. The advance guard of General Gourko was to be followed into Roumelia, by the Eighth, Ninth, and Twelfth Russian Corps; but the latter were stopped at Plevna, in an unforseen manner; and it was then that this advance guard was under the necessity of acting independently and assumed the distinctive character of a raid.

General Gourko broke through the barrier of the Balkans by surprise, and took the great Shipka Pass in reverse; then, through numerous obstacles he marched fearlessly southward, destroying railroads, telegraph lines, etc. He even caused Adrianople to tremble. But coming unexpectedly in contact with the army of Suleyman Pasha, who rushed in all haste from Montenegro, he had, for want of support, to beat a retreat, and repass the Balkans. In this expedition he lost a thousand men, and his cavalry was completely broken down in horses; of each regiment there hardly remained enough to form a squadron. However, he had obtained three great results:

1. Of coöperating in a decisive way, in taking the Shipka Pass, and in its defense.

2. Of carrying devastation and dismay into the heart of the enemy's country, obtaining at least a great moral success.

3. Finally, of making known in ample time, the approach of a new army arriving unexpectedly, the concentration of which he retarded.

The ruin of General Gourko's cavalry induced, a month later, the Russian General Staff to recommend to General Krylof to be sparing of his horses in a second raid which was ordered, composed of 7,000 horses and thirty cannon, and lasting three weeks (18th of September to the 9th of October). Thrown across the left bank of the Vied, it had for its object to contribute to the blockade of Plevna, and to this end to occupy the high road from Sophia to Plevna, which was used by the Turks for supplying the latter place. This cavalry corps allowed numerous convoys of munitions and food to pass by, as well as important reinforcements (about 16,000 men).

The inertia of General Krylof was severely criticised in having exclusively employed his cavalry and infantry, paralyzing its effectiveness for fear of exposing it; in fact of having employed at an inopportune time a great part of his forces in guarding his communications, when, under equal conditions, cavalry could be cut off only by cavalry, and there was no occasion for taking account of the cavalry of the Turks. Of the two tasks imposed on the Russian general, he had accomplished only the least important, *to save his horses;* and the other, *to cut the enemy's communications*, had been completely neglected.

A third raid was ordered under command of General Stroukof, (who had already become celebrated at the commencement of the campaign, by surprising the Danube Bridge, which the great Bucharest-Giurgevo line traverses). He obtained most decisive results. Leaving Eski-Zagra on the 14th of January, 1878, at the head of nine squadrons (1,620 cavalrymen), he was stopped only at the gates of Constantinople by the armistice. Throwing himself in the midst of the retreating Turkish column, without bothering about his communications, marching as much as possible at night to hide the weakness of his force, he threw out small detachments in all directions, which by rapid marches carried points which had not expected Russian troops. In this way he succeeded in taking Adrianople, (120,000 inhabitants, with a garrison of 8,000 men, sixty pieces of cannon, and numerous Bashi-Bazouks).

The moral effect was such that the strong Turkish column changed the direction of their retreat. It should be said that the Bulgarian population gave eager coöperation, and that the numerous disbanded Turkish soldiers gave valuable information. Altogether, this raid can be counted as among the most audacious and the most successful.

A fourth raid, said to have been made by General Lazaref, was executed in Asia Minor (9th to 16th of October, 1877).

It was, properly speaking, a turning movement of great extent, executed with an independent column of twenty-three battalions, twenty-eight squadrons, and seventy-eight pieces of artillery. It resulted in the total destruction of the right wing of the army of Mouktar Pasha. The carelessness of the Turks, the daring and energy with which the campaign was conducted, the perfect coincidence of operations in front and in rear, due to constant telegraphic communication with the commanding general's headquarters, were the principal factors of success. Seven generals, twenty battalions, and thirty rifled guns fell into the hands of the Russians

This same campaign equally exhibits many examples of cavalry fighting on foot, which displayed the traditional aptitude of the Cossacks for this kind of combat.

A *sotnia* of Cossacks arrived first at the summit of the Balkans, and joined the infantry in making the assault on the enemy's intrenchments. (Night of the 4th of July, 1877.)

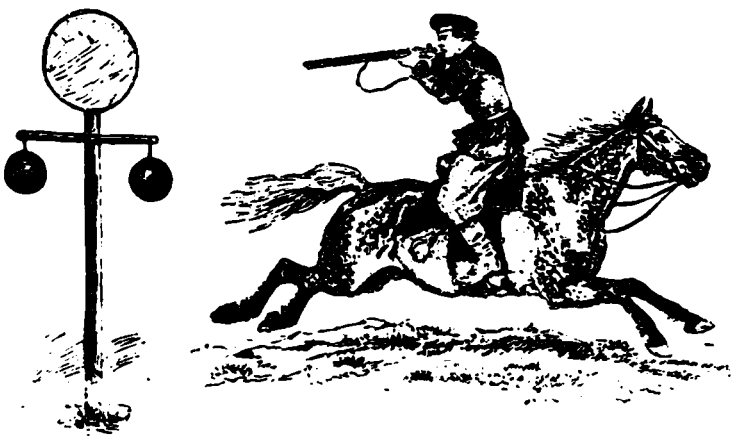
Before Plevna, the Ninth Regiment of the Don took part in two assaults with the infantry; it carried by assault the three successive stages of defense thrown up by the Turks. Threatened by a counter-attack on the part of infantry and cavalry, it fell on the Turkish cavalry, threw it back on the infantry, and obliged the latter to retreat.

On the 11th of August, at the desperate defense of Shipka Pass, the first and second *sotnias* of the Twenty-third Regiment of the Don, threw themselves at full speed on this position, and sent back their horses in all haste, to bring up the light infantry.

Deployed as skirmishers in a single firing line, these Cossacks stopped the attack of the Turks by their fire, opening the way for a battery of artillery, and serving as its support when in position. The latter, being obliged to cease firing for want of ammunition, the Cossacks, together with a regiment of infantry which had just arrived, repelled the tenacious attacks of the Turks. The arrival of the light infantry, brought up by the horses of the Cossacks, permitted the offensive to be resumed.

Of the Rapidity and the Endurance of the Russian Cavalry; its Education in Order to Acquire these Qualities.

We have seen that above all things the Russians look for one essential quality in their cavalry: it is mobility which demands *rapidity* and *endurance*. Not the rapidity which consists in traversing a limited space in the shortest time, but that which obtains in a rapid march during a certain number of hours and days, whatever may be the obstacles which the state of the roads and the vicissitudes of the weather present,—the entire force remaining in good condition for battle.



Experiments dealing with this subject are individual or collective.

The first, which applies almost exclusively to officers, have the object of accustoming detached cavalrymen to completing extraordinary circuits through obstacles of every kind: unfavorable soil, wooded land, crossing water courses without means of passage, rain, snow, frost, complete obscurity, etc.

The second have as an object to train organized detachments in rapidly traversing great distances, in order to surprise important points, whose distance would seem to place them out of reach of all interference. Under such

circumstances, the exhaustion of the horses ought not to stop the Russian cavalryman, who should carry out dismounted the accomplishment of his mission.

For example, they have noted the rapid journeys of officers carrying orders or sent on reconnaissance during the war of 1870–71, in German officers traversing 160 kilometers going and coming, in sixteen hours, giving only two hours' rest to their mounts toward the middle of the trip (the point where the order was to be delivered or the reconnaissance effected). The following rules have grown out of this experience.

1. That it is always advantageous to have well mounted officers carrying dispatches within a radius of seventy to eighty kilometers, without changing horses and without utilizing relay stations.

2. That the use of cavalry escorts for officers charged with this duty should be avoided. One or two cavalrymen would be only a source of embarrassment, not being able to march with same rapidity as the officer, and being no guarantee for his protection.

3. In a fairly safe country it will be useful to have two officers sent out together, marching side by side; this will permit of their overcoming many obstacles in concert.

If now we pass to marches of resistance, accomplished by detachments more or less numerous, experience indicates the following rules:

1. Horses must be kept at the trot for about half an hour at the start.

2. A few *versts* before arriving at the long halt or the end of the march, it is a good thing to bring the horses to a walk, loosening girths, letting them drink, and leading by the head, the cavalrymen marching on foot (the *verst* is equal to 1,067 meters).

3. The most favorable method of alternating the gait will be three *versts* at the trot (fifteen feet), then one at the walk (ten feet). If the trot be pushed to the quickness of a *verst* in four minutes, this gait must be prolonged for a less length of time. Passing from one gait to another ought to be

regulated with the greatest care in order to avoid sudden jerks.

4. In this way horses can pass over from nine to ten *versts* an hour.

5. Better to arrive late in camp than to start before daybreak in the morning.

6. The long halts ought to last at least four hours.

7. When these are about sixty *versts* distance from each other, it will be a good thing to make small halts at intermediate points.

8. If the temperature is high, it is necessary to bathe the horses' heads and limbs from time to time, and, if possible, to pass them through water.

9. Every cavalry corps can, with severity, complete marches of from seventy to seventy-five versts, but after such an effort they cannot be counted on for employment on the battlefield. Perhaps they might still be capable of a

charge over a short distance, but such troops would be incapable of taking part in a cavalry combat of more or less duration. Under such conditions it would be understood that part of the cavalry only were to be drawn upon for dismounted fighting, which would permit of placing a certain number of guns in position, but not of the employment of a mounted troop.

10. A march of fifty versts ought to be considered the maximum for a cavalry troop intended to fight, according to

the tactics of its arm; under very favorable circumstances, however, the march of the troop might be pushed to sixty versts.

Journeys With Relays.

Marches of resistance *with relays* produced the following results: They succeeded in covering 200 versts in eight hours. Under these conditions they obtained a speed of twenty-three versts in half an hour; cavalry officers will even succeed in clearing, under like conditions, 160 versts in fourteen hours, traversing twenty versts at the gallop.

The Passage of Water Courses by Cavalry.

General Skobeleff, taken away so prematurely, professed that a troop of cavalry ought never to be stopped by a water course, whatever might be its width, depth, swiftness of current, and nature of the banks. From different experiments arise the following observations:

(*a*) It is impossible for cavalrymen to cross by swimming, when clothed, equipped and armed, except over small water courses with hard bottoms.

(*b*) In order to cross streams from thirty meters in width up to the largest rivers, such as the Danube, Vistula, Nieman, one of the three following plans ought to be chosen:

First Experiment.—The regiment has some skiffs at its disposal (if not, it will always be possible to construct a raft). The skiffs are used to transport the arms, munitions, clothing, and horse equipments to the opposite bank.

The men are nude; the horses should be bridled with as much care as if on land, otherwise they might be able to rid

themselves of their bridle or throw out the snaffle-bit; it is unnecessary to tighten throat-latch too greatly, as it might render the animal's breathing more difficult. It is well to fasten the reins to the mane, so that they may not become tangled.

As soon as the horse begins to swim, the reins are no longer used to guide him; they are supported by one hand, and the other hand is used for guiding the horse by dashing water on his head.

During the swimming, the cavalryman ought to try, holding tightly to the mane with his hand, to be on the down stream side of his mount. It is necessary to take this position in order to prevent the horse from following the direction of the current; in this way the cavalryman swims more comfortably and the current cannot carry him under the horse.

Upon entering the water the horse is conducted some little distance against the current, in order to counteract its strong pressure, and if he refuses to advance, becomes frightened, or rears, it is unnecessary in any case to pull on the reins, or especially to cry out, but to try to quietly encourage and soothe him with low voice and calm and confident tone.

The cavalryman should rest lightly on the horse, so as not to obstruct his swimming. It is a good thing to accustom the men to let go the mane and grasp the tail, a thing which is necessary when the horse begins to plunge about in the water; the men must also be accustomed to leaving their own horses, from time to time, in order to seize the tail of a neighboring horse, under the supposition that their own has been drowned.

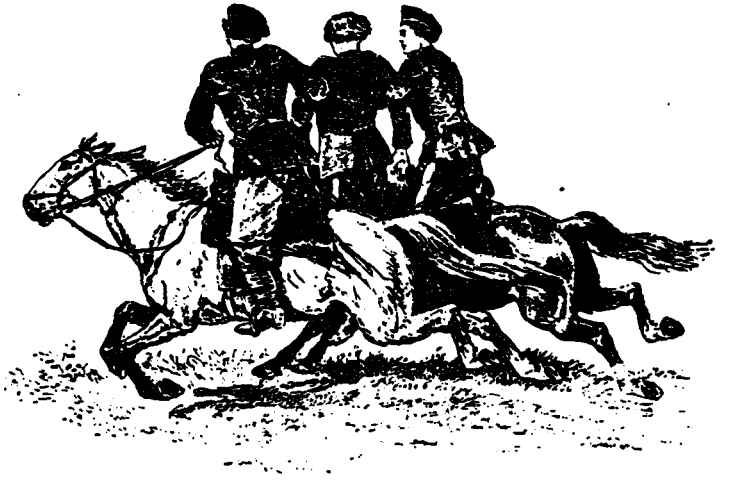
In the passage of a river by a mass of cavalry, one ought, independent of the preceding instructions, to see that the horses which swim the best are at the head of the troop, and that the best swimmers are placed on the down-stream side.

The cavalrymen should preserve between them a distance of at least three paces.

It may be remarked that it is quite impossible to exercise any command whatever on the river banks, because the noise of the water and the snorting of the horses prevent hearing not only the commands but also the signal calls.

A very conspicuous point on the opposite bank should be pointed out, towards which the swimmers should direct themselves, down stream more or less, from the starting point, according to the swiftness of the current. The passage can be effected by platoons, but if nothing urges, it is better to make it by squads.

It is calculated that for a stream of water 500 paces in width (there may be 1,200 paces between starting and land-



ing points, taking into account the current) about fifteen minutes would be necessary for the passage of a squadron, counting the time of departure from the moment when the cavalrymen dismount up to the time when, having reached the opposite bank, they are ready for combat.

Second Experiment.—Crossing a large water course, deep and rapid. Some skiffs or rafts are at hand.

Cavalrymen were first sent across with the horse equipments; then the horses, on which the watering bridles had been left, were pushed into the river as a herd. A few good swimmers took the lead with the sure horses, and the mounts of the three squadrons crossed as a single troop. As soon as the horses arrived on the other bank they were taken by

their cavalrymen and resaddled. The crossing was effected rapidly, the horses entering the water more willingly when at liberty.

Third Experiment.—Water course to be crossed without having skiffs and rafts at hand; horses saddled, the cavalrymen carrying their effects rolled in packs.

Some good swimmers passed over first to the opposite bank. One of them carried tied about his body a long thin rope previously fastened to a tree. This rope served to establish a ferry between the two banks.

The platoon of sappers, whose men were the best swimmers, were sent across as an advance guard.

After having undressed, they fastened on their heads packages of tools, arms and ammunition. Arriving on the other side, they immediately constructed a field intrenchment, intended to cover the passage of the river. The front was quite broad so as not to cramp the horses after having landed.

A system of signals, previously agreed upon, permitted the advance guard to communicate with the main body from one bank to the other. Afterwards they proceeded with the transportation of the men by complete units.

Each cavalryman made a package of his things—clothing, equipment and arms, fastened it about the neck, and then entered the water, pulling on the cord with his hands and meantime swimming with the legs. The passage took place in single file and was accomplished very slowly. The crossing might have been expedited by establishing several rope ferries by means of parallel ropes.

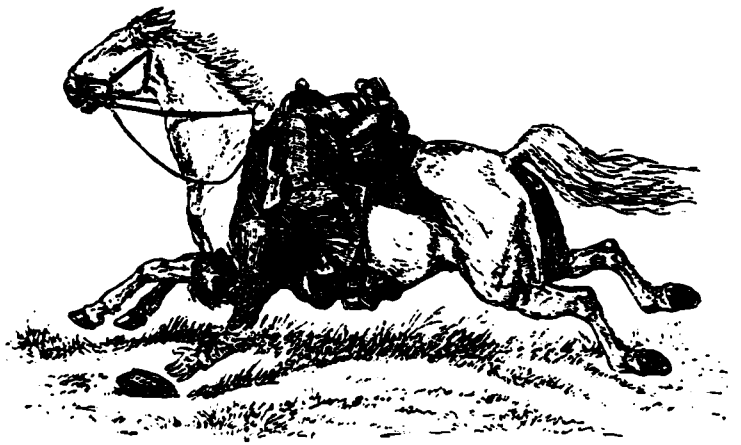
After the men of the first squadron had assembled on the other side, the horses were made to pass over as a herd, all saddled. The experiment demonstrated that extra precautions must be taken to stow away the straps, so that horses may avoid becoming entangled with each other swimming side by side.

The girths should be loosened, the stirrups raised and fastened to the pommel, the curb-bits withdrawn from the horses' mouths, and the reins tied around the neck without

checking respiration. As the troop moves forward the good swimmers with the sure horses serve to guide them.

Cavalrymen should be furnished with knives so as to immediately cut the horses' straps to prevent them from drowning should they become entangled.

As soon as the horses have been conducted to the other bank, with their wet equipments, the squadron was re-formed, the cavalrymen remounted their horses and executed movements.



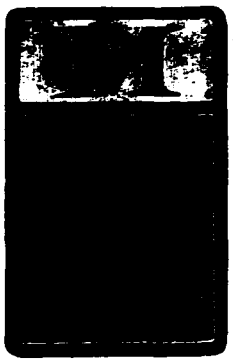
The crossings of the squadron lasted one hour and twenty-four minutes from the first preparations up to the moment when the troops took the formation for fighting.

With four ropes four squadrons might pass over in the same period.

In coming out of the water horses are very much excited. Putting them to quick gaits should be avoided until they have quieted down. It will therefore be advantageous to march them at the walk for twenty minutes.

[THE END.]

EXTRACTS FROM THE REPORT OF COLONEL A. L. WAGNER, ASSISTANT ADJUTANT GENERAL, CHIEF UMPIRE MANEUVER DIVISION WEST POINT, KENTUCKY, AND FORT RILEY, KANSAS.



MANEUVERS in 1903 were held on a more extensive scale than ever before attempted in the United States. There is no doubt of the extreme value of these maneuvers, and it is to be hoped that they may be continued in our army. The organized militia of the various States has shown much interest, and the results have been gratifying. This year the report of the maneuvers is published by authority of the War Department by The Hudson-Kimberly Publishing Company, of Kansas City, Missouri, in a neat pamphlet which is provided with good maps of the maneuver fields.

The pamphlet embraces the reports of the chief umpire of the maneuver division, Colonel A. L. Wagner, Assistant Adjutant General United States Army, now a member of the General Staff. Colonel Wagner has acted in this capacity for the three large maneuvers. A large part of his report on the maneuvers at Fort Riley, Kansas, in 1902, was published in the CAVALRY JOURNAL for January, 1903. The report for 1903 is available to all readers. The account in the JOURNAL therefore, is limited to certain extracts of special interest to the cavalry, but a perusal of the entire report is necessary for a thorough understanding of the operations.

The subject of guides for the maneuver grounds is treated as follows:

"The maneuvers at Fort Riley last year having demonstrated to the Department Commander the desirability of having guides for newly arrived organizations maneuvering even on an open and well mapped terrain, it was evident

that such guides would be all the more necessary in a region such as that at West Point, many parts of which are so close and wooded as to render it difficult for a person to find his way under ordinary circumstances, to say nothing of the perplexity which a commander is likely to feel in conducting military operations over unknown ground. Troop K, Fourth Cavalry, under Captain Harry C. Benson, was accordingly sent from Jefferson Barracks to West Point for instruction as guides. This troop arrived (September 1, 1903) before it was possible to place a good map in their hands, but the troopers were sent daily over the roads in the designated theater, and they conducted their works so well that before the maneuvers began there was scarcely a man in this troop who was not thoroughly familiar with all the roads, by-paths, farm houses, and various topographical features of the ground. The services of these guides during the maneuvers were invaluable, and their instruction reflects great credit upon their troop commander."

In the discussion of the second problem the following comment was made by Colonel Dorst, Third Cavalry, the senior umpire with the Blues:

"It was observed that individual cavalrymen, employed as sentinels, scouts, skirmishers, patrols, etc., on all occasions, held the carbine, withdrawn from its scabbard, at an advance. In corn-fields, brush, orchards, woods and thickets, and in the vicinity of buildings they could see, as a rule, only a short distance, their field of view being increased by the fact that they were mounted and could overlook more ground than a man on foot. The carbine can be used with effect only when dismounted, and in many cases the troopers would by dismounting lose sight of an enemy on whom they wished to fire. It was in campaigns in a country like this, during the Civil War, that the pistol was used as an offensive weapon by small parties of cavalry with the greatest advantage, and it is from the experiences of such parties that enthusiasts for the use of the pistol by cavalry have drawn their strongest arguments. Detached scouts, etc., especially when acting alone, in a country of this kind, must always be prepared to meet similar parties of the enemy at very close range, and the one that can get the drop in using its weapons will always have the advantage. In my opinion, experience in actual warfare would soon lead to the habit of riding with the pistol drawn, instead of the carbine, in a country where

hostile scouts or skirmishers are liable to come upon each other without warning, within short pistol range.

"Another thing noted was a tendency for sentinels, patrols, supports and reserves to dismount without removing their carbines from the saddles. No argument is required to show that this should not be allowed in detachments thrown out in front of an army and liable to surprise from the enemy's cavalry."

"This comment is cordially endorsed and is commended to the careful consideration of all the officers present. The major-general commanding directs me to announce that in future maneuvers, cavalry scouts will use pistol, as recommended by Colonel Dorst, and that officers will carefully see that troopers do not dismount without removing their carbines from the saddles."

In the discussion of the eighth problem the following comment was made:

"It has also been noted, in this and other exercises, that the position of troops was on more than one occasion betrayed by flashes of sunlight from saber scabbards. If we must be so conservative as to retain an anachronistic arm and call it a weapon, instead of relegating it to the museum of antiquities to which it properly belongs, it would seem well that we should provide the saber with a leather scabbard, or something which could limit it to mere uselessness instead of having it a positive detriment. Possibly when some European nation becomes sufficiently advanced in its military ideas to discard the saber, we may humbly follow suit."

