

## UNITED STATES INFANTRY AND CAVALRY SCHOOL.

*Fort Leavenworth, Kansas, July 1, 1890.*

I have the honor to submit the annual report of the Infantry and Cavalry School for the first school year, commencing September 1, 1889, and ending June 30, 1890.

On September 1, 1889, the following officers reported for duty at the school, forming the class for the next two years, viz:-

1st Lieutenant Charles H. Barth, 12th Infantry.  
2d Lieutenant J. B. Batcheler, 24th Infantry.  
2d Lieutenant James Bayliss, 5th Infantry.  
2d Lieutenant W. F. Blauvelt, 15th Infantry.  
1st Lieutenant Thomas Cruse, 6th Cavalry.  
2d Lieutenant George B. Davis, 23d Infantry.  
2d Lieutenant Charles G. Dwyer, 21st Infantry.  
2d Lieutenant William G. Elliott, 9th Infantry.  
2d Lieutenant George E. French, 4th Infantry.  
2d Lieutenant Albert S. Frost, 25th Infantry.  
2d Lieutenant James A. Goodin, 7th Infantry.  
1st Lieutenant E. I. Grumley, 17th Infantry.  
1st Lieutenant A. G. Hammond, 8th Cavalry.  
2d Lieutenant T. G. Hanson, 19th Infantry.  
2d Lieutenant Floyd W. Harris, 4th Cavalry.  
2d Lieutenant W. H. Hay, 3d Cavalry.  
2d Lieutenant W. A. Holbrook, 1st Cavalry.  
2d Lieutenant J. M. Jenkins, 5th Cavalry.  
2d Lieutenant M. J. Lenihan, 20th Infantry.  
2d Lieutenant T. M. Moody, 22d Infantry.  
2d Lieutenant W. C. Neary, 3d Infantry.  
1st Lieutenant John Newton, 16th Infantry.  
2d Lieutenant R. G. Paxton, 10th Cavalry.  
2d Lieutenant J. A. Penn, 13th Infantry.  
2d Lieutenant C. W. Penrose, 11th Infantry.  
2d Lieutenant S. Rice, 7th Cavalry.  
1st Lieutenant P. P. Powell, 9th Cavalry.  
1st Lieutenant W. B. Reynolds, 14th Infantry  
2d Lieutenant H. M. Roach, 1st Infantry.  
2d Lieutenant S. A. Smoke, 18th Infantry.  
2d Lieutenant E. M. Suplee, 2d Cavalry.  
2d Lieutenant W. M. Wright, 2d Infantry.  
2d Lieutenant W. C. Wren, 10th Infantry.

All of these officers passed a satisfactory examination in the drill-book of their respective arms; to include the school of the battalion.

Of these the following have been relieved from duty at the school, viz:—

First Lieutenant P. P. Powell, Ninth Cavalry.

Second Lieutenant S. Rice, Seventh Cavalry, on account of sickness.

Second Lieutenant H. M. Roach, First Infantry, on account of sickness.

The following officers were declared deficient by the school staff in the subjects set opposite their names, viz:—

Second Lieutenant G. E. French, 4th Infantry, in infantry tactics.

First Lieutenant John Newton, 16th Infantry, in infantry tactics.

Second Lieutenant T. G. Hanson, 19th Infantry, in hippology.

Second Lieutenant G. A. Detchmendy, 6th Infantry, in hippology.

Second Lieutenant W. G. Elliott, 9th Infantry, in topography.

Second Lieutenant W. F. Blauvelt, 15th Infantry, in topography.

Second Lieutenant W. M. Wright, 2d Infantry, in surveying.

Second Lieutenant S. A. Smoke, 18th Infantry, in topography.

First Lieutenant E. I. Grumley, 17th Infantry, in topography and surveying.

Second Lieutenant G. E. French, 4th Infantry, in topography and surveying.

Second Lieutenant G. A. Detchmendy, 6th Infantry, in topography and surveying.

First Lieutenant John Newton, 16th Infantry, in topography and surveying.