* * * * *

"The remarks of the chief umpire relative to the saber called out a warm discussion between the advocates and opponents of that arm. The remarks of the different speakers were, unfortunately, not stenographically reported, but the arguments *pro* and *con* were essentially as follows:

ADVOCATES.	OPPONENTS.
1. Even if the opportunity of making effective cavalry charges on the field of battle be more rare than in the past, the necessity for shock action on the part of cavalry has by no means disappeared. Cavalry must cover the front of an advancing or the rear of a retreating army; and it will consequently encounter cavalry, the opposing forces often coming upon each other with such suddenness that shock action alone will be practicable. There will thus be an opportunity for an effective use of the saber in the conflict of cavalry with cavalry.	1. That shock action of cavalry is necessary is not denied, but is readily conceded. But in such action the weight of the horse and rider and the velocity of the movement furnish the living force for the shock. The saber is of use only in the mellay, and for this purpose the revolver is better.
2. The saber is "always loaded," and does not become useless, as a revolver does when the last shot is fired.	2. The saber is always loaded, but it has an extreme range, including the arm of the trooper, of about eight feet. A good club would do about as much damage.
3. There may be some excuse for comparing a dull saber to a club; but the saber should be kept sharpened, and should be carried in a scabbard that will not dull it. The trooper provided with a revolver alone is helpless when his last shot is fired, but if provided with a saber, he is never without means of defense.	3. It should not be assumed that a trooper will be provided with a single revolver. He should be provided with at least three, if not four, One or two could be carried on the belt and two could be carried in holsters. By the time all these weapons were emptied, there would be time to reload. It should be remembered that the revolver is only for close action—for use just before the shock and in the mellay.
4. The moral effect of cold steel is not to be ignored. The effect of gleaming blades ready to strike adds greatly to the demoralization of the troops facing the rapidly advancing line.	4. Men are affected less by the danger of being cut up than by the danger of being run over. If cavalry had demonstrated its expertness with the revolver, the moral effect upon its opponents would be felt in succeeding engagements.
5. The men are likely to check their speed to fire before the shock is delivered. The firing will be hasty and wild. In the mellay the men are quite as likely to shoot their own comrades as they are to shoot their opponents.	5. The men will not check their speed to fire if they are properly trained and disciplined. Neither will their firing be hasty and wild unless they are poorly trained. It takes time to make a man a good "shot" with the revolver; so does it take time to make him a good swordsman—probably as much time in one case as in the other. The chance of men shooting their own comrades in the mellay is a risk that must be run. It is not believed to be great.
6. If the charge be made with the revolver, the officer cannot lead the charge, but must follow in rear of the line. The influence of their example will thus be lost.	6. True. the officer cannot lead the charge; but if the cavalry be of good quality, this is not deemed necessary. They can probably control the line better if they are behind it. They are not, at any rate, ahead of the line at the moment of the shock, which is expected to be delivered as

7. A man receiving a stunning blow from a saber is out of the fight; but a man may receive a serious—even a mortal—wound from a revolver and still be in the fight for a considerable time.	7. The bullet should be of a sufficiently large caliber to have a "stopping effect" on a man or horse. There is no reason why this should not be; the revolver is not a long-range weapon.
8. The Civil War presented instances of the triumph of the saber over the revolver in the charge; but not the reverse.	8. This is denied. Probably no cavalry was more frequently successful in the charge than Forrest's troops. Forrests men were amply supplied with revolvers and knew how to use them.
9. The saber is peculiarly useful in pursuit. Especially is this the case with an uncivilized foe when you are in hot pursuit and in the midst of the fugitives. It is easier to strike them with a saber than to shoot them in the confusion of the pursuit.	9. This is not granted; it may be so.
10. The principal opponents of the saber seem to be infantry officers or officers who were never in the cavalry service.	10. Not so. Some of the most noted advocates of the substitution of the revolver for the saber are cavalry officers or officers who have long served in the cavalry. The sentiment of the cavalry officers present seems to be about equally divided on this subject.
11. The saber is dear to the cavalryman. The traditions of the arm are intimately associated with it. Sentiment means a great deal to a soldier. It should not be lightly ignored. The weight of the saber is but little, and it does not add materially to the burden of the horse.	11. True; but we are entering upon an era of hard fact. The blue uniform, with all its glorious traditions, has given way to the less conspicuous khaki. Everything that is not useful is useless. In a long march even the slight weight of the saber becomes an additional burden. At any rate the additional weight might better be put in the form of an extra revolver. Moreover, our traditions as a people are of the rifle and revolver, not of the saber and bayonet. It is a significant fact that when cavalry regiments were recently ordered to the Philippines, their sabers were boxed up and left at home.

"The above is believed to be an accurate epitome of the arguments used in this discussion, which was continued long and earnestly, but with a happy absence of acrimony. Both the advocates and the opponents of the saber were manifestly sincere and positive in their views. All were apparently agreed that if the saber be retained, it should be a sharpened weapon, kept in a proper scabbard, and the men should be carefully trained in its use; and that if the revolver be substituted, the men should be continually practiced in mounted pistol-firing, and each trooper should be provided with several revolvers instead of relying on a single weapon. The present saber scabbard was universally condemned by the officers at the maneuvers, and the opinion seemed unanimous that it should be replaced with a scabbard that would not glitter in the sunlight."

* * * * *

"The views expressed in this discussion are here set forth at considerable length, as the subject is believed to be an important one, and the officers assembled were representative of many organizations and of all arms of the service."

EXTRACT FROM RULES GOVERNING THE CONDUCT OF TACTICAL EXERCISES.

Cavalry.

"44. Umpires should be early on the scene in cases of cavalry attack, as otherwise it might be difficult to give a correct decision. In adjudging the result, the situation of the opposing forces, the execution of the attack and the strength of the opposing forces should be carefully considered.

"45. Cavalry charges must stop at 100 yards from the enemy.

"46. Cavalry standing mounted to receive a charge must be declared defeated.

"47. Should cavalry, although somewhat inferior in strength, succeed in delivering an attack upon cavalry that is deploying, the attacking force should be adjudged victorious.

"48. In a cavalry versus cavalry charge, no maneuvers should be made so close to the point of attack as to endanger the steadiness and order necessary in the delivery of the shock.

"49. In a cavalry versus cavalry charge, the forces being of approximately equal strength, and both in proper formation, the victory should be adjudged to the side last bringing up a formed reserve.

"50. In deciding an attack of cavalry against infantry, the condition of the latter must be carefully considered. If the infantry undertakes to change its formation, or if it does not preserve the necessary composure in delivering its fire, it is to the advantage of the cavalry.

"51. If the infantry is not surprised, or has not already been shaken, and receives the cavalry attack with coolness and well directed fire, the attack will be regarded as unsuccessful, unless there is a great preponderance of force on the side of the cavalry.

"52. When cavalry attacks artillery in front, the charge must be made in extended order and the escort should be attacked at the same time by cavalry in close order.

"53. Though a cavalry attack against the front of artillery may be attended with great loss, it is not impossible that it may succeed if skillfully made over favorable terrain.

"54. Cavalry cannot move at a walk when exposed to the fire of artillery which is less than 2,500 yards away."

THE RUSSIAN-JAPANESE WAR, 1904, WITH EXTRACTS FROM VARIOUS SOURCES.

The Russian-Japanese War of 1904 resembles, in the prompt aggressiveness of the Japanese navy and in the assumption of hostilities before the formal declaration, the China-Japanese War of 1894. The two wars also have many other points of resemblance. The theaters of war and of operations, both for the land and naval forces, are practically identical, at least during the first stages. The policy of the Japanese in regard to Corea, and the management of the politics of Corea by them, is a repetition of what it was in 1894, though undoubtedly they have profited by experience.

The same initial successes of the Japanese fleet have given the Japanese fleet practical control of the seas. Port Arthur is again one of the most important naval strategic points, and again the Japanese navy is concentrating all its attention on that point, as it did ten years ago when it and Wei-Hai-Wai were the great naval strongholds of China. Attacks were made then as now, and there was some wonder as to the object of such reconnaissance work. It is hardly thought probable that the demonstration in front of Port Arthur is for the purpose of provoking the Russian fleet to come out and engage in naval battle. In 1894 the true object became evident in about a month. It was to cover the movements of the Japanese transports that were pouring troops into Corea all the while. This is undoubtedly the true object of the presence of the Japanese fleet in front of Port Arthur, and its constant attacks and feigned attacks. It is the easiest and most secure method of assuring the absolutely safe movement of the Japanese transports, which can sail without escort or convoy, and thus with the least delay.

The causes of the two wars also are not dissimilar. Corea and its management were in 1894 the bone of contention, and the same question is undoubtedly the cause of the present war. There is this time also the question of Manchuria

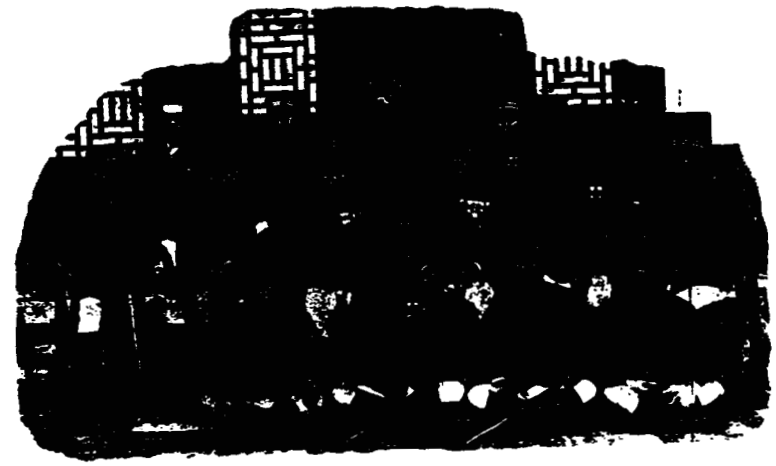
and the Russian occupation of this Chinese territory, which to a certain extent had its influence on the negotiations that ended in war. But Corea remains the primary cause of war. The position of this little country, between the giant China on one hand and progressive and rejuvenated Japan on the other, was already a complicated one, which could be settled by war alone between those two powers, one mighty on account of its numbers and prestige, the other one even more powerful in its recent development and awakening. But the situation, involved as it was, became more complex with the injection of Russian interests and aspirations. This immense power, belonging to the western continent, had stretched forth its mighty arm eastward. Its trans-continental railway was seeking an outlet other than that afforded by the ports in its own domains, and Chinese territory must be traversed. The opportunity came with the end of the China-Japanese War. By the treaty of Shimonoseki, Japan was to receive, besides a large war indemnity, Formosa, the island of Pescadero and the Liao-Tung Peninsula, with the great naval stronghold of Port Arthur. This latter condition was deemed excessive by a coalition of European powers, consisting of Russia, France and Germany, who advised Japan to relinquish the peninsula. This Japan did. The next step was that each of these powers (and England) themselves obtained important concessions. By agreement with the Chinese government, dated March 27, 1898, Russia is in possession of Port Arthur and Talienwan, and practically of all the Liao-Tung Peninsula. Thus it found an eastern terminus for its railroad, which it was at one time believed could be found only in Corea. Port Arthur was made into a naval base and greatly strengthened. It is not open to any but Russian and Chinese men-of-war, while Talienwan Bay is the commercial port.

A glance at the map will show the proximity of Corea to this newly acquired territory of Russia, and the temptation to control this nearby nation is easily imagined. Although other European powers also obtained rights in Chinese territory, to none of them did the acquisition have the vital importance that it had for Russia.

An attempt at interference in Corea, however, brought out the earnest protestation of Japan, who believed she had prior rights in that country, and was prepared to defend her position, even to the extent of going to war with powerful Russia.

Vladimir, writing in 1899, says:

"After the war with China, Japan still retains control of the government of Corea, for the laudable purpose of establishing order and progress in the country. But the task



JAPANESE OFFICERS.

proved to be beyond even the patience of the Japanese, and soon they were deprived of the moral authority to continue their self-imposed task. From that moment Russian influence became paramount in Corea, but this also, as soon as it was no longer necessary to the intrigues of the Corean factions, began to encounter the same difficulties, vexations and disappointments which had fallen to the lot of all that had attempted the hopeless task of reforming Corea. This second intervention of Russia was felt more deeply by the Japanese than the first which had deprived them of Port Arthur. Although the principal cause of discussion had ceased to act, the feeling has driven the two countries in the last few years to make incessant military preparations for what has been generally considered an inevitable struggle."

L. G. Carr Laughton, in the English *United Service Magazine* for March, says:

"Russia had already gained so much without serious fighting that she had seemingly lost sight of the possibility of determined opposition. So she pursued her way, strengthening her position in Manchuria. The same policy was beginning in Corea. Japanese interests were being severely threatened, and there was no sign of concerted opposition to the movement. The position had become intolerable when, on the 8th of October, 1903, the day arrived on which the evacuation of Manchuria, for which Russia had given pledges, should have been complete. But there was no sign of any evacuation, and Japan called on Russia to carry out her promise. Excuses had already been found for the non-fulfillment. They were repeated to cover the non-compliance; but they were not accepted.

"Then Japan stated the only terms which she would accept. It was understood at the time by all but Russia herself that Japan was terribly in earnest, and that the proposal embodied the minimum terms which could be accepted. But Russia insisted on negotiating. Japan did not give way, and she let it be seen that the original terms put forward were in effect her ultimatum. The gist of these terms was, that the independence and territorial integrity of both China and Corea should be mutually recognized; but that there should also be special recognition of special interests acquired by either power in both China and Corea.

"These terms Russia would not accept. Since the war of 1894, she has recognized that the opposition to her aims in the Yellow Sea must come from Japan and not from China; and to guard against Japan it has been necessary to strengthen her strategical position in those waters. The primary strategical necessity to her was a good base in southern Corea, and it is on this rock that she has split. If given time she would have completed the absorption of Manchuria, and then have treated Corea in similar fashion. Being denied the necessary time, she tried the only other means open to her, of demanding the grant of a port as a base. Masampho was most spoken of, but any good harbor would have satisfied her so long as it satisfied two conditions. It must bridge the gulf of a thousand miles between Vladivostok and Port Arthur, and it must afford a post of observation on the Straits of Corea. It was not for a moment to be supposed that Japan would agree to establish her enemy on her flank, almost within view of her western outpost. The impossibility was double. For, by so doing she would not only lay herself open to attack, but would forever renounce her aspirations in Corea.

"Both countries look upon Corea as essential to their welfare. Russia looks to the strategic advantage which could be drawn from it. Japan regards it as a mart, and as an industrial district into which she can pour, without losing them, her surplus population. Her idea of a Japanese Corea was to be gained by a process of naturalization and the survival of the fittest, not by the Russian method of military occupation.

"That such conflicting ideals made a conflict inevitable cannot be denied. That the clash has come now is due, perhaps, to a belief on Russia's part that she is strong enough

A JAPANESE REGIMENT.

to undertake the war, perhaps partly to a failure to appreciate the solidarity of Japan: but more probably to a conviction that she had gone so far that she could no longer draw back without a serious loss of prestige.

And so events drew steadily on to the crisis. On the 3d February the position was that Japan was anxiously waiting, against hope, for a satisfactory Russian answer to her latest note.

"On the 5th February, Japan, tired of waiting for an answer which Russia seemed to have no intention of giving, took the decisive step of recalling her ambassador from St. Petersburg. Russia at once took a similar step, and it became a question as to when and where the blow would fall.

"While Russia was trying in feverish haste to remedy her unpreparedness, the blow fell. For dramatic suddenness the opening of hostilities in this war may be said to be without parallel."

Having thus traced the points of resemblance of this and the China-Japan War and the causes that led up to the present one, it will be well to give a short description of the two armies, and of the military strength of the nations.

THE JAPANESE ARMY.

A nation that is able to transport 80,000 troops to foreign soil in a few months and to follow this up with large reinforcements and with supplies for that army, can lay claim to being a military power. This Japan did ten years ago, and now she is confronted with the same problem. The ten years intervening have not been spent in retrospect but in further development. Each year has put one to two hundred thousand men in the army who have received military training. The transport system, undeveloped in 1894, has had careful attention, and so has every detail of the plan of mobilization.

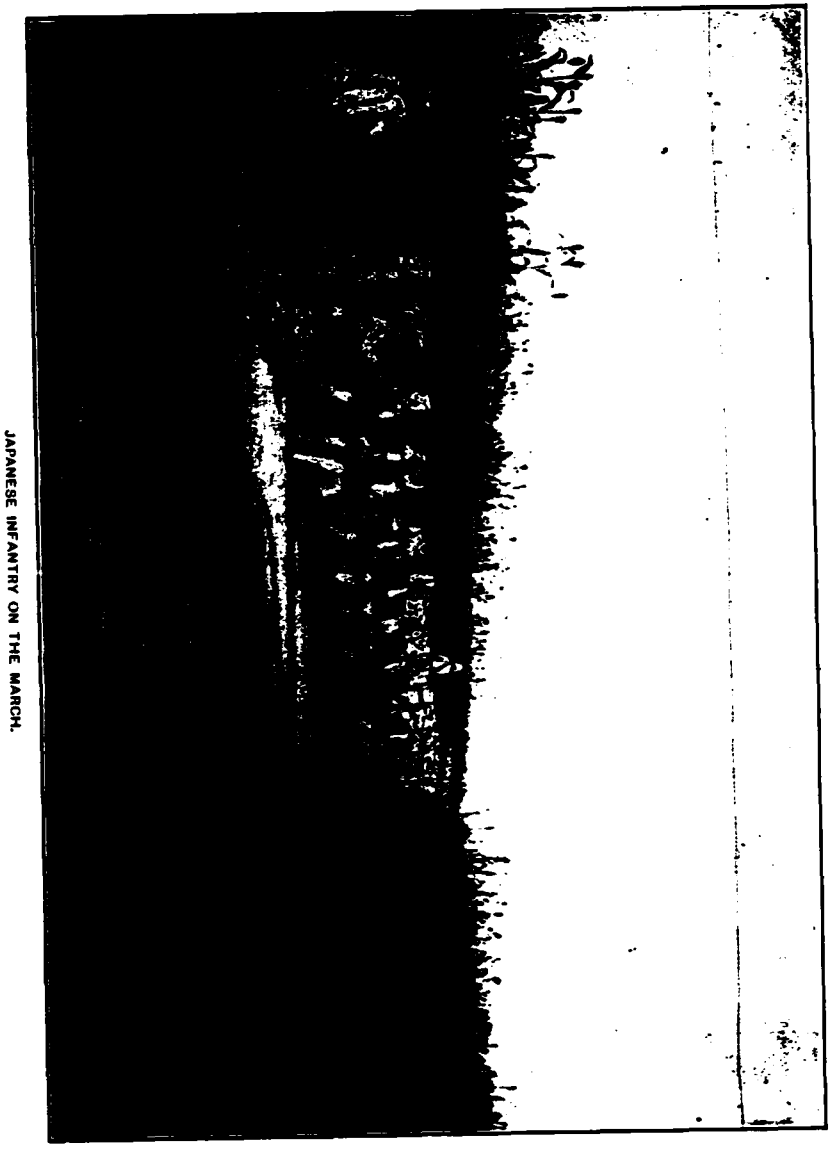
As a nation, dating its army organization from 1872, Japan made wonderful strides in the first twenty years. The outcome of the war with China was a revelation to the world of the power of Japan, and won for her universal recognition as a great civilized nation. The progress was not arrested by the war; the ardor and zeal for further improvement and growth was but strengthened.

Vladimir:

"No branch of human activity has been neglected, and during the last generation Japan has been like a vast beehive whose inmates were busy everywhere gathering the essence of the best they saw, and assimilating it for the improvement of their own people."

The army has had its share of this improvement. In 1900 the Japanese showed that they were not behind other nations and ahead of many of them in all that pertained to their army.

Japan has universal military service, every subject being liable to serve from the age of twenty to forty. He then remains three years in the active army, four years in the re-



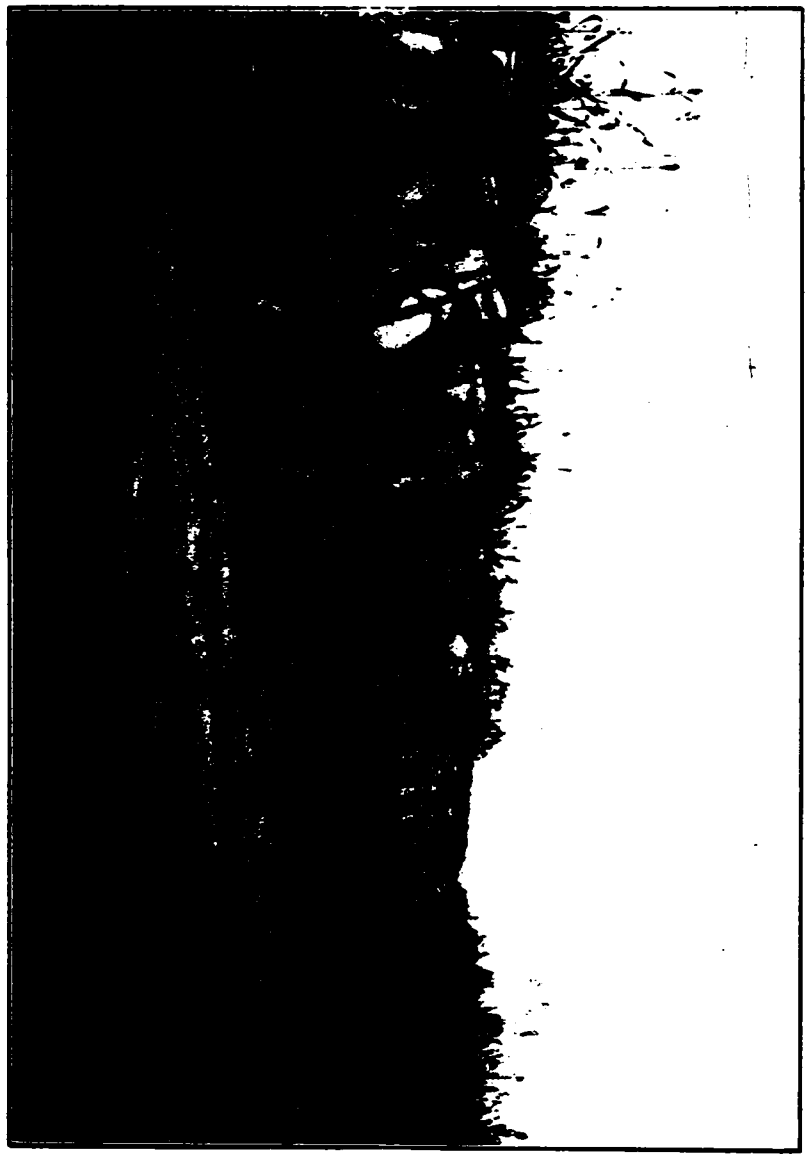
JAPANESE INFANTRY ON THE MARCH.

serve, and four years in the territorial army. Only a small fraction of the number annually fit for the army are compelled to serve. However, the continuous training has served to give Japan a formidable army both for peace and war.

All those serving in the active army, that is, the three contingents of about 48,000 for each year, give a force of 145,000 always in the service, or the peace strength. The first reserve is composed of the four contingents that have just completed the active service period, and allowing 45,000 per annum, this will give a total first line of 300,000. The addition of the second reserve composed of the five previous annual contingents raises the entire force, after allowing for losses, etc., to 500,000, which is usually taken as the war strength of Japan.

The organization of the Japanese army differs from the usual form in that its highest unit is the division, while other armies form their divisions into corps. The Japanese army has twelve divisions, the usual strength being about 12,000 men. This strength may be increased to about 20,000 by the addition of the first reserve, which immediately forms a well trained homogeneous army for the first line of some 200,000 men, which it is believed the Japanese can use as a first operating force in Corea, and yet leave enough trained men at home to provide a sufficient defense. Each division has two brigades of infantry, or four regiments. Besides this, each division has one regiment each of cavalry (300), and field artillery (thirty-six guns), a battalion of engineers (600), and a battalion of transport troops (300).

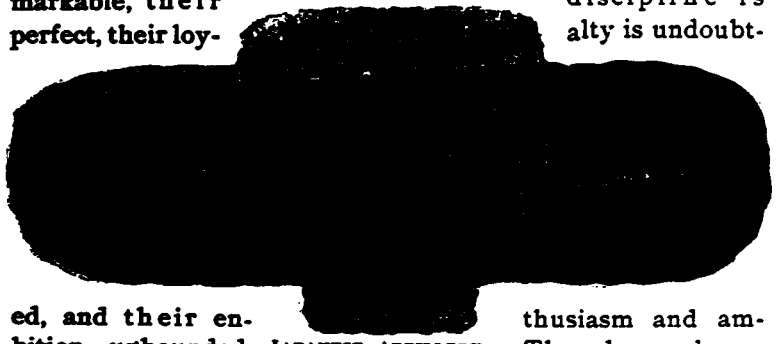
The Infantry.—Each brigade has two regiments. A regiment has three battalions of four companies each. Each company has a peace strength of 120 soldiers, but this is raised to 210 in time of war, thus giving a strength of 2,800 to the regiment. This is a much larger organization than the United States has ever provided for, our largest companies having a maximum of 150 men. But it must be taken into account that the Japanese organization takes in a large number of noncombatants, which are not included in the strength of our companies. Thus each regiment has sur-



JAPANESE INFANTRY ON THE MARCH.

geons (6), hospital attendants, gunsmiths, tailors, shoemakers, carpenters, and many other employees, which they wisely provide for in the organization and which we unwisely (it is believed) leave out. The infantry is armed with the Midji magazine rifle, holding five cartridges, an invention of a Japanese officer. Part of the troops still retain the Murata rifle used in the China-Japan War, evidently because the manufacture of the new rifle has not progressed sufficiently.

The marching powers of the Japanese infantry are remarkable, their discipline is perfect, their loyalty is undoubted, and their enthusiasm and ambition unbounded. They have always given a good account of themselves, and may be relied upon to do so in this war.



JAPANESE ARTILLERY.

Cavalry.—There is only a comparatively small cavalry force available for the Japanese army—about 10,000 out of a total force of 300,000, or about three per cent. Napoleon gave it as his opinion that cavalry should constitute about one-fourth of the force, or twenty-five per cent., the proportion varying somewhat with the nature of the terrain and other considerations. Among the principal of the other considerations and largely a controlling factor, is the amount of cavalry of the enemy. If these premises are correct and founded on experience, it will follow that in its lack of cavalry, as opposed to the excellent mounted force of the Russians, will be found the weak point in Japanese military strength. The Russian cavalry with its many sotnias of Cossacks, has all the resisting power of infantry, though capable of mounted shock action also. A proper and energetic use of this mobile and powerful arm, such as was developed by

the Federal and Confederate cavalry generals in our Civil War, will undoubtedly prove an immense advantage to the Russian side. It remains to be seen whether the horses can be subsisted and whether the many predictions as to the usefulness of these Cossacks in a war against a modern power will be fulfilled. The Japanese are not a nation of horsemen and are badly supplied with stock, which are other important circumstances to be taken into account in determining the relative proportion of the various arms.

The Japanese cavalry is armed with the carbine and saber; only the officers and the noncommissioned officers carry the revolver. The horses are extremely small, being no more than ponies, and the weight they can carry is much less than in our service. If that valuable advantage, ability to go on raids, is to be made use of, it would seem that the very first consideration is that the horses must be weight carriers.

PARTY OF JAPANESE.

Each cavalry regiment is commanded by a colonel, and consists of three squadrons. The Japanese omit the troop unit, their squadron corresponding to that division in our service. The strength of the squadron is four officers and 150 men, and of the regiment twenty officers and 570 men. One regiment of cavalry is attached to each infantry division.

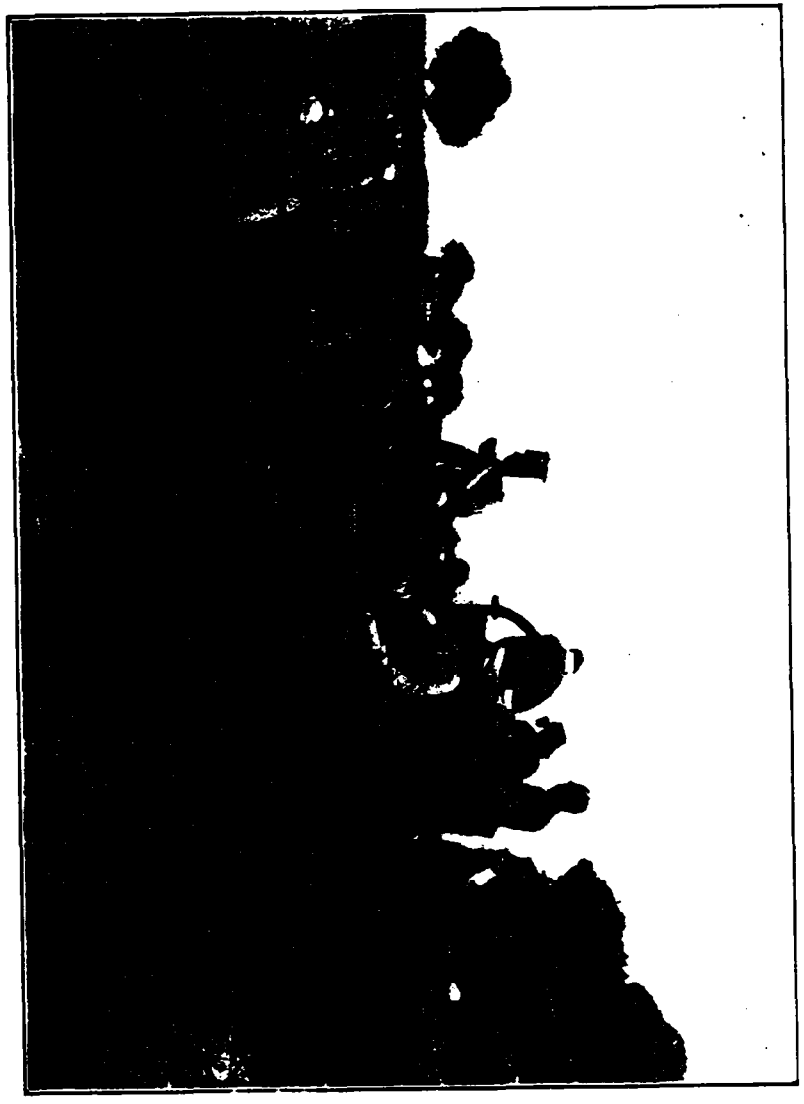
This would leave a small force of cavalry, about 2,000 or 3,000, or four regiments, for a cavalry division to act independently of other forces.

Artillery.—One regiment of field artillery is assigned a place in the permanent organization of each division. These regiments are composed of two battalions, each battalion of three companies. These companies have a strength of 190 men, and an armament of eight field pieces. There are also batteries of mountain artillery, each with six guns. Thus the Japanese have thirty six guns to a division instead of our twenty-four guns; but it must be remembered that we have a corps artillery of forty-eight guns, or an additional sixteen guns per division. Taking the Japanese division at 16,000 in round numbers, this will give two and one-fourth guns per thousand men—a very fair proportion. The armies that invaded France in 1870 possessed 3.7 guns per 1,000 men, but it was with difficulty that a due proportion of these were brought into action.

The *Broad Arrow* gives the following information:

"We have been informed by a Japanese officer that the rearmament was completed nearly two years ago. Not only have the Japanese 104 field batteries with six guns and six ammunition wagons apiece, but they also possess between forty and fifty batteries of mountain artillery, armed with a quick-firer similar in construction to that of the field gun, but considerably shorter. Both weapons have a caliber of seven and one-half centimeters, which is as nearly as possible three inches. The Japanese hope to make good use of their mountain guns in the country on the northern boundaries of Corea, which is a very mountainous district. Amongst most nations who possess mountain artillery the guns are carried on mules, but the Japanese find that their strong, hardy ponies are well suited for the purpose, and are much more tractable than mules. It will be interesting to see to what extent the Russians will employ mountain artillery in the forthcoming struggle on land, but we hear on excellent authority that so far as quick-firing field artillery is concerned there were only six batteries of quick firing guns in Manchuria shortly before the outbreak of hostilities."

There has been no recent war in which the two combatants were on nearly equal terms. Since the Russo-Turkish War,



JAPANESE TRANSPORTATION.

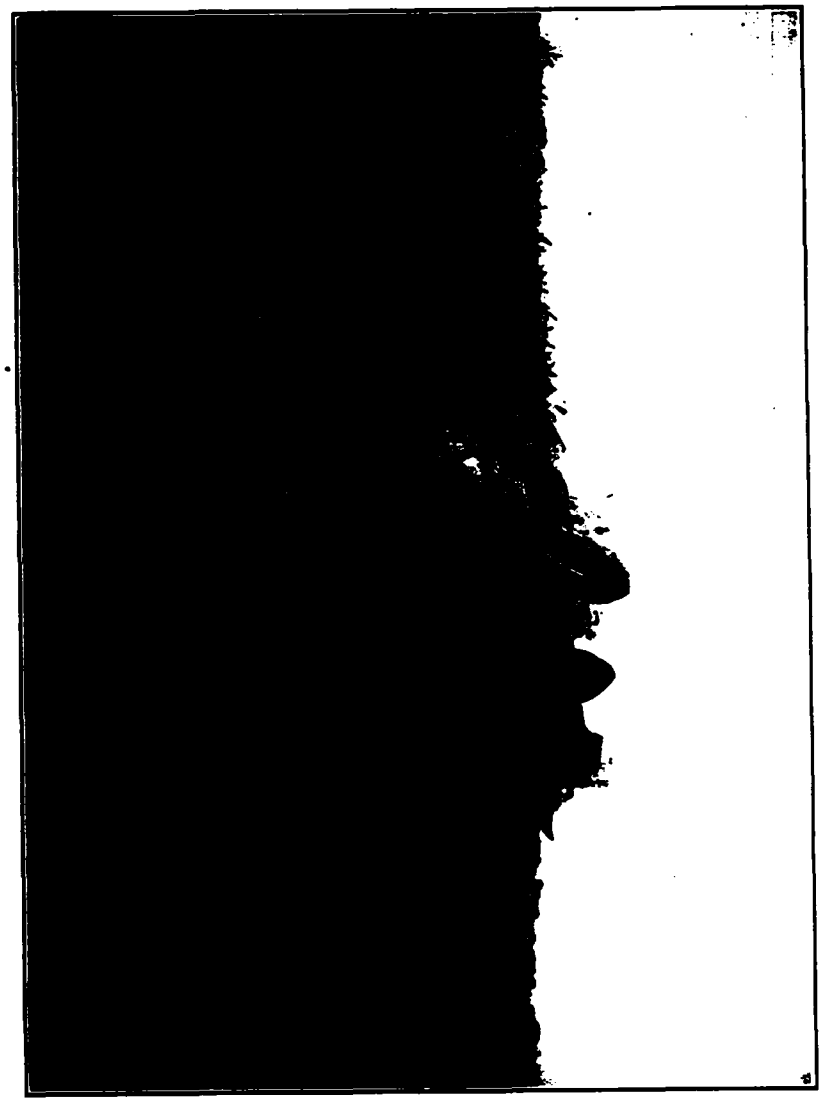
immense improvement has been made in the material of the artillery, and great development in the tactical use of field batteries will probably be brought about in this present war. One of the essential characteristics of field artillery is mobility, and it remains to be seen whether the small Japanese horses will be up to the task.

Engineers.—The Japanese army organization provides for nearly as large an engineer force as it does of cavalry, and to each division is attached one battalion of three companies, of a total strength of 800 men. This seems a large proportion of this special arm. In the war with Spain the United States organization called for about 5,000 engineers, with a total force of 300,000. In the Civil War the proportion was much smaller, but during that war infantry regiments were often assigned to and kept exclusively on engineer duty.

Train Troops.—In the matter of organization of what we might call the Quartermaster's Department, or General Service Corps, the Japanese are much more modern than we are. Not only do they provide for the necessary employees with the companies, battalions and regiments, but they have a special corps of such employees not belonging directly to the smaller units. One battalion of commissariat, or train troops, with a personnel of thirteen officers, 576 soldiers, and twenty-five noncombatants, is attached to each division. This battalion is subdivided and attached to other organizations, furnishing five sergeants, sixty men and sixty pack animals to each battalion.

The commissariat troops work immediately in rear of the troops, and distribute to the troops the supplies received from the most advanced depots.

On the line of communications, and in rear of these commissariat men, are the transport men, who are charged with forwarding the supplies from one magazine to another. These men are not combatants, but they are regularly enlisted, and form a part of the army. How different from our service, where we have all kinds of civilians under no discipline whatsoever and not trained in any military duties. We can learn a lot from this feature of Japan's organization. To it is due the smooth working of the transportation prob-

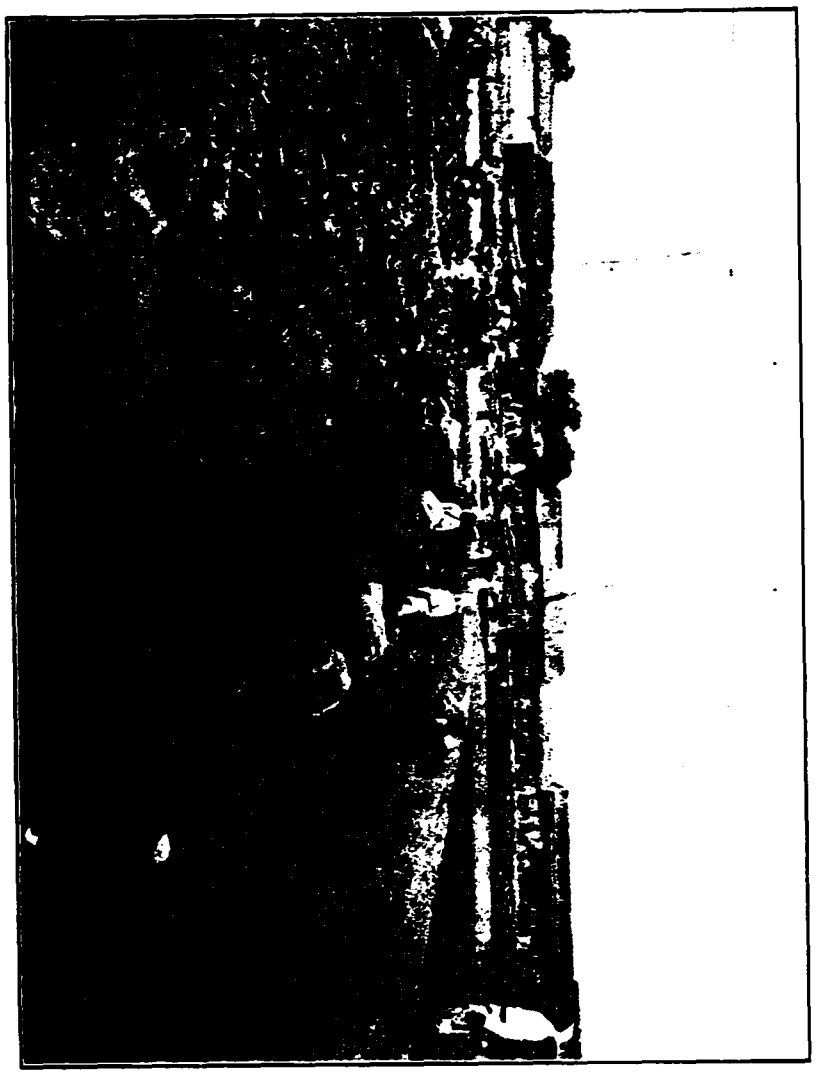


JAPANESE TRANSPORTATION.

lem, which we hear spoken of so frequently and commented on so favorably.

Supply and Transportation.—The ration consists of thirty-six ounces of rice, four ounces of meat and four ounces of vegetables. Each soldier carries one day's ration, and also one day's emergency ration. This is a ration that is easily handled, easily supplied and readily transported. The transportation consists of carts and pack animals, and is managed by the transport service. These carts do not compare favorably with our army wagons and could never take the place of the latter. In this again the lack of good horses and mules must be the controlling consideration. In the matter of transportation, however, the Japanese have secured a very important advantage in gaining the good will of the Coreans. In the China war there was at first the greatest difficulty in obtaining burden carriers. In the first movement toward Asan the entire force of carriers disappeared after having been gotten together with much work. The situation, however, changed when the Coreans found that they were paid in cash promptly upon the completion of any service. This readily overcame their reluctance, and the Japanese never experienced any further difficulty. This state of affairs will now be of immense benefit, and not only will the Coreans be glad to labor, but will render important aid in other ways.

Japan's Base and Line of Communications.—The importance of a good base and a secure and ample line of communication cannot be overestimated. In this respect naval power is to a country situated like Japan of paramount value. Armies can no longer subsist themselves during active operations by foraging in the vicinity of their march or camps. A steady stream of men, ammunition, and supplies must be following the army wherever it goes. The primary bases of the Japanese army operating in Corea are the ports of Japan. The secondary bases are the ports of Corea. The communication between these two sets of bases is by the best means possible, namely, by water transport. It seems remarkable, notwithstanding the recent development of railways, that transport by water is still infinitely more expeditious than



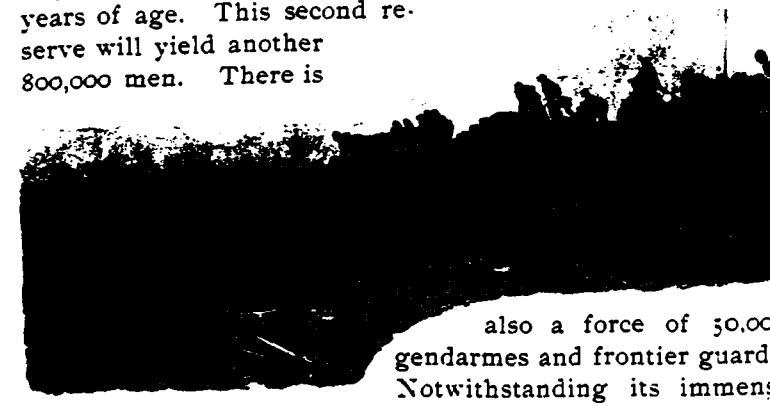
JAPANESE TRANSPORTATION.

transport by rail. There is only one consideration, the water route must be safe. If not, as was the case with the Chinese route from Pekin to Asan, Corea, the possible loss is greater than that in any moderately contested land fight. But the Japanese have the good fortune, further enhanced by their extremely aggressive naval activity, of having practically nothing to fear. If it were otherwise Japan could accomplish nothing. The control of the sea has a further advantage, in the present case of immense value to the Japanese in their operations in Corea, or if they should get that far, in the Liao-tung Peninsula. Lines of communication on land are always uncertain, and if Japan had to depend on land transport in her movement north from Seoul it would make a different problem. The difficulties are reduced, if not entirely done away with, by the control of the sea. New bases can be established wherever it may be found necessary, and thus the land lines of communications need only be for short distances. To this must also be added the feeling of security given to an army which in case of defeat can retire easily and readily to the protection of the fleet in rendezvous at the nearest base whenever such a maneuver may become necessary. Under these conditions, the matter of a perfect equipment for land transport loses its importance. Short distances can always be covered by means of improvised means, and for such work the coolie population of Corea is well fitted.

THE RUSSIAN ARMY.

Though usually considered as the most warlike of nations, it is a fact that since the Napoleonic era Russia has had but two large wars. As a nation she has been working along commercial lines. And yet she has not neglected her military strength, but has carefully fostered it and increased it, so that at the present day there is no nation that can put in the field much more than one-half the trained forces that Russia can muster. For the protection of the entire extent of her domains she can bring over five millions of armed and trained soldiers. In times of peace the standing army

numbers over a million men, or four per cent. of the male population between twenty-one and sixty years of age. Complete mobilization calls into active service all those who have had military training and who have not yet passed their thirty-ninth birthday. The addition of this first reserve brings the active army to nearly four million men. But there is a still further reinforcement available, namely, the militia, which includes all those who have received military training, and are between thirty-nine and forty-five years of age. This second reserve will yield another 800,000 men. There is also a force of 50,000 gendarmes and frontier guards. Notwithstanding its immense permanent army, Russia has only seven soldiers to each 1,000 inhabitants, while Germany has eleven and France sixteen. The United States is not in this list: we content ourselves with less than one soldier. The difficulty in such a large army is lack of material for officers, which is encountered especially in a country like Russia, that has no squirearchy like England nor a "little nobility" like Germany. Russia has sought to remedy this defect by the numerous and excellent cadet and military schools. It has also led to an economical use of officers, there being only forty-three per thousand men, while France has forty-nine and Italy sixty-two.



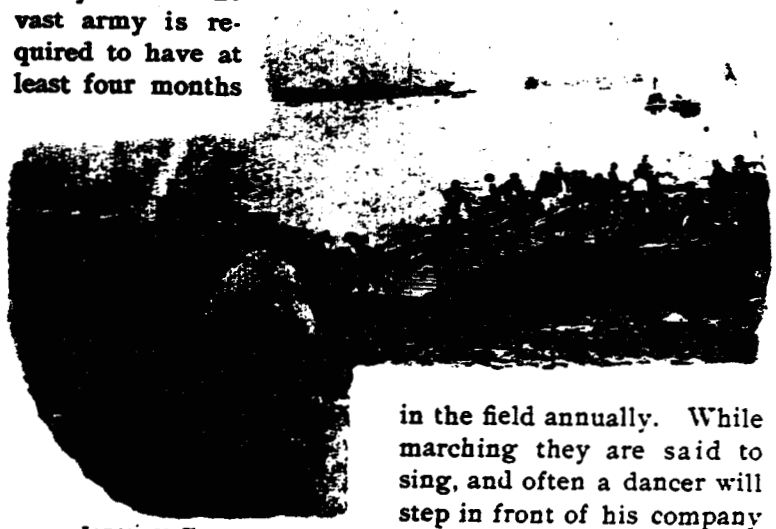
JAPANESE TRANSPORTING PROVISIONS.

The Russian army organization is similar to that of the other European nations in that the lightest permanent unit is the corps, with round numbers of 50,000 to the corps. There are twenty-eight of these corps, two of which are permanently stationed in the Trans-Baikal country and desig-

nated I. and II. Siberian Army Corps. Each corps is composed of two infantry divisions, each made up of two brigades or four regiments.

Infantry.—The infantry is armed with what is known as the three-line rifle model of 1891. In China it was observed that the infantryman did not wear a bayonet scabbard, but kept his bayonet fixed at all times, and his rifle was apparently never out of reach of his hand. The ammunition, of which he is supplied with 120 rounds on the march, is carried in pouches on a waist belt.

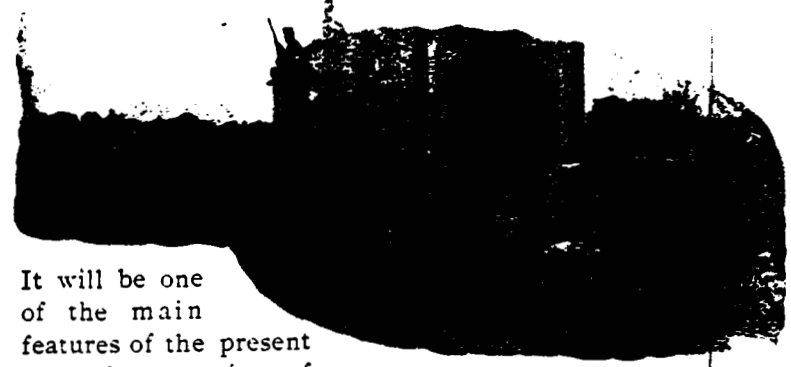
It is said that the Russian infantry has absolutely no equal in marching. Nothing is omitted to develop or improve it. Every unit of the vast army is required to have at least four months



JAPANESE EMBARKING.

in the field annually. While marching they are said to sing, and often a dancer will step in front of his company and make the weary hours bearable by his antics. The rations carried are of the simplest kind, consisting of hard brown bread, salt, pepper and tea. One writer remarks: "As for food, he never had much even when growing, and as he rarely enters on a campaign under twenty-three or twenty-four years of age, he escapes many constitutional dangers of extreme youth." It is undoubtedly true that men under twenty-one years should not be enlisted for a contracted campaign. It is better to have them a few years older.