These officers will at the close of their second year at the school, be re-examined upon the subjects in which they have been declared deficient, when, if proven proficient, diplomas will be issued to them, they losing their standing in the class. Lieutenants Hanson, Elliott and Smoke, amongst the officers declared deficient, are graduates from the Military Academy. Too much time devoted to personal pleasures is no doubt the cause of their failures. Amongst

those deficient are Lieutenants Newton, Grumley, and Blauvelt. Lieutenant Newton was too advanced in years to be sent to this school; besides, he is not in good health. He has devoted his time to his legitimate studies. Lieutenants Grumley and Blauvelt are conscientious officers, have studied hard, and no doubt will pass upon examination; neglect of early education was the cause of their failure. Second Lieutenant Wright, Second Infantry, previous to the annual June examination, was stricken with typhoid fever; in consequence, unable to properly prepare himself in the department of surveying. By application he can become proficient.

I would respectfully call attention of the Major-General commanding the Army, to previous recommendations of the commandant of the school, that no officer be detailed for instruction here who has passed the age of thirty-five years, and preferably those be sent who have made application to come, and are anxious to improve themselves professionally by taking the advanced course of study at the school.

The officers quarters, twenty-one in number, in Thomas and McPherson Halls, have been declared non-sanitary. I recommend that these old and damp buildings be removed, and new quarters for officers substituted in their places.

In order that the Major-General Commanding the Army may have full knowledge of the operations of this school during the past year, the reports of the principal instructors in the departments of Military Art and Infantry, Engineering and Cavalry, are embodied so as to form a part of this report.

#### DEPARTMENT OF INFANTRY.

The preparatory examination required for infantry officers at the school showed that all were proficient in infantry tactics up to and including the

school of the battalion. Instruction commenced with “evolutions of the brigade, ” and covered the subject; also “evolutions of a division, ” “camping, ” “manual of the sword, ” and “ceremonies. ” At the completion of the course the usual examination was held. Whilst the daily marks of the instructors showed careful preparation for the recitations, at the examination First Lieut. John Newton, Sixteenth Infantry, and Second Lieut. George E. French, Fourth Infantry, failed to show their proficiency to the satisfaction of the school staff, and they were declared “deficient. ” The instructors in this department were Capt. W. H. H. Crowell, Sixth Infantry, and Capt. James Fornance, Thirteenth Infantry. ’

#### DEPARTMENT OF MILITARY ART.

The course of instruction in this department was covered by Shaw’s Elements of Modern Tactics, and Home’s Precis of Modern Tactics, together with practical exercises. Examinations followed the completion of each book. In Shaw, three days were required, in Home two. The results were highly satisfactory, showing all proficient.

The practical field exercises in minor tactics were in detail as follows, viz. :

No. 1. Exercise in forming an infantry advance guard: The advance guard was formed by student officers at exactly the distance and intervals given in theory, the object being to present to them a living diagram. Each member of the class was questioned on the field as to the duties of the different parts, and the changes from the theoretical dispositions that would be made under various circumstances.

No. 2. A repetition of No. 1.

No. 3. The same as No. 1, substituting the word “cavalry” for the word “infantry, ” wherever the latter occurs.

No. 4. A repetition of No. 3.

No. 5. Exercise in establishing an infantry outpost. The outpost was established by student officers at exactly the distance and intervals given in theory, the object being to give a living diagram of an infantry outpost. As soon as the outpost was posted, the student officers not in command of reserves, outposts, or pickets, made the tour of the sentries, pickets, and supports, with the instructor. The officers in command of the several component parts of the outpost were questioned on the field in regard to their duties.

No. 6. Exercise in establishing an infantry outpost with regard to the configuration of the ground, and with a view of combining observation with the best possible degree of security to a supposed force in rear. In this exercise no other information was given the student officers than an indication of the position of the force to be guarded. The commander of the outpost choose his own line of defense and observation, and the commanders of the supports, and pickets made their dispositions according to their own judgment. The outpost being established, the instructor inspected it and commented on the advantages and defects of the dispositions made. Exercise No. 6 was conducted by the second section.

No. 7. Identical with No. 6, conducted by the third section.

No. 8. Same as No. 6, conducted by the first section.

No. 9. Exercises in the duties of a small infantry patrol. In this exercise two small patrols were pitted against each other on one part of the reservation and two on another part. Each patrol was required to carry out the principles of patrolling in the main, according to the manner prescribed in the text-book in use; but everything was left to the judgment

and discretion of the patrol commanders, who were instructed to regard the text-book as their servant, not as their master. The victory was awarded to the patrol which could first get a shot at its adversary at shorter range than 200 yards. Was conducted by the second section.

No. 10. Exercise with a small cavalry patrol, similar in methods to exercise No. 9; only two patrols were out. Conducted by the second section.