Cavalry.—Because the Russians have developed their cavalry and its training along lines dictated by their own experience, European writers when referring to this branch prefer to use the term "mounted infantry." The term, "gunless horse artillery," would be quite as appropriate. Why cavalry trained to fight on foot and to depend upon the immense resisting power given it by dismounted action should be called "mounted infantry" is not clear. It still retains all its functions of cavalry as such. An English officer writes: "We have learned the Russian lesson, but twenty-five years too late, and by blood and disaster, instead of by observation and power to grasp new ideas."



JAPANESE REPAIRING RAILWAY.

It will be one of the main features of the present war, the opposing of the large force of modern cavalry, trained as dragoons, by nothing but artillery and infantry. Much will depend whether the entire proportion of cavalry can be transported by the Russians to the seat of war, and whether the horses can be supplied with forage. The Russian cavalry is organized with nineteen divisions of two brigades each, and to each division is attached a brigade of horse artillery with from forty to fifty guns.

In another part of this volume will be found a thorough and detailed description of Russian cavalry and its training. In the matter of cavalry Russia easily leads all countries, and it may be said that the United States is a close second.

not so much in numbers, but in the proportion of cavalry to the other arms of the service, and in recognizing the value of dismounted fire action.

The Russian cavalryman is armed with the carbine, model of 1896, and a sword; officers carry the revolver.

Cavalry Raids.—The Russians learned the true use of cavalry and its capabilities in the war of 1877, and they have not forgotten those lessons. The power of cavalry to go on extended raids independent of all lines of communication was first realized in the Civil War when Stuart and his lieutenants, Lee and Hampton, put their cavalry through the test. The lesson was in good time learned by the Northern generals, and the cavalry commands so organized that such enterprises were possible.

This calls for a semi-independent organization. Nothing is achieved by assigning the cavalry regiments to other organizations. The mass of cavalry must be kept together in cavalry divisions, and a cavalry leader put in command. The Russian organization is laid out on these lines, and if they have an opportunity to use their large available cavalry force, we will undoubtedly hear of many successes gained.

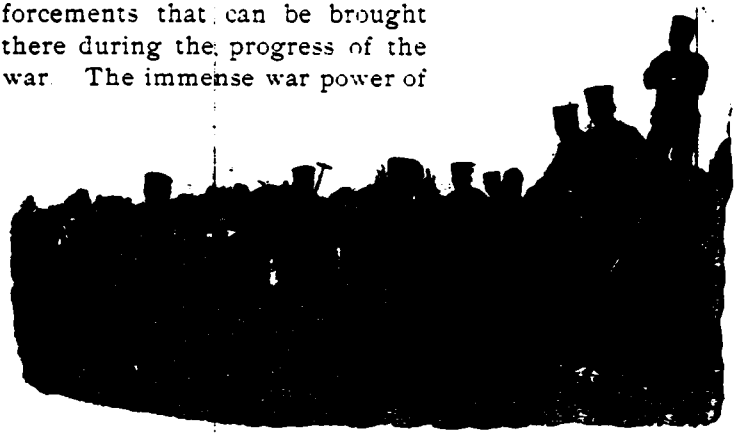
Artillery.—Every corps has two field artillery brigades of from six to eight batteries of eight guns each, and every cavalry division has a horse artillery brigade, with six guns per battery. The field battery has about 250 men and 207 horses, and the horse battery 208 men and twenty-five horses. The Russian artillery has just been supplied with a new model of rapid-firing guns, and it is supposed that the new material has been supplied to all the batteries. Such a re-armament is very expensive in so large an army. Some 7,000 guns were required, and the expense estimated at $92,000,000. The new gun is a three-inch rapid-fire cannon, with a relatively light projectile, but with a corresponding high initial velocity.

Subsistence of Troops.—The ration of the Russian soldier is extremely simple. In the method of preparing the food a novel rolling kitchen has been introduced lately. It consists of a large iron kettle placed on the axle of a light carriage, so arranged that it can be put in operation while in motion.


SIBERIA
MONGOLIA
CHINA
JAPAN
SEA
YELLOW
SEA
PEKING
YOKOHAMA
SHIKOKU
Theatre of Operations
Russian-Japanese
WAR-1904

The water, vegetables and meat are put into the kettle before moving it, and firewood is also carried. Fire is made some hours before the halt is to be made, and a supply of hot soup or stew is immediately available. This rolling kitchen is also used for preparing the food on railway trains.

Strength of the Russian Army in Manchuria.—While a study of the Russian army as a whole is interesting, and attracts our attention on account of the immense numbers we have to deal with, still as far as this war is concerned we must take into account only the forces in Manchuria, and the reinforcements that can be brought there during the progress of the war. The immense war power of



JAPANESE REPAIRING RAILROAD.

Russia is of no avail unless it can be utilized in the theatre of operations, and this is the difficult problem for Russia. To have this immense power and then be able to bring into play only a small fraction is one of the fortunes, or rather, misfortunes, of war.

Previous to the war in China, Russia had hardly more than two army corps in Manchuria. These were called the First and Second Siberian Army Corps, and have their regular stations in Siberia and Manchuria. A Russian corps consists of about 1,000 officers, 30,000 men, 17,000 horses and 124 guns. During the war in China these two corps were reinforced until in October, 1900, the total force in Eastern Asia was 4,000 officers and 175,000 men, with 336 guns. Of

these reinforcements 55,000 men and 12,000 horses were brought over the Siberian Railway across Lake Baikal, the movement taking about three and one-half months. During the same time 20,000 men were landed at Vladivostock and Port Arthur from transports coming from the Baltic. How much of this force of 179,000 men has been withdrawn is not certain. Some claim that the greater part was returned to Europe; others there are who maintain that the force was increased. However that may be, the various estimates of the Russian strength agree quite well.

The *Broad Arrow* says:

"The number was reinforced by land last summer by two brigades, one from the Tenth Army Corps, at Kharkoff, and one from the Seventeenth Army Corps, at Moscow. This would augment the brigades to twelve in number. These, with their necessary complements of artillery, engineers, etc., have been formed into three Siberian Army Corps, each of which numbers 40,000 men. Adding to that force the three reserve divisions of Siberia, 45,000, which will probably form a Fourth Army Corps, and say 75,000 railway guards, we obtain a total of 240,000 men. To this total must be added the numerous forces sent out by sea and those despatched by land since last November up to the closing of Baikal, on the 25th of December. The garrisons of Port Arthur and Vladivostok have also to be counted."

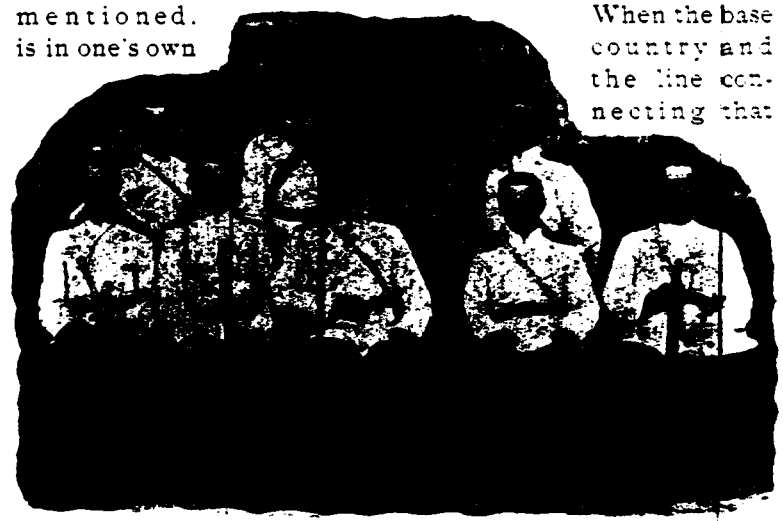
The *Militar-Wochenblatt's* estimate is, "Russia, 158,761 men, 256 guns; Japan, 165,884 men, and 702 guns. Russia has seventy-five and Japan fifty-nine squadrons of cavalry in Manchuria." It does not seem probable that the Russian railway guards and frontier guards can be included in this estimate.

Mr. Chas. S. Osborne, in *Collier's Weekly*, says, "that according to common report the Russian mobilization has been going on for years and has resulted in a concentration of 400,000 soldiers." He adds that "if the facts were known, those best informed say the correct number is nearer 600,000."

Of Russia's field army some 100,000 are said to be about Liavu-Yan, the Yalu River line, and the seashore, while another 100,000 are at Harbin and Tsitsikar. The available strength of the Russian force in Manchuria is, however,

greatly reduced through the necessity of guarding so many points. Even if there are 250,000 available men this will not permit of placing in line anywhere more than 100,000 men. If the necessity of guarding the railways will allow the initiative to Japan, the available numbers of Russia's force will be still further decreased and that measurably so, for the assumption of the strategic defensive will require a scattering of the forces in order to be strong at all points.

Russian Communications.—The effect of the line of communication on a campaign and upon a war has already been mentioned. When the base is in one's own country and the line connecting that



RUSSIAN OFFICERS.

base and the army a short one, not much attention is ordinarily paid to it, nor need it be the cause for worry. Again if the communications are kept up by vessels, the problem is simplified if the adversary has no navy or is rendered powerless to employ it. Thus Russia, before the outbreak of hostilities, was using (in conjunction, however, with its railroad) a line of transports from its base in European Russia through the Suez Canal to Port Arthur and Dalny. About eight ships arrived monthly, and each carried about 1,000 reinforcements for the East. It is easy

to conceive how this carrying capacity could have been multiplied again and again by the simple addition of ships. But another factor rendered this means of communication and line of supply absolutely useless Sea power decided the question in less than a day.

Russia, however, had a land line of communication open, and this must be resorted to. The length of the line is the great difficulty. As an enemy separates itself from its base it will meet with ever increasing difficulties and perplexities. In case wagon transportation alone is used, the length of line is soon limited, one hundred miles being regarded as the maximum distance. With a railroad the case is different, but still the difficulties are not entirely removed.

The Siberian Railroad.—The immense distance of the seat of war from the base, some 6,000 miles and communicating over a single track railway, makes this war unique in history.

Such a road is indeed of immense capacity, and yet the demands likely to be made on it in a case like the present will be greatly in excess. As already stated the road in 1900, then just nearing completion, in not nearly as good a state as it is now, transported 55,000 troops and 12,000 horses in about three months. This, however, was during the summer months, when the transportation over Lake Baikal does not impede railway traffic. Of the five sections of the Siberian Railway, this one called the Circum-Baikal section, is the only one not completed. The remainder are in operation, but of course seriously handicapped by the gap at Lake Baikal in the otherwise continuous line.

Even at the very best, the capacity of the road will depend on the weakest link. The ferry boat used on Lake Baikal can make not more than two round trips daily, and thus the total that can be transported would be about 1,000 per day, or 30,000 per month. This would indeed be a large number, and twice the capacity of the road in 1900.

The original plan for the construction of the Siberian Railway, through Eastern Siberia, along the Amur River was abandoned on account of the great difficulties attending the building of this section of the road, and because a different route became available. In 1896 Russia secured by treaty from China a concession for a railway to run southeasterly through Manchuria, from a station on the Trans-Baikal section of the Siberian Railway to a point on the line from Vladivostock to Khabaroosk. This road was commenced August 10, 1897, at Poltava, and though operations were conducted in the name of the China Eastern Railway Company, Russian interests controlled, and it was practically a section of the Siberian Railway, running in harmony with it. When Port Arthur was acquired by Russia in 1898, further railway concessions were received, and the building of a connecting line from there to the main line of the Manchurian Railway was commenced. The southern portion of this branch from Port Arthur, Talienwan and Mukden

A COMPANY OF RUSSIAN INFANTRY.

was opened for traffic on November 24, 1899. The length of the main line is 960 English miles, that of the southern branch is 650 miles. The ordinary labor of building the road was done by Chinese coolies, of whom nearly 100,000 were employed, and the line was protected by about 6,000 Cossacks distributed in small parties along the line and its branches.

The results achieved by the Russians in the handling of this road to forward reinforcements, horses and supplies, will be of great value to the military student.

Theatre of Operations.—Only a short part of the entire line is in what may be termed hostile territory, where it is exposed to interruptions due to the enemy's activity. The difficulty will be that it is not a straight line, but that at the eastern extremity the road branches, one track going to

Vladivostock, the other to Port Arthur as above described. The configuration leads to the formation of a huge reëntrant angle, with its apex near Harbin. The strategic theatre of operations is thus defined for us as the territory lying to the south and east of the two boundary lines of railway. To guard this territory, the first defense of the Russians must therefore be advanced so as to be on the third side of this triangle, that is, on the line connecting Port Arthur with Vladivostock. This line corresponds very closely in general direction with that of the Yalu River and the boundary between Corea and Manchuria. The railroads, however, must be guarded at all points, and a scattering of the Russian forces will thus be inevitable. The only change from the line indicated may be brought about by the assumption of the offensive on the part of the Russian forces, and their advance into Corea. If, on the other hand, the Japanese are able to force the passage of the Yalu, they will have the immediate advantage of operating on interior lines, and compel the dispersion of the enemy's force for the purpose of guarding the other two sides of the triangle. The position of Corea, half way between the extremities of the Russian lines, is peculiar. The Japanese have a tradition that the peninsula of Corea represents a dagger pointed at the heart of their own country. It will be another matter if they are able to seize this dagger, turn its point away from their own country, and use it to pierce the armor of their most powerful adversary in the Far East.

Supposing the two forces massed against each other on the Manchurian frontier of Corea, the Japanese with their line of communications directly to their rear, and a strong naval base near by, will undoubtedly have the strategic advantage of position over an equal Russian force whose lines of communication will be widely diverging lines to Port Arthur, Harbin, and Vladivostock and the railways connecting these points.

Manchuria.—Should the Japanese be defeated on this line the worst that can happen to them is that they must evacuate Corea, and this will involve an embarkation on transports under the protection of the fleet, which should be

RUSSIAN TROOPS.

possible. Manchuria on that account becomes the theatre of operations.

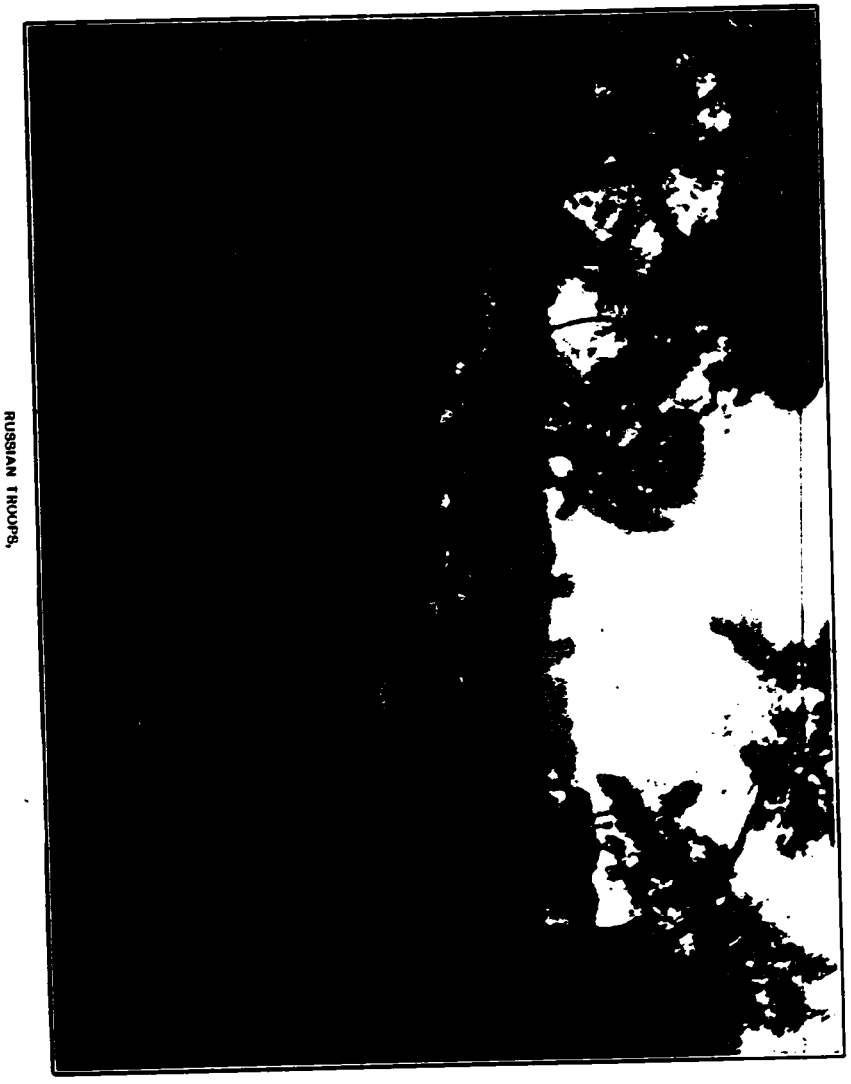
The *Broad Arrow* says:

"There are but three roads leading from Corea across the northern boundary into Manchuria. One to the south is over the Liaou at Wi-ju. A second leads by Kan-ge and past the gold mines at Er-dan-kaou over the Chan-ho-Shan, 3,000 feet high, on Girin. This is a very difficult pass. A third entrance passes Hun-Chun coal mines. This is also a bad road, and is threatened by the fortress of Vladivostok, but is the shortest route to Harbin.

"The River Yalu, from its source to its mouth in the Yellow Sea, forms the frontier between Corea and Manchuria. In its upper reaches it traverses a wild forest country. It is navigable by small junks for fifty miles, but ocean vessels can only just enter the mouth of the river.

"To understand the conditions which govern operations in Manchuria, one must study its topography, resources, and climatic conditions. Divided into three provinces, Hen-Lung-Tsian, Girin and Shon-King, the area of Manchuria is 363,000 square miles, and its population only 9,000,000 souls. In the northern province there is much cattle, but in winter no forage. The two southern provinces produce all grain except wheat, vast herds of swine, and flocks of poultry. At this period the communications are excellent. It is in winter that the trade of the country is carried out on two-wheel mule carts. The country is hard, good going. The thaw comes in the southern provinces in early March, and in Hen-Lung-Tsian in April. The roads, or tracks, then become quagmires. The single line of railway runs from north to south. Thus in any offensive movements toward Corea the Russians must depend on native carts for their chief commissariat transport. Of these some 500 have already been requisitioned in Mukden alone, and thousands of others will have been ere this taken up elsewhere. The basins of the Liaou and Sungari Rivers remain favorable for military movements then only so long as the frost lasts.

"From Sungari the southern branch of the Manchurian Railroad traverses the richest portion of Manchuria, passing through the great commercial city of Mukden, and thence down the valley of the Liao, the most fertile part of the country. This is the great agricultural region, thoroughly under cultivation and producing wheat, beans and vegetables. There are many Russian mills in this district. This



RUSSIAN TROOPS.

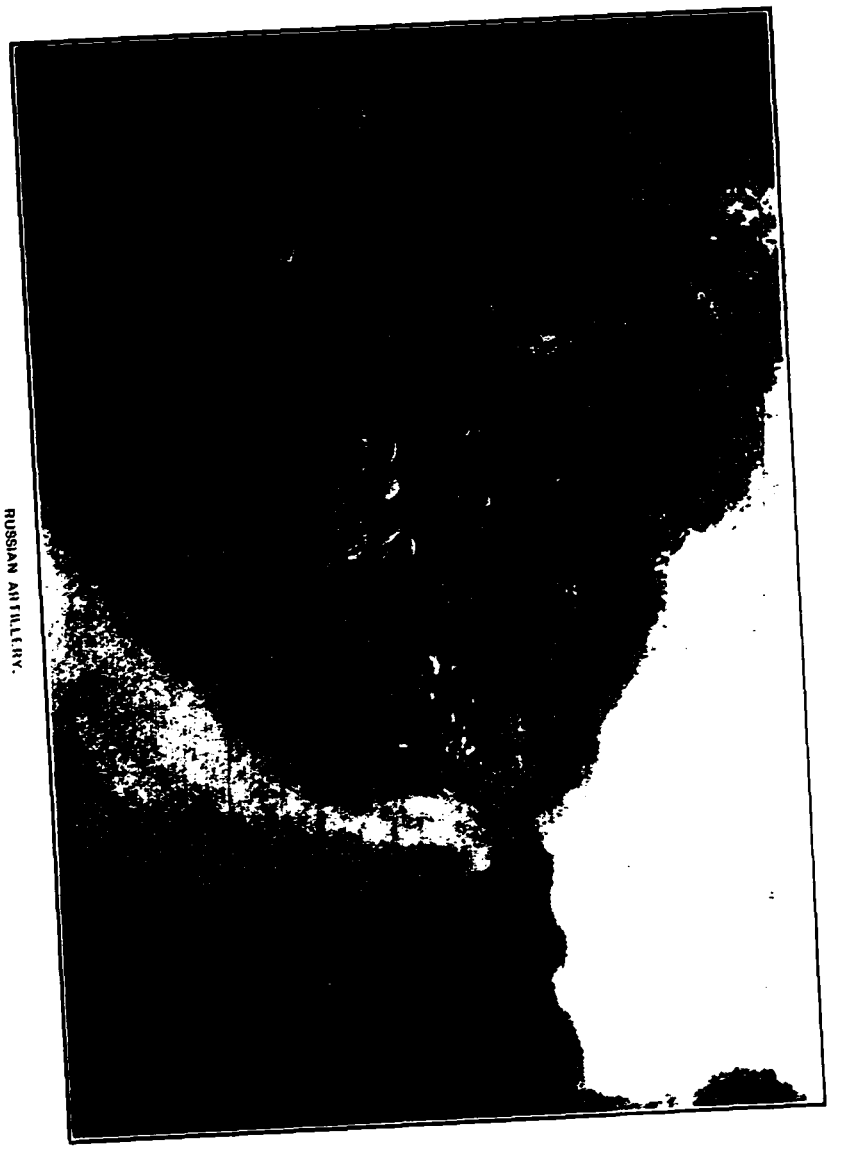
fine farming tract will undoubtedly play an important part in the war, for Russia will be loth to give it up and the Japanese will attempt to occupy it, not only on account of its fertility and riches, but because it affords the best route for an advance to the north. From the head of the Liao-Tung Gulf, where a short branch connects it with the treaty port of New-chwang, the railway traverses the Liao-Tung Peninsula, a hilly country, much cut up by streams and not very densely populated.

"On the main line from Sungari to Vladivostok the railway traverses a hilly region, hitherto scarcely populated at all, partly on account of the country in the lowlands offering a more favorable opening to farmers, and due also in a measure to the fact that brigands formerly made this district their home. However, the presence of the railway has already made great changes in this district, and doubtless in time this region will support a large and flourishing population."

Port Arthur.—Port Arthur, at the point of "Regent's Sword," or Liao-Tung Peninsula, was formerly China's chief naval arsenal. In 1898 Russia obtained a lease of Port Arthur, and has been fortifying it and making it into a great naval stronghold. The *Broad Arrow* says:

"The garrison of Port Arthur during the summer has been about 20,000 men, not including the troops at Dalny, Kiu-Chaou, etc. Of this force four battalions of rifles have been moved to Liaou-Yan. The armament of Port Arthur we put last month at 400 pieces of ordnance. We now hear from German sources that on Golden Hill alone there are 105 guns. Of these, fifty are 10 c. m., thirty-four are 18 c. m., and twenty one are 32-c. m. guns. As all these guns are placed at a height of some 200 feet to 300 feet above sea level, they are practically safe from the fire of ships."

Talienwan is a bay to the northeast of Port Arthur, and is a free port, and constitutes the principal terminus of the Manchurian & Siberian Railway. The bay is some six miles long and six in width, and is open to easterly winds.



RUSSIAN ARTILLERY.

RECORD OF ENGAGEMENTS WITH HOSTILE INDIANS IN THE DIVISION OF THE MISSOURI FROM 1868 TO 1882.

[CONTINUED.]

1879.

The Northern Cheyennes held in confinement at Fort Robinson were informed that the Indian Department had directed their return to the country from which they had escaped. Only a few of the prisoners, however, expressed a willingness to go, and upon attempting to remove their effects from the prison room, were forcibly detained there by the other Indians who, fearing punishment for the crimes which they had committed during their flight, were determined to die rather than be taken back to the South again.

On January 9th, it was decided to arrest "Wild Hog," the principal disturber, and he was securely ironed only after a very severe struggle, in which a soldier was stabbed. The Indians in the building used as a prison immediately barricaded the doors and covered the windows to conceal their movements, tearing up the floor and making rifle-pits to command all the entrances. At first it was supposed the Indians had only knives, but when captured they had also succeeded in concealing some pistols and carbines. Armed with slings and other weapons, their prison room was described in an official report as "like a den of rattlesnakes," into which it was certain death for any white man to enter.

About ten o'clock on the night of January 10th, while six sentinels were on guard around the prison building, shots were fired from the windows, killing two of the sentinels and wounding a corporal in the guard-room. Simultaneously a rush was made from all the windows, the Indians dashing out resolved to kill or be killed. The guard and the troops of the garrison gave chase, the Indians fleeing toward the creek near the post, and keeping up an incessant fire upon their pursuers. All refused to surrender when called upon to do so, and in the various struggles which took place altogether five soldiers were killed and seven wounded; thirty-two Indians were killed and seventy-one were recaptured. The pursuit of the remainder was continued, and on January 11th, about twelve miles from the post, they were overtaken in a strongly intrenched position, where skirmishing was kept up all day, the Indians appearing to have plenty of ammunition. On January 13th, Lieutenant Simpson, of the Third Cavalry, attacked them, and had one corporal killed; later in the day he struck them again near the Hat Creek road, where he had another enlisted man wounded. On January 14th, the Indians were again attacked by the troops in a strongly intrenched place, about twenty miles from Fort Robinson. Shells were fired into their position, but no damage appeared to be done, and during the night they again succeeded in making their escape. Of the fugitives only forty-five now remained unaccounted for by death or capture; of these, nineteen were warriors, and all were evidently bent upon joining "Little Wolf's" band, from which they had become separated whilst escaping from the Indian Territory.

On January 18th, a lot of horses were taken from a ranch on the Sidney road, believed to be stolen by some of Little Wolf's band, and troops from Fort D. A. Russell were sent in pursuit.

On January 20th, Major Evans, with Troops B and D, Third Cavalry, intercepted the Cheyennes who had left Fort Robinson, strongly posted upon some cliffs; they escaped, however, during the night, toward the Red Cloud Agency, but Captain Wessells, with Troops A, E, F, and H, Third Cavalry, overtook them again on January 22d, near the telegraph line from Fort Robinson to Hat Creek, where they were intrenched in a gully. They refused all terms of surrender, so Captain Wessells' force charged them and killed or captured the entire party. Captain Wessells and two men were wounded, and three enlisted men were killed; twenty-three Cheyennes were killed and nine were captured, three of whom were wounded. The prisoners reported that "Dull Knife" had been killed by a shell in the artillery attack upon their position a few days before.

February 13th, "Victoria," with twenty-two Warm Spring Apache Indians, who had made their escape when about being taken to the San Carlos Agency, Arizona, surrendered to Lieutenant Merritt, Ninth Cavalry, at Ojo Caliente, New Mexico. After his escape Victoria had been to Old Mexico, and now desired to send to the Fort Stanton Indian reservation, where he believed there were other Indians belonging to his band. He was given a pass to send two of his Indians, and in a few days a total of thirty-nine Warm Spring Indians were gathered at Ojo Caliente. Learning, however, that the whole band were to be sent to the Stanton reservation, on April 15th they all broke away again from Ojo Caliente, and escaped to the San Mateo Mountains, New Mexico. Two troops of the Ninth Cavalry and one company of Indian scouts were sent in pursuit, followed Victoria into Arizona, whence, joined by other Indians from the San Carlos Agency, they all succeeded in escaping into Old Mexico.

March 15th, a Mexican herder was killed about fifty miles from Fort Ewell, Texas.

March 25th, near Box Elder Creek, in the Department of Dakota, Lieutenant Clark, Second Cavalry, with Troops E and I, Second Cavalry, a detachment of infantry, a field gun, and some Indian scouts, overtook "Little Wolf" and his band of Northern Cheyennes who had escaped from Fort Reno, Indian Territory, the previous autumn, and had thus far eluded every attempt at capture. The Indians were persuaded to surrender without fighting and gave up thirty-five lodges, with all their arms, and about two hundred and fifty ponies, and marched with the troops to Fort Keogh, Montana. The band numbered thirty-three men, forty-three squaws, and thirty-eight children.

For murdering two members of this band, a party of eight Indians had been driven out of Little Wolf's camp previously, and this small party, on the 5th of April, attacked a signal sergeant and a private soldier of the Second Cavalry, on Mizpah Creek, killing the private.

severely wounding the sergeant, and capturing their horses. Sergeant Glover, Troop B, Second Cavalry, with ten men and three Indian scouts from Fort Keogh, pursued this small party and captured them all on April 10th.

March 1st, several head of stock were stolen by Indians from McDonald & Dillon's ranch, near Powder River, Montana. March 4th, twenty-three head of stock were also stolen from Countryman's ranch, near the mouth of the Stillwater. March 28th, Indians attacked two white men near the mouth of the Big Horn River, killed one named H. D. Johnson, and wounded the other named James Stearns; a man named Dave Henderson was also killed the same day near Buffalo Station on the Yellowstone. Horses were also run off from Pease's Bottom, near the mouth of Buffalo Creek, and sixty-seven ponies were stolen from the Crows at their agency. The Indians committing these depredations were ascertained to be Sioux from the north, with a few Nez Percés; Captains Mix and Gregg with their troops of the Second Cavalry were dispatched in pursuit, but after a very hard chase were unable to overtake the marauders.

April 4th, the commanding officer of Fort Ellis, Montana, reported that Indians had stolen twenty-five or thirty horses the previous night from Countryman's ranch, on the Yellowstone, and that a party of citizens and some friendly Crow Indians had gone in pursuit. On April 5th, the same officer reported that Sioux and half-breed Nez Percés had raided the Crow Indians on the Stillwater. On April 6th, Indians also attacked the ranch of Sebezzo and Peterson, near Powder River, killed the former, wounded the latter, and ran off eight or ten head of stock. The Indians were recognized as Gros Ventres, and came from the Northwest Territory.

On April 10th, the commanding officer of Fort Ellis reported that Indians attempted to steal stock at Young's Point, but were discovered and driven off; on April 14th, seven horses were stolen by Indians on Pryor's Fork; on April 22d, the same officer reported that some Crow Indian scouts had overtaken a party of Sioux who had stolen horses from Countryman's ranch, and had killed one of the hostiles.

Lieutenant S. H. Loder, Seventh Infantry, with fourteen mounted men of the Third and Seventh Infantry, and six Indian scouts, pursued a party of Sioux who had been committing depredations, and on April 17th attacked them near Careless Creek, at the head of the Musselshell Cañon, Montana, and killed eight of the hostiles; two of the scouts were killed and one wounded.

May 8d, Indians ran off twelve head of stock from the east side of the Little Big Horn; the commanding officer of Fort Custer sent a detachment of Crow scouts in pursuit, but the thieves could not be overtaken.

May 1st, a Mexican teamster was killed between Fort Ewell and Corpus Christi, Texas. (Reported by commanding officer Fort McIntosh, Texas.)

May 18th, John Clarkson was murdered near Van Horn's Wells, Texas. (Reported by commanding officer Fort Davis, Texas.)

May 29th, Captain Beyer, with Troop C and a detachment of Troop I, Ninth Cavalry, attacked Victoria's Apaches in the Miembres Mountains, New Mexico, captured the camp with all the animals, and wounded four Indians, two of them mortally; one enlisted man was killed and two wounded. The band fled into Old Mexico, five of their number being killed near the San Francisco settlement, New Mexico.

June 1st, the commanding officer of Fort Clark, Texas, reported that the wife and two daughters of N. Colson were killed by Indians, near Camp Wood, Texas.

June 16th, a party of Texans pursued a band of Indians and recaptured nineteen horses which had been stolen near Fort McKavett, Texas.

June 19th, a party of ten Sioux, with thirty stolen horses, crossed the Missouri River about eleven miles above Fort Benton, Montana; Lieutenant Van Orsdale, Seventh Infantry, with a detachment of eight men, caught up with five of these Indians, killed one and drove the rest into the "Bad Lands."

June 29th, Indians stole seven head of stock on the Little Big Horn, about seven miles from Fort Custer, Montana; some Crow scouts also had a fight with a band of Sioux near the head of Alkali Creek, about twenty-five miles from Terry's Landing, on the Yellowstone, killed four of the hostiles and captured thirty-three ponies; one Crow scout was killed and four wounded.

June 30th, a man named Anglin was killed in a fight with Indians near the headwaters of the North Concho River, Texas. (Reported by the commanding officer of Fort Concho, Texas.)

July 14th, a Mexican woman (name unknown) was killed about four miles northeast of Fort Clark, Texas. (Reported by commanding officer of Fort Clark.)

July 27th, Captain Courtney, Twenty-fifth Infantry, with a detachment of ten men of Troop H, Tenth Cavalry, had a fight with Indians at the salt lakes near the Carrizo Mountains, Texas; three Indians were wounded, two of them mortally, and ten ponies were captured; two enlisted men were wounded.

Many depredations having been recently committed by Indians in the vicinity of the Missouri and Yellowstone Rivers, it was ascertained that large numbers of hostiles, half-breeds, and foreign Indians from British Columbia, including the Indians under Sitting Bull, were roaming upon United States territory, south of the boundary line. From a number of reliable persons who had seen the main hostile camp, this was estimated at not less than five thousand Indians, of whom two thousand were warriors, with twelve thousand horses. Half-breed Indians had also been trading with the hostiles and furnishing them with ammunition, so in July Colonel Miles was sent from Fort Keogh, Montana, with a strong force to break up their camp, separate the doubtful Indians from those avowedly hostile, and force the foreign Indians to return north of the boundary.

Colonel Miles' force consisted of seven companies Fifth Infantry, seven troops Second Cavalry, a detachment of artillery, and some friendly Indians and white scouts. At Fort Peck he was joined by two

companies of the Sixth Infantry, and his entire command then numbered thirty-three officers, six hundred and forty-three enlisted men, and one hundred and forty-three Indian and white scouts.

The hostiles consisted of the Uncapapas, under Sitting Bull, the Minneconjous, under "Black Eagle," the Sans Arcs, under "Spotted Eagle," and the Ogallalas, under "Big Road" and "Broad Tail."

Colonel Miles reported that the depredations of the hostiles had resulted in the killing of not less than twenty men and the stealing of three hundred head of stock, all of which had been taken to the hostile camp.

As a preliminary step the Yanktonnais camp of about three or four hundred lodges was first moved to the south side of the Missouri about June 23d.

On July 17th the advance guard of Colonel Miles' column, consisting of a troop of the Second Cavalry, a company of the Fifth Infantry, and about fifty Indian scouts, commanded by Lieutenant Clark, Second Cavalry, had a sharp fight with from three to four hundred Indians, between Beaver and Frenchman's Creeks; the Indians were pursued for twelve miles, when the advance became surrounded; Colonel Miles moved forward rapidly and the hostiles fled north of Milk River. Several of the enemy were killed and a large amount of their property abandoned; two enlisted men and one Indian scout were wounded, and three Indian scouts killed. Sitting Bull himself was present in this engagement.

On July 31st, Colonel Miles reported that the main hostile camp had retreated north, across the boundary, to Wood Mountain: the column followed and halted on the main trail at the British line, whence it returned to Milk River.

Attention was then turned to the camps of the half-breeds which had formed a cordon of outposts around the main hostile camp, furnishing the latter with the supplies of war. On August 4th Captain Ovenshine, Fifth Infantry, with a portion of Colonel Miles' command, arrested a band of half-breeds on Porcupine Creek, capturing one hundred and forty-three carts and one hundred and ninety-three horses. On August 5th, four camps of half-breeds were arrested, numbering three hundred and eight carts. On August 8th, Colonel Miles reported the total number of half-breeds arrested by various detachments eight hundred and twenty-nine, with six hundred and sixty-five carts.

On August 14th, Lieutenant Colonel Whistler, Fifth Infantry, with part of Colonel Miles' command, captured a band of fifty-seven Indians with one hundred ponies, who had left the Rosebud Agency and were in the act of crossing the Missouri, near Poplar Creek, on their way to join Sitting Bull in the north.

On August 28th, it was officially reported that extensive fires were raging in the mountains west of Hot Sulphur Springs, Colorado, the work of Indian incendiaries. On September 10th, Mr. N. C. Meeker, agent for the White River Utes, wrote to the governor of Colorado that Indians had fired upon an agency employee whilst plowing; that his house had been attacked, himself driven out of doors and injured considerably. Mr. Meeker stated that the lives of the people at the agency

were in danger, and that at least one hundred soldiers should be sent there to protect the people. He therefore requested the governor of Colorado to confer with General Pope, commanding the Department of the Missouri, and with Senator Teller, of Colorado, with the object of obtaining the required aid.

On September 16th, directions were given by the honorable Secretary of War, in compliance with request from the Interior Department, for the nearest military commander to send a force to the White River Agency to protect the agent and to arrest the ringleaders of the Indians who had committed the outrages reported. Accordingly General Crook, commanding the Department of the Platte, ordered Major T. T. Thornburgh, Fourth Infantry, with Troops D and F, Fifth Cavalry, E Third Cavalry, and Company E, Fourth Infantry, to proceed to the White River Agency, Colorado. This force, numbering about two hundred officers and men, left Fort Fred Steele, Wyoming, September 21st, and reached Fortification Creek, Colorado, September 25th. The infantry company, numbering about thirty men, was left there to establish a supply camp, and the cavalry proceeded to Bear Creek, September 26th. During the afternoon of September 26th, several Ute Indians of prominence came into the cavalry camp, talked freely with Major Thornburgh on the subject of the troops coming to the agency, and departed about night apparently in good humor. At Williams Fork of Bear River, the next day, September 27th, an employee of the White River Agency, named Eskridge, accompanied by several prominent Ute Indians, arrived with a letter from the agent, Mr. Meeker, to Major Thornburgh, stating that the Indians at the agency were greatly excited and wished the advance of the troops stopped, though agreeing to a proposition that the commanding officer, with five soldiers, should come to the agency. Major Thornburgh replied that he would camp his command at some convenient place the following day and proceed, on September 29th, to the agency with only five men and a guide, as suggested; but he also renewed a former request for Mr. Meeker, with such chiefs as the latter might select, to come out and meet the command on the road.

On September 29th, at 1 o'clock in the afternoon, Mr. Meeker accordingly wrote that he would leave the agency, with several chiefs, on the following morning to meet Major Thornburgh.

On September 28th, the cavalry camped at Deer Creek, and on the 29th reached Milk River about 10 o'clock in the morning. After watering the horses, Troop D, Fifth Cavalry, was left to continue the march along the road with the wagons, while Major Thornburgh, with the rest of the cavalry, turned off from the road, taking a trail which bore away to the left. After placing a mile between themselves and the wagons, the troops with Major Thornburgh, in crossing a high ridge commanding the main road along which the wagons were traveling, came suddenly upon the Indians in heavy force.

The whole attitude of the Indians was hostile, so Major Thornburgh at once dismounted and deployed his men, but at the same time tried to open communication with the Indians. His overtures were, however, met by a volley, and a hot engagement at once began. The In-

dians had not only the advantage of position, but were superior in numbers to the troops in advance, so Major Thornburgh determined to withdraw and join the escort with the wagon train. This skirmish line retired slowly, leading their horses, but returning a fire, which did great execution among the Indians. Failing to break the line of skirmishers, the Indians attempted to get between them and the wagon train, which had gone into park on the right bank of Milk River. The Indians took a strong position commanding Thornburgh's line of retreat, and a charge by about twenty men under Captain Payne was ordered, so as to clear a commanding knoll of Indians, reach the train and arrange for its protection. This was done, and Major Thornburgh himself started for the train soon after giving this order, but he was shot and instantly killed, just after crossing the river and when within five hundred yards of the wagons.

The line of skirmishers in front, commanded by Captain Lawson, Third Cavalry, steadily fell back towards the wagons, their retreat skillfully covered by a detachment under Lieutenant Cherry, of the Fifth Cavalry. The wagons were formed into an elliptical corral, about two hundred yards from the river, the side toward the stream being exposed to a furious fire from the Indians, who were making determined efforts to capture and destroy the train. The animals were crowded in the space formed by the wagons; about twenty or more which were wounded were led out upon the open side of the corral toward the Indians and shot there, to form a slight defense for some of the men acting as sharpshooters. The wagons were unloaded, and with their contents slight breastworks were hastily made, the Indians keeeping up a most destructive fire, under which officers and men rapidly fell.

A high wind was blowing at this time, and the Indians set fire to the tall grass and sage brush down the valley, the flames spreading rapidly toward the troops, igniting bundles, grain sacks, wagon covers, and other combustibles, threatening the train with entire destruction. The Indians attacked the command furiously at this critical moment, but the troop succeeded in extinguishing the flames among the wagons, with considerable loss to themselves in killed and wounded. The Indian supply train of Mr. John Gordon was parked within seventy-five yards of the position of the troops. To prevent the Indians obtaining a lodgment there, the train was ordered set on fire and destroyed.

From 3 o'clock in the afternoon until nightfall the Indians kept up a constant fire upon the position of the troops, killing fully three-fourths of their animals. At dark a large body of Indians charged down from behind Gordon's burning train, delivering volley after volley, but they were repulsed with the loss of several warriors seen to fall from their saddles.

During the night a supply of water was obtained, better intrenchments dug, the wounded cared for, dead animals dragged away, ammunition and rations distributed, and at midnight couriers slipped away toward the railroad with dispatches reporting what had occurred and asking for aid.

The whole of the following day, September 30th, the Indians kept up an almost incessant fire, killing all of the remaining animals except-

ing fourteen mules. During the night of September 30th, the Indians suspended firing, but after that time gave the troops no rest. At night, on October 1st, a small party, while procuring water, were fired upon at close range and one man wounded, but the guards returned the fire, killing one of the Indians.

On October 1st, Captain Dodge and Lieutenant Hughes, with Troop D, Ninth Cavalry, who had been scouting in that section of the country, met the couriers who had left the intrenched position on Milk River. Apparently camping for the night, to deceive any Indians near him, Captain Dodge issued two hundred and twenty-five rounds of ammunition and three days' rations to each man, and after dark pushed for Milk River, with but two officers, thirty-five men, and four citizens. At 4 o'clock on the morning of October 2d, they reached the main road about five miles from the intrenchment on Milk River, and found the dead bodies of three men, near a train loaded with annuity goods, burned by the Indians. Half an hour later Captain Dodge arrived at the intrenchments and succeeded in forming a junction with the troops there. Captain Dodge was hardly inside the trenches when the Indians opened a fire, which was kept up at intervals for the next three days, killing all but four of Dodge's forty-two animals, and these four were wounded.

The following were the casualties in Major Thornburgh's command: Killed, Major T. T. Thornburgh, Fourth Infantry, and nine enlisted men; wounded, Captain Payne and Second Lieutenant Paddock, Fifth Cavalry, Acting Assistant Surgeon Grimes, and forty enlisted men, Wagonmaster McKinstry, guide Lowry, and one teamster were killed and two teamsters wounded; total, twelve killed and forty-three wounded. The strength of the Indians, who were well armed and supplied with abundant ammunition, was estimated in the official report of the affair at from three hundred to three hundred and fifty; the Indians themselves afterward admitted a loss of thirty-seven killed.

The couriers sent out on the night of September 29th succeeded in getting through safely. As quickly as possible after receipt of orders at Fort D. A. Russell, Wyo., Colonel W. Merritt, with Troops A, B, I and M, Fifth Cavalry, was upon a special train for Rawlins. From this point, by a march of almost unparalleled rapidity, in something over forty-eight hours Colonel Merritt's column, consisting of three hundred and fifty men, one hundred and thirty-one of whom were infantry following in wagons, marched one hundred and seventy miles over a most difficult road, and reached the command at Milk River at half past five o'clock in the morning of October 5th.

In anticipation of a general war with the Utes, a force consisting of nearly two thousand cavalry and infantry, was hurried to Rawlins. Of these one thousand four hundred and twenty-eight took the field, with Colonel Merritt, while five hundred and twenty-six remained at Rawlins, under command of Colonel Brackett, Third Cavalry. Another force, aggregating one thousand one hundred and nine cavalry and infantry, commanded by Colonels E. Hatch, Ninth Cavalry, R. S. MacKenzie, Fourth Cavalry, and G. P. Buell, Fifteenth Infantry, was also dispatched to the Ute country from the Department of the Missouri to

watch the confederated bands of Utes in southern Colorado, should they attempt to join the White River Utes in the hostilities which the latter had begun.

Colonel Merritt's light advance column having reached Milk River, the crippled command there with the wounded were sent back to the railroad at Rawlins. Other troops having joined Colonel Merritt, making his force strong enough for an advance against the hostiles, he proceeded to the White River Agency, the Indians all having disappeared before the troops. It was found that the Indians had burned and utterly destroyed the agency, had killed the employees and the agent, Mr. Meeker, and had carried off all the females into the horrors of savage captivity. Colonel Merritt's command buried the bodies of seven men, including that of Mr. Meeker.

Colonel Merritt was about moving against the hostiles when his operations were suspended at the request of the Indian Department, pending special negotiations with the Utes for release of the captive females and surrender of the ringleaders in the late outrages.

While these negotiations were in progress, however, on October 20th, a reconnoitering party from Colonel Merritt's command, under Lieutenant Hall, Fifth Cavalry, was attacked by the Indians about twenty miles from White River; they defended themselves until night, when they succeeded in returning to camp, but with the loss of Lieutenant W. B. Weir, of the Ordnance Department, and the chief scout, Humme, both of whom were killed; two Indians were reported killed by Lieutenant Hall's party during the fight.

In September New Mexico was again raided by Victoria with his band of Indians from Old Mexico, reinforced by Mescaleros and some Chiricahuas.

On September 4th, the herd guard of Troop E, Ninth Cavalry, Captain Hooker commanding, were attacked near Oje Caliente, New Mexico; eight men were killed and forty-six horses captured by the Indians.