No. 11. Same as No. 9, conducted by the third section.

No. 12. Same as No. 10, conducted by the first section.

No. 13. Same as No. 9, conducted by the first section.

No. 14. Same as No. 10, conducted by the third section.

No one problem was the same, and different locations were selected.

No. 15. Exercising in marching from given points to effect a junction at a designated point at a fixed time. Four companies of infantry, each under command of a student officer, started from four different points to rendezvous at a given point at a fixed hour. Each company had a full complement of officers. Each commander was furnished with a map, and allowed to choose his own time for starting. No halts were allowed, except those authorized in Upton's tactics, and all unusual accelerating or retarding of the pace of the march was prohibited. This exercise was conducted by the first section.

No. 16. Same as No. 15, by the second section, conducted by cavalry officers, substituting "cavalry" for "\*infantry."

No. 17. Same as No. 15, conducted by third section.

All exercises were satisfactory, and held the interest of student officers and instructors.

It is to be regretted that the infantry companies are not larger so that more men would be available. In the five companies at no time was I able to have an aggregate force of one hundred.

It is recommended that the sections be subdivided so as to have but six student officers at a time.

#### DEPARTMENT OF ENGINEERING.

The following is the report of the operations of the department of engineering for the school year ending May 31, 1890, with suggestions as to desirable modifications:

The time assigned to instruction embraced alternate days during all but the winter months of the school year. Such assignment is advantageous, as it enables entire days to be devoted to practical work when advisable.

In general a day's work consisted of two hours practical work and one recitation. Three whole days were devoted to topographical work and road sketching, advantage having been taken of convenient railroad trains to enable officers willing to defray their own expenses to make sketches of roads with more novelty than of those in the immediate vicinity. It is expected that this sketching will be continued during the next school year.

Besides instruction in topography and surveying a lecture on range finders was prepared, and, after printing, incorporated as part of the course of military topography.

The practical work comprised the use of range finders and of surveying instruments, the drawing of topographical signs and features, the making of plain and slope scales, and the solution of topographical and surveying problems.

The ground covered by the present class has been slightly modified, by devoting more time to the use of the plane table and by the study of and practice with range finders.

For instruction in engineering the class has been arranged in four sections, according to rank; the charge of the first and second sections assigned to Lieutenant Irons, Twentieth Infantry, and, of the third and fourth to Lieutenant Baker, Seventh Infantry. By this arrangement but one officer in the class ranks his instructor.

At the beginning of the school year Lieutenant Baker was, at my request, detailed as assistant instructor by the post commander.

Both Lieutenant Irons and Lieutenant Baker have ably and -satisfactorily assisted me.

With additions recently made the school now possesses five range finders, of which two are of the pattern in use in the English and French armies. A sixth is now being made for the school by the Ordnance Department, U. S. Army. A standard tape for use in testing other measuring instruments has been obtained, and a contract has been made for 'delivering to the school two plane tables of a less elaborate pattern than that of the one now at hand.

Private Roberts, Company K. Thirteenth Infantry, has been very efficient in caring for the instruments and other property in use and in doing much clerical and photographic work. Of the latter class, in addition to that performed for school purposes, he has done a large amount for the tactical board and such as was requested by the medical board charged with the revision of the manual of the hospital corps.

In order to inculcate exact methods of work it had been thought advisable to take up the study of surveying before that of topography. However, as



many officers report for instruction with a very elementary knowledge of mathematics, insufficient for the mastery of the course of surveying, it is thought advisable to take up the subject of topography first, so that opportunities may be afforded, on days not devoted to regular recitation, for adding to their knowledge of mathematics.

Field engineering might be taken up the first year, were it not that in this case sufficient time would not remain after theoretical instruction in topography for the practical work that should follow.

It is thought that officers who have not the proficiency in mathematics now required of candidates for a commission should either be sent here in advance of the 'rest of the class to take a course of mathematics, or should not be sent at all. The standard of the school is not too high; and it has been deemed advisable not to graduate at one time two classes of different grades. Yet it must be recognized that many of our older subalterns have not had the education which would prepare them to master the school course in the time assigned to it. Give them a preliminary course, or do not subject them to the stigma of a failure which may be predicted with almost absolute certainty.

#### DEPARTMENT OF CAVALRY.

During the first three months of the course the cavalry officers of the class received instruction in the United States Cavalry Tactics (school of the regiment, brigades, etc., ) and after twenty-eight lessons in advance and review were examined in the subject December 6, 1889, by the academic staff.