On September 17th, Major Morrow, Ninth Cavalry, reported that near Hillsboro, New Mexico, a fight occurred between a party of citizens and about one hundred Apaches; the hostiles killed ten of the citizens and captured all of their stock.

On September 18th, Captain Dawson, with two troops of the Ninth Cavalry, struck Victoria with about one hundred and forty Apaches, at the head of Las Animas River, New Mexico; Captain Beyer, with two more troops of the Ninth Cavalry, arrived and took part in the fight, but the Indians having the advantage of a very strong position, the troops were obliged to withdraw during the night, with a loss of five men killed and one wounded, thirty-two horses killed and six wounded, and two Navajo scouts and one citizen killed.

On September 26th, Major Morrow, Ninth Cavalry, with six officers and one hundred and ninety-one men, attacked Victoria not far from Ojo Caliente, New Mexico, and after two days of fighting killed three Indians and captured sixty horses and mules, among them twelve or more of those previously lost by Captain Hooker. On September 30th, one of Morrow's vedettes was killed whilst on post, the hostiles again retreating before the troops. On October 1st, the scouts captured a squaw

and a child, from whom the position of the Indians was learned, and by a quick night march Victoria's strongly fortified camp was captured, the Indians escaping, however, in the dark.

Morrow's force, reduced to less than one hundred available men, continued pursuit of the hostiles, following them, by very hard marches, into old Mexico, and on October 27th again overtook Victoria, about twelve miles from the Corralitos River, Mexico. With about forty men Morrow charged the Indian breastworks, in the moonlight, and drove the Indians from them, losing himself one scout killed and two wounded. The command had been three days and nights without water, ammunition was nearly exhausted, and men and animals were utterly worn out, so the troops returned, reaching Fort Bayard, New Mexico, November 3d.

1880.

On January 2d, Victoria and his Indians were again reported raiding in southern New Mexico. All the cavalry in that section were pushed after him, and on January 12th, a force commanded by Major Morrow, Ninth Cavalry, struck Victoria near the head of Puerco River, killing and wounding several of the hostiles, the troops losing one enlisted man killed and one Indian scout wounded: the fight lasted from two o'clock in the afternoon until sunset, when the Indians escaped. On January 17th, Major Morrow's force again struck Victoria in the San Mateo Mountains, New Mexico, and drove him from his position, but with what loss could not be learned. Lieutenant French, Ninth Cavalry, was killed, and two scouts wounded.

February 3d, a war party of Uncapapas attacked some citizens on Powder River, Montana: Sergeant Glover, Troop B, Second Cavalry, with eight men and eleven Indian scouts, pursued the hostiles for sixty-five miles and surrounded them near Pumpkin Creek, killing one Indian and wounding two, losing one soldier killed and one wounded: the Indians were prevented from escaping until the arrival of Captain Snyder, with a company of the Fifth Infantry, when they all surrendered.

February 6th, a band of Sioux stole fifteen horses from settlers in Pease's Bottom, on the Yellowstone, and a number of horses from camp at Terry's Landing: Crow Indian scouts pursued and overtook the Sioux near Porcupine Creek and killed or recaptured all of the stolen stock.

March 3d, Companies I and K, Fifth Infantry, left Fort Keogh, Montana, in pursuit of hostile Indians north of the Yellowstone, and on March 8th, after a continuous gallop of forty miles, Company K succeeded in surrounding the Indians, and captured thirteen ponies and sixteen mules.

March 4th, two citizens were attacked by Indians on Alkali Creek, Montana, and one of the men wounded.

March 5th, Lieutenant Miller, Fifth Infantry, with nine soldiers and eight Indian scouts, attacked a band of hostile Indians, thirty miles west of the Rosebud, Montana, killed three of the hostiles and eight of the ponies, captured some arms and a large amount of ammuni-

tion, and destroyed the hostile camp; two Indian scouts were killed in the affair; the Indians escaped across the Yellowstone, and were closely pursued by Captains Baldwin, Fifth Infantry, and Hamilton, Second Cavalry. On March 9th, Captain Baldwin overtook the Indians on Little Porcupine Creek, chased them for thirty miles, and captured all their animals excepting those on which they escaped.

March 13th, the commanding officer of Fort Davis, Texas, reported the killing of a Mexican boy, a sheep herder, near Russell's ranch, Texas.

March 24th, a party of thirty or forty Sioux ran off about thirty ponies belonging to enlisted Crow scouts at Fort Custer, Montana; Captain J. Mix, with Troop M, Second Cavalry, numbering forty-four officers and men, started in pursuit, and, after traveling sixty-five miles in eleven hours, overtook and engaged the hostiles, recapturing sixteen of the stolen stock. These Indians were also pursued by Lieutenant Coale, with Troop C, Second Cavalry, from Fort Custer, and by Captain Huggins, with Troop E, Second Cavalry, from Fort Keogh. Captain Huggins surprised the camp April 1st, captured five Indians, forty-six ponies, and some arms. Lieutenant Coale had an engagement April 1st on a fork of O'Fallon's Creek, when one enlisted man was killed.

The Mescalero Agency at the Fort Stanton, New Mexico, reservation had largely served as a base of supplies and recruits for the raiding parties of Victoria, and it was determined, with the consent of the Indian Department, to disarm and dismount the Indians there. Pursuant to directions from Headquarters Military Division of the Missouri, Generals Pope and Ord, commanding the Departments of the Missouri and Texas, arranged that a force under Colonel E. Hatch, Ninth Cavalry, numbering four hundred cavalry, sixty infantry, and seventy-five Indian scouts, should arrive at the Mescalero Agency simultaneously with Colonel Grierson, Tenth Cavalry, and a force of the Tenth Cavalry and Twenty-fifth Infantry, numbering two hundred and eighty officers and men, from the Department of Texas.

On March 31st, Colonel Grierson's column, whilst passing Pecos Falls, Texas, learned of the stealing of stock from citizens in that vicinity the previous night, and Lieutenant Esterly, with a detachment from Troops F and L, Tenth Cavalry, was sent in pursuit. On the third day Lieutenant Esterly overtook the Indians, one of whom was killed and eight head of stolen stock were recovered.

On April 6th, Colonel Grierson detached Captain Lebo, with Troop K, Tenth Cavalry, to scout near the line of march, and on April 9th, Captain Lebo attacked a camp of Indians at Shakehand Spring, about forty miles south of the Penasco, Texas, killed the chief of the band, captured four squaws and one child and between twenty and thirty head of stock, destroyed the camp, and recovered a Mexican boy, named Coyetano Garcia, who had been taken captive by the Indians.

On April 8th, Colonel Hatch's command struck Victoria in a strongly fortified position in the San Andreas Mountains, New Mexico; three Indians were killed, Captain Carroll, Ninth Cavalry, and seven men were wounded, and twenty-five horses and mules belonging to the troops were killed. Many of the Mescaleros and some Comanches were in the fight. Their trail was followed to the Mescalero Agency.

On April 16th, Colonels Hatch and Grierson, having duly arrived at the Mescalero Agency, the attempt was made to disarm and dismount the Indians, but a desperate effort was made by the Indians to escape, and ten warriors were killed, some forty more escaping. About two hundred ponies and mules were taken away from the Indians and two hundred and fifty Indians, men, women and children, were taken into the agency. From twenty to thirty guns, carbines and pistols, were captured from the Indians and turned over to their agent. Major Morrow, with a portion of Colonel Hatch's force, pursued the escaping Indians and overtook them in Dog Cañon, killed three warriors and captured twenty-five more head of stock. One party of the fugitives was pursued and attacked by a detachment of Troop L, Tenth Cavalry, commanded by Lieutenant Maxon; one Indian was killed and five horses captured.

May 13th, the commanding officer of Fort Davis, Texas, reported that Mr. James Grant and Mrs. H. Graham were killed, and H. Graham and D. Murphy wounded by Indians in Bass Cañon, Texas.

After the disarming and dismounting of the Indians at the Mescalero Agency, Colonel Hatch began again the pursuit of Victoria, assisted by troops from the Department of Arizona, but the campaign resolved itself into a chase of the hostiles from one range of mountains to another, with frequent skirmishes, but no decisive fights, until the Indians again escaped into old Mexico, the Mexican government declining to allow further pursuit on their territory. One fight took place on May 24th, at the head of Polomas River, New Mexico, when fifty-five Indians were reported killed. On June 5th, Major Morrow, with four troops Ninth Cavalry struck the hostiles at Cook's Cañon, New Mexico, killed ten and wounded three. One of the killed was a son of Victoria. A quantity of stock was also captured.

June 11th, Lieutenant Mills, Twenty-fourth Infantry, with a detachment of Pueblo scouts, en route to join Colonel Grierson's command, was attacked by Indians in Cañon Viejo, southwest of Fort Davis, Texas, his principal guide killed, and several horses wounded.

July 31st, the commanding officer of Fort Davis, Texas, reported that E. C. Baker, stage driver, and Frank Wyant, a passenger, were killed by Victoria's Indians eight miles west of Eagle Springs, Texas.

July 31st, Colonel Grierson, Tenth Cavalry, with a small party of six men was attacked by Victoria's Indians between Quitman and Eagle Springs, Texas; Lieutenant Finley, with a detachment of fifteen men of Troop G, Tenth Cavalry, came up, engaged the Indians, and held them in check until the arrival of Captain Viele and Captain Nolan, with two troops of the Tenth Cavalry, when, in an engagement lasting four hours, seven Indians were killed, a large number wounded, and the hostiles pursued to the Rio Grande. Lieutenant Colladay, Tenth Cavalry, was wounded and one enlisted man killed; ten horses of the troops were killed and five animals wounded.

Colonel Grierson's troops continued the pursuit, and on August 3d a detachment of cavalry and scouts had a fight near the Alamo, one soldier being wounded and one missing; several Indians and ponies were shot. The same day Captain Lebo, with Troop K, Tenth Cavalry,

followed an Indian trail to the top of the Sierra Diabolo, Texas, captured Victoria's supply camp of twenty-five head of cattle, a large quantity of beef and other provisions on pack animals, and pursued the Indians to Escondido.

On August 4th, a detachment of Captain Kennedy's troop of the Tenth Cavalry struck the Indians near Bowen Springs, Guadaloupe Mountains, Texas. The detachment had one man killed and several horses shot. Captain Kennedy attacked and pursued the hostiles toward the Sacramento Mountains, killing two Indians and shooting and capturing a few ponies.

On August 6th, the Indians were struck again in Rattlesnake Cañon and scattered in every direction. A train guarded by Company H, Twenty-fourth Infantry, Captain Gilmore, was then attacked by the Indians near this point, but the hostiles were repulsed with a loss of one killed and several wounded. Altogether four Indians were killed, many were wounded, and some ponies captured.

On August 9th, the commanding officer Fort Davis, Texas, reported that General Byrne, of Fort Worth, Texas, was killed by Indians near old Fort Quitman.

On August 11th, Captain Nolan, with Troops K, Eighth Cavalry, A, Tenth Cavalry, some Lipan souts and Texas rangers, struck Victoria's trail and pursued the hostiles to the Rio Grande, twelve miles below Quitman, August 13th, when the band were again driven into Old Mexico.

August 1st, Company H, Fifth Infantry, left camp on Redwater, Montana, and marched toward Poplar Creek Agency, Montana. It returned to Fort Keogh August 14th, bringing in twenty lodges of surrendered hostile Indians. The same day Troop E, Second Cavalry, left camp on Willow Creek, Montana, and marched to the Missouri River, capturing twenty-four lodges of Minneconjous, numbering one hundred and forty persons, returning with them to Fort Keogh August 14th.

August 16th, Sergeant Davern, Troop F, Seventh Cavalry, with a detachment of eight men and three Indian scouts, followed a war party of Sioux and struck them near the forks of the Box Elder Creek, Montana, killed two, wounded one, and captured seven head of stock.

August 19th, a detachment of Indian scouts struck a war party north of the mouth of O'Fallon's Creek, Montana, and recaptured eleven head of stock.

September 8th, "Big Road" and two hundred Sioux surrendered to the commanding officer of Fort Keogh, Montana.

October 26th, at Fort Stanton, New Mexico, twenty-four Apaches, consisting of seven men and seventeen squaws and children, surrendered to the commanding officer at the Mescalero Agency.

October 29th, a party of from thirty-five to fifty Indians supposed to be a remnant of Victoria's band, attacked a picket party of twelve men belonging to the command of Captain Baldwin, Tenth Cavalry, near Ojo Caliente, Texas; one corporal and three private soldiers were killed. Captain Baldwin followed the Indians to the Rio Grande, across which they escaped.

November 11th, Lieutenant Kislingbury, Eleventh Infantry, with a detachment consisting of twelve men Second Cavalry and ten Crow scouts, was attacked by a war party of Sioux near the mouth of the Musselshell, Montana, and had one horse killed and three wounded: one of the hostiles was reported killed.

1881.

The Indians who had broken away after the Sioux War of 1876–77, and had taken refuge in the British possessions, kept sending out raiding parties, which committed depredations as far south as the Yellowstone, and when pursued by the troops escaped again into the Northwest Territory.

In September, 1880, a scout named Allison went from Fort Buford to communicate with Sitting Bull and other chiefs, and, if possible, to induce the hostiles to come in and surrender. Allison made several visits to the hostiles and numbers came into Poplar River Agency, Montana, in the latter part of 1880. At first these Indians seemed peaceable, but after they had collected in force became turbulent and arrogant, assuming a threatening attitude toward the garrison at Poplar River, which it became necessary therefore to increase.

On December 15, 1880, Major G. Ilges, Fifth Infantry, with five mounted companies of his regiment, numbering about one hundred and eighty officers and men, left Fort Keogh, and after a march of nearly two hundred miles through deep snow, with the thermometer ranging from ten to thirty-five degrees below zero, reinforced the garrison, consisting of four companies of the Seventh Infantry and one troop of the Seventh Cavalry, at Camp Poplar River.

On January 2, 1881, leaving one company of infantry and detachments of three other companies of infantry to guard the camp, Major Ilges moved, with a force of about three hundred officers and men with two pieces of artillery, against some camps of Sioux, numbering about four hundred, who were located on the opposite side of the Missouri. Upon the approach of the troops the Indians fled from their villages and took refuge in some timber, from which they were quickly driven by a few shells and soon surrendered, to the number of over three hundred, under the terms already extended to all the hostiles, viz: that they should be disarmed and dismounted. Nearly two hundred ponies were given up, together with sixty-nine guns and pistols, as well as the camp equipage; eight Indians were killed in the attack and about sixty escaped and joined others in the vicinity. On January 9th, twenty additional Indians were captured, and on January 29th, eight more lodges, numbering sixty-four people, also surrendered to Major Ilges, with five guns and thirteen ponies. There were no casualties to the troops during these operations, but many were very badly frozen through exposure to the terrible weather.

On February 26th, three hundred and twenty-five hostile Sioux, from what was generally called Sitting Bull's camp, with one hundred and fifty ponies and about forty guns and pistols, nearly all the guns being Winchester and Henry rifles, surrendered to Major Brotherton, Seventh Infantry, commanding Fort Buford, Dakota.

February 12th, Major Ilges, Fifth Infantry, reported having arrested one hundred and eighty-five hostiles, forty-three of them being full-

grown warriors, in the Yanktonnais camp at Redwater, Montana; fifteen horses and seven guns were taken from the prisoners.

April 11th, one hundred and thirty-five hostiles, forty-five of them men, surrendered with their arms and ponies to Major Brotherton, Seventh Infantry, commanding Fort Buford, Dakota.

April 18th, thirty-two lodges of hostile Sioux, numbering forty-seven men, thirty-nine women, twenty-five boys, and forty-five girls, with fifty-seven ponies, sixteen guns, and three revolvers, surrendered to Lieutenant Colonel Whistler, Fifth Infantry, commanding Fort Keogh, Montana.

May 24th, eight lodges of hostiles, numbering about fifty persons, twelve of them men, surrendered to the commanding officer at Camp Poplar River, Montana.

May 26th, thirty-two hostile Indians surrendered to the commanding officer at Fort Buford, Dakota.

July 20th, Sitting Bull, with the last of his followers, comprising forty-five men, sixty-seven women, and seventy-three children, surrendered to the commanding officer at Fort Buford, Dakota.

On July 23d, there were turned over to the Indian agent at Standing Rock Agency (Mr. J. A. Stephan), two thousand eight hundred and twenty-nine Indian prisoners, with five hundred and forty-nine ponies and mules.

In July, "Nana," with fifteen warriors, the remnant of "Victoria's" band, reëntered New Mexico, and, reinforced by about twenty-five Mescaleros, whirled through the Territory, plundering and killing a number of people. On the 17th of July, at Alamo Cañon, New Mexico, a small party of these Indians ambushed Chief Packer Burgess and one man, belonging to a detachment commanded by Lieutenant Guilfoyle, Ninth Cavalry, wounded Burgess and captured three mules. On July 19th, Lieutenant Guilfoyle, with his detachment of the Ninth Cavalry and some Indian scouts, following a trail westward of Cañon del Perro, New Mexico, had a skirmish with some of the hostiles near the Arena Blanca, where they had just killed two Mexicans and a woman; the party numbered about thirteen warriors, and succeeded in making their escape. On July 25th, Lieutenant Guilfoyle again struck the hostiles encamped in the San Andreas Mountains, New Mexico, captured two horses, twelve mules, many blankets, and all the Indians' provisions; two of the hostiles were shot and believed to be killed; the others escaped, crossing the Rio Grande six miles below San José, killing two miners and a Mexican in the flight.

July 30th, four Mexicans were reported killed by the hostiles in the foot-hills of the San Mateo Mountains. August 1st, a party of thirty-six citizens, commanded by a Mr. Mitchell, whilst at dinner in the Red Cañon of the San Mateo Mountains, were surprised and defeated by the hostiles, losing one man killed and seven wounded, besides all their riding animals, thirty-eight in number; the Indians escaped. On August 3d, Lieutenant Guilfoyle's detachment again struck this band at Monica Springs, New Mexico, wounded two Indians and captured eleven head of stock, some saddles, blankets, etc. This band numbered about twenty or thirty warriors, led by Nana, and they had killed another Mexican in escaping from Red Cañon. At La Savoya, New Mexico, on August 11th, Lieutenant Guilfoyle found that two Mexicans had been killed and two women carried off by the hostiles.

August 12th, Captain Parker, with a detachment of nineteen men of the Ninth Cavalry, struck Nana's band twenty-five miles west of Sabinal, New Mexico; lost one soldier killed, three wounded, and one missing, but reported an equal loss inflicted upon the hostiles, who then drew off; Captain Parker's small detachment, incumbered by their wounded, were unable to pursue.

August 16th, Lieutenant Valois, with Troop I, Ninth Cavalry, had a severe fight with a band of about fifty Indians, near Cuchillo Negro, New Mexico; Lieutenant Burnett, Ninth Cavalry, was wounded twice, two enlisted men and six horses were killed; the hostiles lost several killed. The same day Lieutenant Taylor, with a detachment of the Ninth Cavalry, also had a fight with the hostiles, captured some horses and recovered some stolen property, losing himself a few horses killed; the hostiles were pursued toward the Black Range.

August 18th, Lieutenant G. W. Smith, Ninth Cavalry, with a detachment of twenty men, struck the hostiles about fifteen miles from McEver's ranch, New Mexico. The Indians were defeated after a very severe fight, in which Lieutenant Smith and four of his men were killed; a party of citizens, under command of George Daly, joined Lieutenant Smith in the fight, and Daly was killed.

Altogether, eight troops of cavalry, eight companies of infantry, and two Indian scouts were in the field, personally commanded by Colonel E. Hatch, Ninth Cavalry, in pursuit of these Indians, and while no decisive engagement took place, the hostiles were persistently driven from one point to another until they fled across the Mexican border, where, under positive orders from the government, the chase was abandoned.

In the Department of Texas, the following murders were also specially reported:

By the commanding officer, Fort Davis, Texas: January 3, 1881, in Quitman Cañon, Texas, the stage driver and a passenger named James Kelso, killed by unknown parties, supposed to be Indians.

By the commanding officer, Fort Clark, Texas: Allen Reiss and Mrs. McLauren, killed by Indians on the Rio Frio, Texas, about April 24, 1881.

By the commanding officer, Fort Davis, Texas: Two railroad employees named Bell and Smith were killed by unknown parties at a water-hole between Quitman and Eagle Springs, Texas, about July 5, 1881.

1882.

April 23d, a detachment, consisting of six men and six Indian scouts, commanded by Lieutenant McDonald, Fourth Cavalry, was attacked by a large band of Chiracahua Apaches about twenty miles south of Stein's Pass, Arizona, and four of the scouts were killed. One of the scouts made his escape with the news, and Lieutenant Colonel G. A. Forsyth, with Troops C, F, G, H and M, Fourth Cavalry, proceeded at a gallop for

sixteen miles to the relief of the rest of Lieutenant McDonald's party, who were found still defending themselves. The hostiles fled on the approach of this column, were pursued and overtaken in a strongly intrenched position in Horse Shoe Cañon, where the command dismounted and promptly attacked them among rocky ridges, varying from four hundred to sixteen hundred feet high. The Indians were driven from rock to rock among the mountains, until they dispersed in every direction, and further immediate pursuit became impracticable; thirteen Indians were killed, a number wounded, and a quantity of their animals captured.

On April 28th, Captain Tupper, with Troops G and M, Sixth Cavalry, and a company of Indian scouts, all belonging to the Department of Arizona, struck these Indians about twenty-five miles south of Cloverdale, surprised and attacked their camp, killed six of the hostiles, and captured seventy-two head of stock.

After Forsyth's fight in Horse Shoe Cañon he followed upon the trail and, joining forces with Captain Tupper, after the latter had also attacked the hostiles, continued the pursuit into Old Mexico. About ten miles from the scene of Tupper's fight a squaw was found, who stated that the Indians had lost thirteen killed in the fight with Forsyth and six more in Tupper's attack. On April 30th, Forsyth met a column of Mexican troops, commanded by Colonel Garcia, who declined to allow further pursuit upon Mexican soil, and stated that his own troops had just destroyed the band Forsyth had chased into Mexico. Forsyth accompanied Garcia to the scene of the fight, which had lasted five hours, during which time the Mexicans had lost two officers and nineteen men killed, and three officers and ten men wounded; seventy-eight Indians were killed, and thirty-three women and children were captured. The totals thus known to be killed in the fights of Forsyth, Tupper and Garcia was ninety-eight; about thirty Indians had also been wounded, who escaped, and two hundred and five horses and mules were killed or captured before the hostiles entered Mexico.

April 29th, Lieutenant Morgan, Third Cavalry, with a detachment of six men of Troop K, Third Cavalry, was sent from Fort Washakie, Wyoming, to arrest "Ute Jack," a chief of the White River Utes. Armed with a knife, "Ute Jack" resisted arrest and attempted to escape, when he was wounded in the arm by a shot from the guard. He then took refuge in an Indian tepee, where he obtained a carbine and succeeded in killing the sergeant of the detachment. Major Mason, Third Cavalry, arrived on the spot, and further measures were taken resulting in the capture and death of the Indian.

June 23d, a party of hostile Apaches attempted to take refuge upon the Mescalero Agency at Fort Stanton, New Mexico. The agent, Mr. Llewellyn, assisted by some of the employees and Indian police, attempted to arrest the hostiles, when a fight occurred, in which three of the hostiles were killed and Mr. Llewellyn wounded; the rest of the band, about seven or eight in number, escaped and fled from the reservation, pursued by a small detachment of troops and Indian scouts from Fort Stanton.

CONCLUSION.

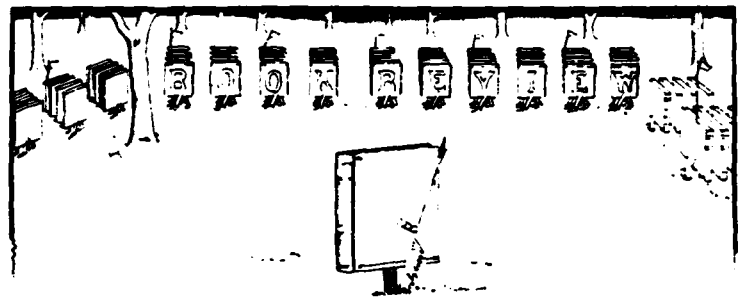
In connection with the operations of the army within the Military Division of the Missouri, many important changes have taken place during the fifteen years embraced by the foregoing narrative: much of the country, which, at the beginning of that period, was monopolized by the buffalo and the Indian, has now been opened to the settler, to the railroad, and to civilization. With a loss to the troops of more than a thousand officers and men killed and wounded, and partly as the result of more than four hundred skirmishes, combats, and battles—not including many pursuits and surrenders of Indians, when no actual fighting occurred—the majority of the wasteful and hostile occupants of millions of acres of valuable agricultural, pasture, and mineral land have been forced upon reservations under the supervision of the government; some have been gradually taught a few of the simpler useful industries, Indian children have been placed in schools, under instruction in a better life than the vagabond existence to which they were born, and the vast section over which the wild and irresponsible tribes once wandered redeemed from idle waste to become a home for millions of progressive people.

Following behind the advancing troops, who protected the hardy pioneer engaged in breaking the soil for his homestead, came the Kansas and Union Pacific Railways, racing through Kansas and Nebraska, to gain "the hundredth meridian." Guarded by the soldiers, the surveying and construction parties completed the main lines of those roads during the earlier years covered by this narrative, and later their branches and connections have extended into many fertile valleys which now support not only a thick local population, but supply, also, material for the bread of this nation and the Old World. Subsequently the Atchison, Topeka & Santa Fe Railway opened to the stock raisers the rich cattle ranges of the Arkansas Valley, and carried into the drowsy regions of New Mexico the implements of a new era. Across Dakota and Montana, to-day, the working parties of the Northern Pacific, escorted by the troops, are rapidly adding another complete transcontinental highway, and over all of the foregoing roads are pouring thousands of cars loaded with cattle, to furnish Eastern markets with their daily supply of beef. With its narrow iron threadways, the Denver & Rio Grande has seamed the almost vertical faces of mountain cliffs, scaled their lofty summits, and made available the wealth of Utah and Colorado. Through the State of Texas the Southern Pacific, the Texas Pacific, and the International and Great Northern have opened complete routes to the Pacific and into Old Mexico, whilst all over the division numerous minor roads and branches are constantly penetrating what were until recently, mysterious and almost unknown regions.

As the railroads overtook the successive lines of isolated frontier posts, and settlements spread out over country no longer requiring military protection, the army vacated its temporary shelters and marched on into remote regions beyond, there to repeat and continue its pioneer work. In rear of the advancing line of troops, the primitive "dug-outs" and cabins of the frontiersmen were steadily replaced by the tasteful houses, thrifty farms, neat villages, and busy towns of a people who

knew how best to employ the vast resources of the great West. The civilization from the Atlantic is now reaching out toward that rapidly approaching it from the direction of the Pacific, the long intervening strip of territory extending from the British possessions to Old Mexico yearly growing narrower; finally the dividing lines will entirely disappear, and the mingling settlements absorb the remnants of the once powerful Indian nations who fifteen years ago vainly attempted to forbid the destined progress of the age.

[THE END.]



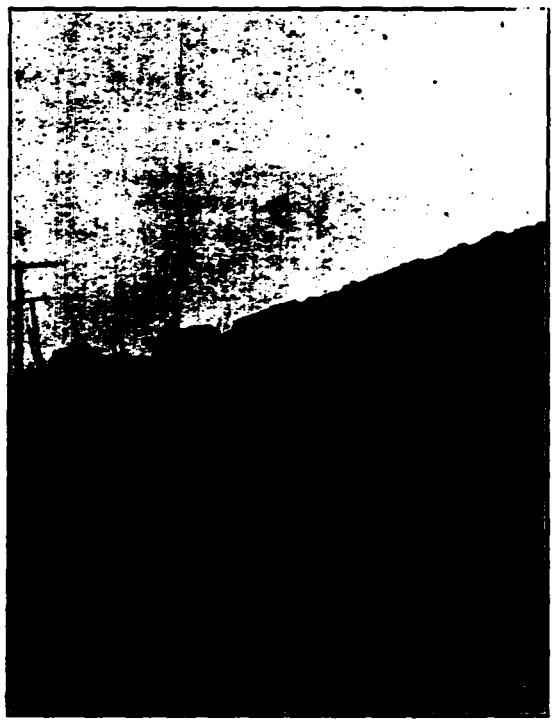
A Trooper's Narrative of Service in the Anthracite Coal Strike, 1902.*

This little volume, which is written in very interesting style, is a narrative of the services of the Second Troop, Philadelphia City Cavalry National Guard of Philadelphia in 1902.

It starts out with a short introduction by Allen Glenn, giving the historical record of the troop. He says that the Philadelphia City Cavalry was formerly known as "Light Horse," and as early as 1780 there were two troops in Philadelphia. The second troop is now commanded by Captain

*"A TROOPER'S NARRATIVE." By Stewart Culin. Press of George W. Jacobs & Company, Philadelphia.

Frank Earl Schermerhorn, and consists of one captain, one first lieutenant, one first lieutenant and surgeon, one second lieutenant, one second lieutenant and quartermaster, one first sergeant, one commissary sergeant, one quartermaster sergeant, five sergeants, eight corporals, two trumpeters, one saddler, and thirty-six privates.



The troop was called into actual service during the anthracite coal strike on August 27, 1902, and remained on duty until November 1st of that year, completing sixty-seven days' field duty.

The narrator brings the troop to Columbia Park, Shenandoah, where it remained in camp for sixty days, making many excursions into the surrounding country. Camp life is described in an easy, natural way, that appeals to an old camper and brings many pleasant recollections. The people of the surrounding country are portrayed, their habits, religion and mode of life touched upon to give the reader an insight into the duty to be performed. The descriptions of the rides into the surrounding country are well written. The ride to Mahanoy City, where a colliery was to be started, is full of life and incident.

The troop moved to Wilkes Barre where the narrator describes a novel use of the search light. He says: "As a further assistance to the camp guards an electric search light had been established on a scaffolding at the top of a high grand stand overlooking the camp. By means of it the men were continually watched on their posts. 'Halt! Who is there?' 'Corporal of the guard.' The sentry and the challenged would stand in a little circle of light. Then the corporal would come running with his lantern, the three figures would speak their parts like actors on a stage and the light would sweep aside to follow some distant sentinel, or bound as if in play, from zenith to horizon. The supply wire for the light was cut on two occasions, by strikers, it was asserted, although a different opinion prevailed in the regiment. In addition to this fixed light, a portable acetylene search light was used by troops on the march, and was said to have proved a most efficient instrument in dispersing mobs at night."

The literary style is most pleasing throughout, and the book makes a very pretty memento of their service, but also makes good reading for the general public.

Notes on Military Hygiene, for Officers of the Line.* While military sanitation, the art of preserving the health of soldiers, has been recognized since the earliest days, and had reached a high state of efficiency in the Roman Legions, the study of military hygiene as a science

*A syllabus of lectures formerly delivered at the U. S. Infantry and Cavalry School by Alfred A. Woodhull, A.M., M.D., LL.D., Col. U. S. A., retired. Lecturer on "Personal Hygiene and on General Sanitation." Princeton University. Third edition. John Wiley and Sons, New York. Chapman and Hall, Limited, London, 1904.

has until recently received very little attention from line officers, whom it concerns more vitality than any other, for "they control the daily lives of men," and upon them to the very largest extent depends the well being and physical efficiency of the command.

Although Colonel Woodhull's book appeared less than fifteen years ago, it was a pioneer in its important field, and first brought to the attention of our combatant officers in a concrete way the facts of military hygiene, which up to that time had been for most of them a *terra incognita*.

Since its appearance, we have had a little war in which we learned at least two things:

1st. That the neglect of camp sanitation will, through the introduction of diseases, in a very short time completely neutralize a military force; and

2d. That even after camp epidemics become widespread, they can be quickly controlled if proper sanitary precautions are taken.

Our author states his aim to be "to stand in the place of a line officer anxious to take care of his command, and to find answers for his natural questions"—in which laudable object it would appear that he has succeeded very well.

The book opens with "Selection of Soldiers," in which great stress is laid upon the necessity for the strictest adherence to the recruiting regulations, including the table of physical proportions. It is to be regretted that any latitude in this direction should be allowed the recruiting officer. If sixty-four inches is the "minimum height" of a recruit, thirty-two inches the "minimum chest" measure, and 125 pounds, the "minimum weight," there should be no further reduction, and yet plenty of men are now accepted with thirty inches chest measure and 110 pounds weight, with the result that during the period of active service "a large majority of the men (boys) invalided home from the Philippines were in their first or second year of service, and a great many were taken off transports, put in hospitals, and shipped home without doing a day's duty." It should go without saying that such men will never make efficient soldiers. Vigitius' remark that "An army raised without due regard

to the choice of recruits was never yet made a good army by any length of service," is just as true to-day as it was sixteen centuries ago.

The chapter on "Military Clothing" conforms to the latest uniform order, which our author seems to regard for the most part as being up to a proper hygienic standard. The order in which colors draw fire is that set forth in Parkes's hygiene, and does not correspond with that of later investigators. But this is a matter of little practical importance, since the armies of the world have taken to neutral colors for their service uniforms.

The opinion expressed in previous editions that the so-called sportsman's hat with "double peek and folding flaps," evolved by hunters would fulfill the requirements of open air life is reiterated. As a matter of fact an entirely satisfactory head covering for the field is yet to be evolved. The so-called "campaign hat" perhaps meets more field conditions than any other, but it is certainly most unsoldierly looking and appears to invite to undiscipline.

The author lays stress upon the inadvisability of a tight collar on coat or shirt, saying that "the neck should be free." This fact, which is illustrated in the clothing of every working man, was fully appreciated by the original uniform board, by which a low turned down collar for the service coat was recommended for both officers and men. It is understood that particular stress was laid upon the necessity for this by the highest authority, and yet to-day the service coat has an impossible "high rolling" collar which will seriously interfere with the efficiency of any one wearing it, and will result in its being discarded at the very time it was intended to be used. Much emphasis is laid upon the necessity for suitable footwear and the care of the feet, a neglect of which is in the German army a military offense. "An infantry officer should be as solicitous as to the care of his men's feet as a cavalry officer is of his horses. By frequent stated inspections he should make sure that the nails are well trimmed directly across the toe, that corns or chaps are not developed and that the whole extremity is clean." An excellent powder for preventing sore feet is a mixture of

salicylic acid, three parts, starch ten parts and pulverized soapstone eighty-seven parts. This is sifted into the shoe and stocking to keep the feet dry, prevent chafing and to heal sore spots.

Colonel Woodhull invites attention to the desirability of making military clothing water repellent. The importance of this subject from a military as well as a hygienic standpoint cannot be overestimated. When it is realized that a heavy rain will add pounds to the soldier's burden if his clothing has not been water-proofed, it is not difficult to see that the fate of an important military movement might turn upon the lack of this simple precaution; while no one can doubt that the soldier's physical well being must be greatly promoted by dry clothing. Munson states that one cent's worth of acetate of alumina will render a suit of clothes water repellent, which being the case there seems to be no possible reason why all military outer clothing should not be water-proofed.

So much has been said and written upon the subject of the ration during the last five years that one turns to the chapter on food with interest. This subject is discussed from the view point of the four official rations: garrison, field, travel and emergency. Our author adheres to the view held by Parkes that the "nitrogenous substances are necessary in the manifestations of energy," whereas the later view is that such are really tissue builders, by which the machine is kept in repair, the fats and the starches being, so to speak, the anthracite and the bituminous coal that supply the heat necessary to actuate the machine. The question in any dietary is, are the meat, bread and vegetable components adequate? They certainly are in our rations, though in the field, when most needed, the vegetable component is not always available. The real trouble in our army during the Spanish-American war was ordinarily not with the ration but with its manipulation. We suffered from a dearth of field cooks, and not as a rule of food, which will always be the case with a volunteer army in the beginning of a campaign.

The chapter on "Habitations," is sufficiently comprehensive to enable one to know the reasons for things, and to apply them in a practical way. Certainly no company officer who knows these reasons will be satisfied with ventilating his squad rooms through a scuttle hole into the dead space between the ceiling and the roof, nor fail to appreciate that the efficiency of his command is distinctly lowered by ill-located, ill-ventilated and ill-policed habitations.

The disposal of waste is considered chiefly from the standpoint of the permanent post with its modern sewer system, and affords one a very fair idea of the principles of plumbing, quite sufficient indeed to enable an officer to make an intelligent sanitary inspection of his company barracks, which ordinarily is all that is necessary.

The very practical subject of water is treated in a practical way, and furnishes all the information necessary to a clear appreciation of the subject, than which none is more important.

Since water is a *sine qua non* to the human machine and a fruitful source of disease, so much so indeed as to probably make its cooking as important as the cooking of any other food, would it not be well to promulgate a regulation requiring that all drinking water be boiled, no matter if troops be in garrison or field? Nobody in our country questions that meat should be cooked before eating. This is merely a matter of habit, by no means universal, and such would be the cooking of water if once established.

The chapter on "Preventable Diseases" has been rewritten. Perhaps nothing illustrates the remarkable advance made during the last few years in our knowledge of the causation of the diseases which chiefly affect the health of armies, and which knowledge has been developed to the largest degree by our own medical officers, than the fact that a chapter written on this subject five years ago is now practically obsolete. In a few well chosen sentences the line officer is told all that is necessary for him to know of malaria, typhoid and yellow fever, cholera, the plague, dysentery, consumption, dyptheria, etc., and the necessary information given as to disinfectants and their employment.

The chapter on the "Care of Troops in the Field," as our author states, "was prepared for the second edition at the outbreak of the Spanish War. It is an expansion of parts of the body of the work, and to that extent duplicates what has been said in a fragmentary way. It is retained, revised and somewhat enlarged, under the belief that the subject merits this more connected discussion."

A few words are given to asepsis in wounds, and the book closes with a comprehensive scheme for a sanitary inspection by a company officer in garrison and field, which, if backed by a knowledge of the facts preceding it, and conscientiously carried out, cannot fail to improve the efficiency of any command.

Thus it will be seen that Colonel Woodhull has presented to the line officer an almost complete epitome of the science of military hygiene. Special chapters on the hygiene of troop ships, of high and low latitudes, etc., might well have been added, but the general principles are well set forth and, in any event, their special application will depend upon the intelligence of the officer whose duty it is to apply them.

Woodhull's "Notes on Military Hygiene" should be in the library of every officer of our army. It is now a text-book of the General Service and Staff College, in which institution considerable attention is given to the subject; but this is not enough. Military hygiene should be taught in every post school, and no officer, no matter to what branch of the army he belongs, should be promoted until he has successfully passed an examination in the "care of soldiers."

J. V. R. H.

Guide to Official Letter Writing.* This work, written by "an army schoolmaster," is in its second edition, and contains concise directions upon official letter writing and orders; also upon handwriting, style of composition, punctuation, military abbreviations and relative rank, together with such business terms as are or may be applicable to military life.

*"Guide to Official Letter Writing, Orders, Etc." Gale & Polden, Ltd., Aldershot. Price, one-and-six (net).

In the latter part of this work is found a list giving the origin and meaning of military terms, from which the following are culled:

Baggage—From the Saxon *baelg*, a *sack*.

Barracks—From the Italian *barracca*.

Battalion—From the French *battaille*, which is derived from the Latin *battere*, to *fight*.

Bayonet—From the name of the French town *Bayonne*, where these weapons were first made.

Bivouac—From the French, meaning a guard at night in open air.

Campaign—From the Latin *campus*, the order of tents for an army.

Carbine—From the Arabic *karab*, through the French *carabine*.

Cartridge—From the Latin *charta*, paper.

Colonel—From the Latin *colonna*, a column, or pillar, or support.

Commisariat—From the Latin *con mitto*, I entrust with.

Cuirass—From the French *cuir*, leather.

Dragoon—From the Greek *draken*, a winged serpent.

Drill—From the Saxon *thirlian*, to bore, to pierce.

Engineers—From the Latin *ingenium*, clever.

Furlough—From the Dutch *verlof*, leave.

Hussar—From the Hungarian *huss*, twenty and *ar*, price.

Infantry—From the Latin *infans*, a child: Italian *infante*; French *infanterie*.

Maneuvers—From the Latin *manes*, a hand, and *opera*, worker.

Quarter—From the Latin *quatuor*, four: one soldier to each house having four persons.

Sentinel—From the Latin *sentio*, I feel.

Stirrup—From the Anglo-Saxon *stigan*, to climb, and *rap*, a rope.

Military Policy of the United States.

The following review of this most important book appeared in the *Chicago Tribune*. While every officer will undoubtedly read this valuable book, what the service wants is that every civilian should read it, for then the convincing arguments would find the proper auditors. It is interesting to notice, therefore, how the press of the country regards this book:

"A splendid military ancestry is given to the past year's changes in the organization of the regular army through the resurrection of Major General Emory Upton's soldierly treatise upon the 'Military Policy of the United States.' Twenty-five years ago the far seeing intelligence of this brilliant tactician demanded the staff and line reforms which are to-day substantially secured. Amongst his last official acts as Secretary of War Elihu Root caused this report to be disentombed from the catacomb of the files of the War Department, to be edited, and published as a buttress to the reconstructive work already done, and a guide to future progress.

"Building upon the stern dictum that patriotism cannot take the place of discipline in time of war, General Upton, himself a West Pointer and a distinguished fighter of the Rebellion, devoted the best years of his life to the composition of a logical and thoroughly professional plea for a reorganized army system. He recommended the establishment of the General Staff, with examination as a condition to promotion. He recommended interchangeable service in staff and line as against the permanent staff departments. He recommended the three battalion formation in cavalry and infantry regiments, and, above all, he recommended the systematic extension of military education. These reforms as brilliant possibilities of the dim future were indorsed by no less an authority than William Tecumseh Sherman in a note found penciled upon the margin of the War Department manuscript. Every one of the reforms are now in practical effect.

"One other field of great importance, according to both Upton and Root, still remains to be covered by Congressional legislation. That is the establishment of an adequate system for raising, training, and officering the volunteer forces of the future.

"General Upton, speaking just after the Civil War, uses the mistakes of that contest and those that had preceded it to lay bare the evils of State interference in the makeup of the forces which take the field to fight the fights of the nation.

"When Lincoln issued his call for 300,000 volunteers in 1862 the political taint to the officering of many State regiments was notorious. During 1812 the chief executives of several commonwealths refused to order out their militia in the common defense, while in the Florida War of 1841 Federal commanding officers were severely hampered by the undesired and unasked for addition to their ranks of undisciplined levies representing the State of Georgia.

"Consideration of such facts Mr. Root rightly terms unpleasant. They are none the less important, however, and General Upton's analysis of them is as pertinent and live as if penned yesterday."

Editor's Table.

The little collection of stanzas given below was written in 1889 on the maneuvers at Chilocco, Indian Territory. It is interesting as showing the many changes time makes in the military service, but chiefly because it recalls to mind Second Lieutenant Charles L. Foster, Fifth Cavalry, the author. He died August 10, 1900, after having served but a very short time. He was one of the most promising graduates of the Military Academy, and was beloved by all who knew him:

THE WAR OF '89.

Of the Indian Territory, if you'll listen to my story,
I'll tell you something that is very fine, fine, fine;
It's all about the war, that cruel, bloody war,
The celebrated war of eighty-nine, nine, nine.

General Merritt and his staff, three regiments and a half,
Went into camp upon Chilocco Creek, Creek, Creek;
For 'twas the General's notion to set the war in motion,
That celebrated war of eighty-nine, nine, nine.

Colonel Wade and regiment into this war was sent,
The cavalry idea to maintain, tain, tain;
As history can tell, his part he played full well,
In the celebrated war of eighty-nine, nine, nine.

Then Goldman formed his line, upon a slight decline,
Whereon he thought he soon would have to die, die, die;
He sent three times for aid, but never got afraid,
In the celebrated war of eighty-nine, nine, nine.

Jake Augur and his boys, without making any noise,
Rode down upon a careless troop of Browns, Browns, Browns;
He thought he'd made a coup, but he fell in Joey's soup,
In the celebrated war of eighty-nine, nine, nine.

Macauley, tall and slim, on a horse that looks like him,
Went charging o'er the rocky battle ground, ground, ground;
"Where shall I put my corps?" he loudly did implore,
In the celebrated war of eighty-nine, nine, nine.

That modest man of push, the gallant old Forbush,
Was sent upon the left to guard a ford, ford, ford;
He did no good that day, for he went too far away,
In the celebrated war of eighty-nine, nine, nine.

Macomb and Schuyler too, those men so brave and true,
Upon the battlefield they both were slain, slain, slain.
Did they really, really die, or did the umpires lie,
In that celebrated war of eighty-nine, nine, nine?

Then Thomas had the sand to lead his precious band,
And go right in for glory or the grave, grave, grave;
He was butchered like a lamb, but he didn't care a cent,
In the celebrated war of eighty-nine, nine, nine.

There's Paddock, tall and grim, I'll sing to you of him,
And how gallantly he fought upon the right, right, right;
He charged into the fray, and helped to win the day,
In the celebrated war of eighty-nine, nine, nine.

The smoke hung thick and dense, the firing was intense,
The cannon belched their flames across the plain, plain, plain;
We fought and we fit, but not a man was hit,
In that sanguinary war of eight-nine, nine, nine.

Foster wrote a little song, it didn't take him long,
The characters in camp to tell about, 'bout, 'bout;
Though some of them got blame, they got there just the same,
In the celebrated war of eighty-nine, nine, nine.

Though Quartermaster Foster is not on duty's roster,
With his wagon train he never has been seen, seen, seen;
He fell like a sack, and kept the column back,
While riding to the war of eighty-nine, nine, nine.

Hail to Kentucky went, and time and money spent
In purchasing a very handsome mare, mare, mare;
But that unexpected mule made him say there was one fool,
In the celebrated war of eighty-nine, nine, nine.

T'was really not expected that Swift should be subjected
To questioning about the General's plans, plans, plans;
So just before a fight he kept his mouth shut tight,
In the celebrated war of eighty-nine, nine, nine.

Bishop was an umpire there, and had a knowledge fair
Of strategy as laid down in the books, books, books;
For him we had no fear—he had his Injuns near,
In the celebrated war of eighty-nine, nine, nine.

At the east end of the line, with pets of every kind,
Quay always had a crowd about his tent, tent, tent;
A Bull-dog and a Hawk, and a Parrot that would talk,
In the celebrated war of eighty-nine, nine, nine.

Is Waite so very vicious, or is he too ambitious
To have upon his shoulder straps two bars, bars, bars?
He ropes the captains in, and loads them up with gin,
In the celebrated war of eighty-nine, nine, nine.