The section, consisting of ten officers, one from each of the ten cavalry regiments, was under the direct charge of Lieutenant John F. Guilfoyle, 9th Cavalry, and the recitations conducted by him were

attended by himself whenever practicable. In January 1890, the whole class took up the subject of hippology, using Fitzwygram's "Horses and Stables" as a text-book. The class was divided into three sections under charge of Captain Carr, 1st Cavalry; Captain Moore, 9th Cavalry; and Lieutenant Brown, 1st Cavalry. The instructors exchanged sections at regular intervals, in order to preserve as far as possible an equality in the marks given by them. The different sections were visited daily by me in turn. The course, consisting of about fifty lessons, included the subjects of ventilation, construction of stables, watering, feeding, forage, grooming, exercise, stable management, the blood, arteries and veins, the pulse, absorbents, structures and uses of the various membranes and tissues, the nervous system, good nursing, infection, contagion, action and uses of medicines, conformation and age as indicated by the teeth. In the latter subject practical illustrations were given in the cavalry stables, and at different times in the course lectures on the subjects under consideration were delivered by Captain Carr.

The class was examined in the subject on April 10 and 11, 1890.

The subject of biting and saddling was then taken up, Major Dwyer's work on the subject being used as a text-book, and the same instructors being in charge of the sections. After fifteen lessons the class was examined on the 26th of May, 1890. During the absence, on detached service, of Captains Carr and Moore, Lieutenants Guilfoyle, Ninth Cavalry, and Haines, Fifth Cavalry, took charge of their sections for a few days. No other change in the personnel of the department occurred during the course.

Much interest in the subjects considered has

been displayed by the student officers, and their progress has been markedly satisfactory.

The examinations were in writing, and the papers submitted were, in the majority of cases, in the highest degree creditable to the students.

For the ensuing year I respectfully recommend a continuation of the course in hippology, during which the various diseases to which the horse is subject will be treated in such a manner as to make them easily understood. It is proposed to take up the subject of shoeing also and illustrate it practically.

The subject of equitation presents some difficulty, the majority of the members of the class having already pursued the course at the Military Academy, and being, generally speaking, excellent horsemen. I recommend that a course of equitation be taken up by such officers as appear to require it, each member of the class being dismissed as soon as he shows himself proficient; and that this course be taken up during the months of July and August, when no section room work is going on.

Some considerable portion of the work of the next year will be communicated to the students through the medium of lectures, and for the illustration of the subjects treated plates are very much needed. Small ones are not difficult to obtain, but are of little use for the purpose. A stereopticon for properly enlarging them would be of great use for many purposes of the school. I respectfully recommend its purchase whenever funds are 'available.'

The proper illustration of the subject of minor tactics, as far as it relates to the employment of cavalry on reconnaissance, outpost duty, advance and rear guards, etc., is now included in the department of the art of war, so that the consideration of that subject as heretofore by this department is no longer required. I am inclined to think, however, that the

subject as far as it relates to the cavalry division acting as a screening and reconnoitering body of an army, or a cavalry brigade acting independently, should be included in this course.

Lieutenant Brown, First Cavalry, having been detached from duty at the school, I have requested the assignment of Captain Babcock, Fifth Cavalry, in his place. I have also requested the assignment to the department for duty in the equitation course of Lieut. J. B. Aleshire, First Cavalry.

For the welfare and still further progress of this institution it is recommended that the control of the school and the post of Fort Leavenworth be segregated from the Department of the Missouri, placing it under the immediate direction of the General commanding the Army. The school and the post are so mutually dependent upon each other that what affects one influences the other. They should enjoy like advantages with West Point, the Engineer School at Willet's Point, and the Artillery School at Fort Monroe.

The efficiency, progress and discipline of the Infantry and Cavalry School have been satisfactory.

In closing this report, it being the last one I have opportunity to make, I cannot refrain from extending my professional and personal thanks to the instructors on duty at the school for the manner in which they have performed the arduous duties connected therewith, and to Second Lieutenant James B. Aleshire, First Cavalry, for the efficient manner he has performed all the work pertaining to the office of school secretary.

Very respectfully, your obedient servant,

A. McD. McCOOK,

*Brigadier General, U. S. Army,*

*Commanding Infantry and Cavalry School.*

*The Adjutant General, U. S. Army,*

*Washington, D. C.*