Amid that brilliant throng was Butler, man of song;
He was a shining light in our glee club, club, club;
"Johnny Jones and sister Sue, and the peach of Emerald hue,"
Amused us in the war of eighty-nine, nine, nine.

From Leavenworth came down a man of great renown,
Who galloped up and down between the lines, lines, lines;
And Sumner was the name of the umpire known to fame,
In the celebrated war of eighty-nine, nine, nine.

And Watts, the Adjutant, whose hair is rather scant,
Looked very much as if he'd like to quit, quit, quit;
He hadn't much to say when he rode that trotting gray,
In the celebrated war of eighty-nine, nine, nine.

A youngster of Troop "B," (it's Carson, you can see),
Lay in his bed and slept through reveille, lee, lee;
And in his sleeve did laugh, and said, "I'm on the staff,"
In the celebrated war of eighty-nine, nine, nine.

Our handsome A. A. G., was full of strategy,
And labored like a Turk both night and day, day, day;
He studied charts and maps, and set his deadly traps,
In the celebrated war of eighty-nine, nine, nine.

And there was Captain Hayes, his stories did amaze
As told to all the youngsters of the line, line, line;
Buffalo Bill and Fitzhugh Lee and the Grand Duke on a spree,
Where heard of in the war of eighty-nine, nine, nine.

Now Elliott and Blunt, though always near the front,
Were never killed or captured by the foe, foe, foe;
What could have been the charm that kept them out of harm,
In the celebrated war of eighty-nine, nine, nine?

An Arkansas City dance, our pleasure did enchance—
Of course we all had on our winning ways, ways, ways;
Of the Kansas girlie's heart we each bore off a part,
In the celebrated war of eighty-nine, nine, nine.

To the SEVENTH now I'll say, we hope to see the day,
When you shall be in camp again with us, us, us;
So here's a health to you, and to our friendship true,
And to the famous war of eighty-nine, nine, nine.

I've sung of war and death, till I am out of breath,
I know you all are glad that I am through, through, through,
Then pass the bottle round—we'll ring the curtain down,
On the celebrated war of eighty-nine, nine, nine.

Prize Essay 1903. The committee of award for the 1903 prize essay, consisting of Generals Lee and Wilson and Colonel Wagner, submitted its finding on the essays offered in competition for the prize, and the essay so selected was published in the January, 1904, JOURNAL, as provided for in the rules of the contest. This is the second of the series of prizes awarded, the first going to Captain C. D. Rhodes, Sixth United States Cavalry, now of the General Staff. In time, the CAVALRY JOURNAL will, under this system, bring forth a good history of the cavalry operations of the Civil War which will be of immense value to all cavalry officers and students. There is so much in the official records that has not been properly digested, that an immense field is still open from which to collect this information and put it in shape to admit of ready reference. The second essay of the series was "The Cavalry of the Army of Northern Virginia," and the prize was awarded to Captain J. G. Harbord, Eleventh Cavalry, now assistant chief of Philippine Constabulary.

The subject for the next competition should call forth the efforts of all ardent cavalrymen, "Saber versus Revolver," as illustrated by examples taken from the Civil War. This essay should give us in compact form and arranged for ready reference the account of all engagements in which the outcome was influenced by the arms of the opposing troopers. The question of armament is a serious one, and for a thorough and complete understanding of the subject one should have accurate and reliable information of the use made of weapons in our own wars.

The rules under which the competition, which is open to all persons, is to be held, are given in another part of the JOURNAL. The competition closes October 1, 1904.

Cavalry Journal Prizes, 1902–1903. Thirty seven articles and contributions competed for the CAVALRY JOURNAL prize for 1902–1903. This included all original papers submitted to the publication committee, and printed in the CAVALRY JOURNAL from and including the

JOURNAL of July, 1902, to and including that of October, 1903. The method of deciding on the best and second best paper inaugurated in this competition takes it out of the hands of an appointed board, which has been the usual manner of determining such prize contests. It is believed that by giving a vote to each member, a more careful selection will be made. Notice of the annual meeting must be sent out some time during the last quarter of the preceding year, and all members given an opportunity to send in their proxies, so that it is an easy matter to send at the same time a list of papers on which to cast the vote. The responses have not been as numerous as might be desired, but it is believed that next year this can be remedied by sending out additional notices.

The votes this year were very scattering, and included nearly every article in the list. The large majority of votes, however, went to Captain T. Bentley Mott's excellent paper, "The Cavalry School at Saumur." This article appeared in the January, 1903, number of the JOURNAL, and has, besides receiving the indorsement of the votes of the members of the Association, attracted no little attention in military circles.

That this first prize in the series should go to an officer of another branch of the service is a nice compliment to our large list of associate members.

Three other papers had exactly the same number of votes, and no decision as to second prize could be arrived at.

The next prize contest of this kind will include all original articles appearing in the JOURNAL from January, 1904, to October, 1904, both numbers inclusive. The announcement appears in another part of the JOURNAL.

The following poetry is too good not to publish, though at the outset it is well to announce that as far as our service goes the sentiments do not apply any more to our colored regiments than they do to the others. In any case, while reveille is rather at a discount it is well known that by all our troops the call "To Arms" and "Charge" have always been held at a premium; even mess call can not compete with them in any manner. It has been well illustrated that our soldiers are fighting men, and only poetic license can be allowed to say that our soldiers would not rather "fight than eat any day."

THE BLACK TROOPER'S LAMENT.

Ain't got no use foh reveille: doan cyah much fah taps.
Drill calls ain't no friends ob mine: sick call am—p'haps.
Ob all de calls Ah lak ter heah fum de bugle's b'assy th'oat.
It am de call dat seems ter hab dat melly-floo-yus note—
"Soupy, soupy, widout er single bean.
Po'ky, po'ky, widout er streak ob lean."

Tattoo am rader er pooty call, am pleasin' to de yeah.
To ahms, and chawge am nasty calls dat Ah nevah lak ter heah.
Gib me dat mos' chawmin' soun' dat comes free times er day.
Dat melly-floo-yus bugle call dat allus seems to say—
"Soupy, soupy, soupy, widout er single bean.
Po'ky, po'ky, po'ky, widout er streak ob lean."

Ah ain't no doggone fightin' man, doan lak ter fight a 'tall.
Ah'd rader shoot de bones all day in de ba' 'ack hall.
Ah'd lak ter be de kunnel an' de only call dere'd be
Would be dat call free time er day dat seems to sing ter me—
"Soupy, soupy, soupy, widout er single bean.
Po'ky, po'ky, po'ky, widout er streak ob lean."

DAMON RUNYAN.

ILLUSTRATIONS.

In the January number of the JOURNAL some of the illustrations appearing in the article, "Five Years a Dragoon," where taken from "Everglades to Cañon," by General T. F. Rodenbaugh, United States Army, which is a description of the work of the Second Dragoons. Credit should have been given to this book for the reproductions, and the omission to do so is hereby acknowledged and rectified.

The following from the *Broad Arrow*, the English military paper, is of interest to our army at present. Promotion by selection is evidently not in favor in England:

"Promotion by merit has always obtained in the British army, and the army itself has, when the occasion arose, called for its adoption. Promotion by selection in secret is

quite another thing, and officers are beginning to question whether it is worth while to remain in a profession in which after years of good service the reward which they and others considered their due is withheld in consequence of the careless vote of a member of a secret tribunal. To suppose that a man who has spent the greater portion of his life in the earnest endeavor to do his duty, and who has never been told that he has failed in that endeavor, will allow himself to be passed over without comment and without dispute, is ridiculous. That good men should be specially selected for promotion goes without saying, but that equally good men should be cast aside without a better reason being assigned than that the selection board did not recommend them, is contrary to the most elementary ideas of justice. In the old days, the man who had struggled to the top of the colonel's list, was given his chance whether he had had an opportunity of showing if he was fit to command in the field or not, because it was assumed that until he had had that opportunity no one could say that he would fail. That many of those promoted on those grounds justified the system is a mere matter of history, and it is equally historical that those of them who did fail were not more numerous than those who have failed since selection came into vogue."

BOUND VOLUMES OF THE CAVALRY JOURNAL.

The Association is prepared to furnish bound volumes of the back numbers from No. 6 to No. 52, inclusive. The announcement with prices and terms will be found among the advertisements in the first part of the JOURNAL. It is to be hoped that cavalry officers will avail themselves of this opportunity to provide themselves with an excellent library of the very best literature on cavalry and kindred subjects. The volumes are handsomely bound in half leather, but any style of binding may be had. The officer's name can be added in gold lettering on the back of each volume if he so prefers. The sale of back numbers unbound has been quite encouraging, and it is fortunate that the Association has these back numbers on hand.

GIVE US A CHIEF OF CAVALRY.

A member sends us the following timely admonition. A careful perusal will convince members that we must again be doing something to promote the interests of our service, and work for a betterment in the organization of our arm of the service. We should not rest content with what has been done, but continually look forward to new improvements. Suggestions, comments and remarks on this subject are desired for the CAVALRY JOURNAL:

"It is suggested that cavalry officers consider the propriety of asking for the reëstablishment of the Cavalry Bureau of the Civil War, but with greater powers and a larger scope of usefulness.

"It will be remembered that the cavalry service was neglected and belittled in the early days of the war. The few cavalry which were in service were frittered away in useless details. Recruiting for the cavalry was ignored; the formation of a cavalry corps was not dreamed of, and one of our most prominent generals is said to have declared that he did not need cavalry. As a result campaigns were undertaken with practically no cavalry; armies executed marches in four days that should have occupied one day; an army halted for a month in the face of a force which could not have stopped it for a day; an army took several days forming line of battle within sight of the camps of an enemy and then surprised that enemy without its presence being known or suspected; a defeated army fled in rout for twenty miles and was not destroyed.

"The establishment of the Cavalry Bureau in 1863 gave an importance to the arm which it had never before possessed. Although the first idea was suggested by the necessity for a remount system, its influence was extended. The cavalry was soon heard from in the field, and by the defeat of the opposing cavalry and killing its leader, it prepared the way for the success of the Federal army.

"The necessity of a chief of cavalry at the present time is great. When we consider that we agree with no other country in the world in many vital matters of cavalry organization, armament and equipment, we may well wonder whether we can afford to ignore questions which have received the best study of the brightest men of other lands than ours. Matters which would immediately occupy the attention of a chief of cavalry would be perhaps the abandon-

ment of our independent regimental organization, a new drill book, armament, recruiting, instruction.

"Unless we get a chief of our own arm who will devote himself to our own needs, these matters will continue to be ignored as they have been. We fortunately have a sufficient number of general officers to make it possible that one of them could be assigned to the duty of chief of cavalry without additional legislation being necessary.

"The experience of the army since the chief of artillery has been designated ought to be sufficient to make us put all our efforts to the work of securing the same advantage for the cavalry. The artillery is now the foremost arm of the service, due almost entirely to the intelligent work of its chief.

"As long as the cavalry are without a chief we will continue to be orphans, with few friends, forgetful of the lessons of history and without hope for the future.

"The orders issued in 1863 and 1864 on the subject of a Cavalry Bureau afford food for reflection, and suggest plainly another order which would secure a new life for the cavalry service."

WAR DEPARTMENT.
GENERAL ORDERS, } ADJUTANT GENERAL'S OFFICE,
No. 236. } WASHINGTON, July 28, 1863.

I. A Bureau will be attached to the War Department, to be designated the Cavalry Bureau.

II. This Bureau will have charge of the organization and equipment of the cavalry forces of the army, and of the provision for the mounts and remounts of the same.

III. The purchases of all horses for the cavalry service will be made by officers of the Quartermaster's Department, under the direction of the Chief of the Cavalry Bureau. Inspections of horses offered for the cavalry service will be made by cavalry officers.

IV. Depots will be established for the reception, organization and discipline of cavalry recruits and new regiments, and for the collection, care and training of cavalry horses. These depots will be under the general charge of the Cavalry Bureau.

V. Copies of inspection reports of cavalry troops, and such returns as may be at any time called for, will be sent to the Bureau established by this order.

VI. The enormous expense attending the maintenance of the cavalry arm, points to the necessity of greater care and more judicious management on the part of cavalry officers, that their horses may be constantly kept up to the standard of efficiency for service. Great neglects of duty in this connection are to be attributed to officers in command of cavalry troops. It is the design of the War Department to correct such neglects, by dismissing from service officers whose inefficiency and inattention result in the deterioration and loss of the public animals under their charge.

By order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant General.

WAR DEPARTMENT.
GENERAL ORDERS, } ADJUTANT GENERAL'S OFFICE,
No. 237. } WASHINGTON, July 28, 1863.

The following instructions, intended to promote the efficiency of the cavalry service, are promulgated for the guidance of all concerned:

I. Inspections will be made of all cavalry troops at the end of every month, reports of which inspections will be forwarded without delay, through the Army or Department Commander, to the head of the Cavalry Bureau at Washington. These reports will exhibit the condition of the cavalry service in general, and especially the condition of the mounts. The reports shall state what service the troops inspected have done since last inspected: how many miles their horses have traveled within the month: what character of service has been required of them, and under what circumstances it has been rendered: what appears to have been the care taken of them, as regards treatment, shoeing, etc., etc.: what has been the quantity and character of the rations of forage issued to them: if there have been any deficiencies of forage, and who is responsible therefor, etc., etc.: and shall convey any other information pertaining to the objects of the inspection which it may be advisable should come to the notice of the Bureau.

II. Inspection reports shall divide cavalry horses into four classes:

1. Those which are to be condemned as unfit for any use whatever in any branch of the service. With regard to this class, proceedings are to be had as required by existing regulations.

2. Those now unfit for cavalry service, and not likely to be efficient again for such service, which may be used for team or draught horses, or for herding purposes. Horses of this class are to be turned in to the Quartermaster's Department.

3. Those which are now unfit for service, or nearly so, but which, by timely care and treatment in depots, will regain condition. Such horses are to be sent to such depots as may be established for the army, to be replaced by an equal number of good animals from the depots. As soon as serviceable, the horses turned in will be eligible for reissue.

4. Serviceable horses.

The number of each class of horses will be given in every report of inspection, for each troop in the service.

III. A suitable number of officers of the Quartermaster's Department will be directed to report at once to the Chief of the Cavalry Bureau, to be charged with disbursements for the objects of his Bureau, under his direction.

IV. Purchases will be forthwith made of a sufficient number of horses to meet the present and prospective wants of the service up to September 1, 1863, and the horses placed in depots for issue from time to time.

V. Requisitions for remounts will be made through the intermediate commanders on the Chief of the Cavalry Bureau, who will give orders on the depots for the horses needed to fill them.

VI. Officers of the Quartermaster's Department assigned to duty under the orders of the Chief of the Cavalry Bureau, will make their reports and returns of money and property, as required by existing laws and regulations, to the accounting officers of the treasury and to the Quartermaster General, and will also make to the Chief of the Cavalry Bureau such reports and returns as he may require for his information.

Estimates for funds will be submitted to the Chief of the Cavalry Bureau for his approval before being finally acted upon by the Quartermaster General.

VII. Major General George Stoneman is announced as the Chief of the Cavalry Bureau in Washington.

By order of the Secretary of War.

E. D. TOWNSEND,
Assistant Adjutant General.

GENERAL ORDERS, No. 162.

WAR DEPARTMENT, ADJUTANT GENERAL'S OFFICE, WASHINGTON, April 14, 1864.

In relation to the Cavalry Bureau.

I. That the Cavalry Bureau shall be under the command of the Chief of Army Staff, who shall perform the duties of Chief of the Cavalry Bureau prescribed by existing orders; and the officers of that Bureau respectively will report to him.

II. All the duties relating to the organization, equipment and inspection of cavalry, will be performed by a cavalry officer specially assigned to that duty.

III. The duties in relation to purchase and inspection of horses, the subsistence and transportation of horses purchased will be performed by, and under the direction of an officer of the Quartermaster's Department, specially assigned to that duty.

IV. Lieutenant-Colonel Ekin is assigned to the Quartermaster's duties of the Cavalry Bureau.

By order of the Secretary of War.

E. D. TOWNSEND,
Assistant Adjutant General.

Anent the autumn maneuvers, which are gaining ground in our army, an important factor not brought out in the official reports is the subject of a report to the *Chicago Times* of February 4, 1904:

"From the Smoky Hill basin to the Republican River, and up and down the Kansas River banks, there is rejoicing in Kansas. Congress has appropriated money to pay the farmers for their pullets and old hens.

"When the army maneuvers ended October 27th, this section of the State was eggless and chickenless. The casualties of the campaign of the Blues against the Browns had been 84,000 hens and late autumn 'spring fries.'

"Now hope springs anew in the agricultural breast, since Congress has appropriated $2,100 to pay for the damage done last year by soldiers and $5,900 for additional loss which will be sustained (it is hoped) by the farmers at the next maneuvers.

"Everybody is preparing to raise chickens. Incubator agents are arriving at Junction City on every train. Farmers are preparing to fill their fields with chicken coops, built without doors. Every opportunity will be given the soldiers next summer to rob hen roosts without trouble.

"In the annals of the Fort Riley engagement as officially recorded, it will not be mentioned that the decisive engagement of the Browns against the Blues was lost because of chickens. The twenty-eighth mountain battery had been ordered to the support of the First Kansas, then hard pressed, and in taking position the battery came across an untouched chicken farm.

"The First Kansas was left to its fate, and Major William H. Coffin, commanding the divisional artillery from the timberland back of the Smoky Hill, saw through his field glasses a carnage he could not stop.

"These chickens were accountable for the decimation of Colonel Metcalf's fine regiment of Kansas infantry, and the day was lost."

ANNUAL MEETING OF THE U. S. CAVALRY ASSOCIATION.

The Association met at 8 P. M. Monday, the 21st of January, 1904, pursuant to Section 1, Article VI of the Constitution, with Brigadier General J. Franklin Bell, vice president of the Association, presiding.

The roll call showed the following members present:

Brig.-Gen. J. Franklin Bell, U. S. A.
Maj. C. H. Murray, 4th Cav.
Maj. Loyd S. McCormick, 7th Cav.
Maj. D. F. Boughton, 11th Cav.
Capt. Geo. W. VanDeusen, A. C.
Capt. M. F. Steele, 6th Cav.
Capt. B. A. Poore, 6th Inf.
Capt. R. A. Brown, 4th Cav.
Capt. L. M. Koehler, 4th Cav.
Capt. O. I. Straub, A. C.
Capt. D. L. Hartman, 1st Cav.
Capt. M. F. Davis, 1st Cav.
Capt. L. C. Scherer, 4th Cav.
Lieut. Marlin Craig, 6th Cav.
Lieut. J. J. Boniface, 4th Cav.
Lieut. Warren Dean, 15th Cav.
Lieut. Edwin A. Hickman, 1st Cav.
Lieut. Douglas McCaskey, 4th Cav.
Lieut. George B. Rodney, 5th Cav.
Lieut. R. J. Reaney, 2d Cav.
Lieut. J. C. Righter, jr., 4th Cav.
Lieut. S. D. Smith, 1st Cav.
Lieut. S. C. Megill, 5th Cav.
Lieut. Frederick Mears, 4th Cav.
Lieut. Thos. H. Cunningham, 5th Cav.
Lieut. Edward A. Keyes, 7th Cav.

The report of the Secretary and Treasurer was then read. The following extracts from this report show the standing of the Association:

Total receipts for the year 1903	$3,[illegible] 13
Assets January 1, 1904	[illegible] 50
Liabilities January 1, 1904	100 00

This shows a total increase over the receipts of 1902 of $2,753.20 and an increase of thirty-two per cent. in actual over estimated receipts in 1903.

The gain in membership has been equally encouraging; showing an increase of forty-seven per cent. There are still about 150 cavalry officers that are not members of the Association. We should have them all, and if members will aid the Council in this matter, it will be an easy matter to accomplish.

The JOURNAL has increased in size with each issue and soon it will be confronted with the problem to get out a greater number of issues. This, however, was reserved for the next year. The growth of the JOURNAL and the membership dates from July, 1902, and only six issues have appeared since that time.

The report of the Secretary and Treasurer was, upon motion duly made and seconded, approved.

The Association then proceeded to the election of officers for the ensuing year, with the following result.

General Wesley Merritt was unanimously reëlected President of the Association.

General J. Franklin Bell was unanimously reëlected Vice-President of the Association.

The following members of the Executive Council were then unanimously elected for the ensuing year:

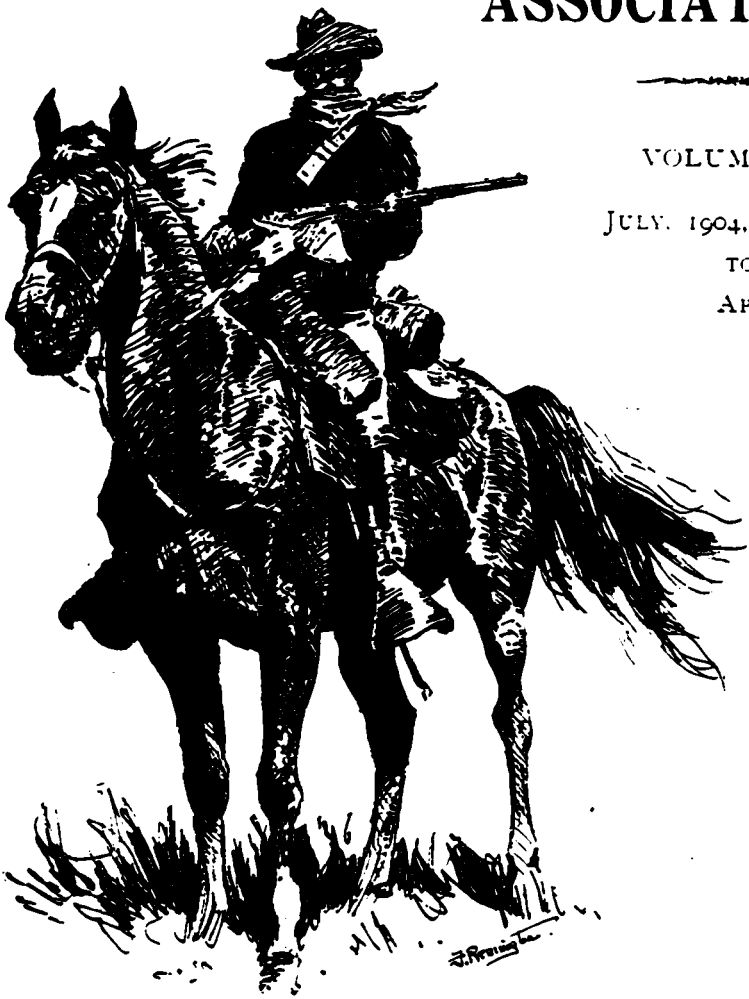
Major C. H. Murray, Fourth Cavalry.
Major D. H. Boughton, Eleventh Cavalry.
Captain T. R. Rivers, Fourth Cavalry.
Captain R. A. Brown, Fourth Cavalry.
Captain L. M. Koehler, Fourth Cavalry.

A discussion was then had as to the advisability of publishing the CAVALRY JOURNAL oftener than once every quarter. No action was taken.

A discussion then followed as to the desirability of binding the back numbers of the JOURNAL for sale to the new members. The Council undertook to see to this matter.

The meeting adjourned without having made any changes in the Constitution or By-Laws.

JOURNAL U. S. CAVALRY ASSOCIATION.



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