
U. S. INFANTRY AND CAVALRY SCHOOL,

FORT LEAVENWORTH, KANSAS, August 1, 189

— :: —

E. F. TOWNSEND,

Colonel 12th Infantry, Commandant.

— :: —

ANNUAL REPORT.

(7 Enclosures.)

U. S. INFANTRY AND CAVALRY SCHOOL,

FORT LEAVENWORTH, KANSAS, *August 1, 1892.*

General:

I have the honor to submit the annual report of the U. S. Infantry and Cavalry School for the first school year commencing September 1st, 1891, and ending May 31st, 1892.

The student class as such reported for duty at the school September 1 st, 1891, and was composed of the following named officers :

- 2nd Lieutenant Henry A. Barber, 1st Cavalry,
- 2nd Lieutenant P. D. Lochride, 2nd Cavalry,
- 2nd Lieutenant Malvern-Hill Barnum, 3d Cavalry,
- 2nd Lieutenant Michael M. McNamee, 3d Cavalry,
- 2nd Lieutenant Thomas H. Slavens, 4th Cavalry,
- 2nd** Lieutenant Stephen H. Elliott, 5th Cavalry.
- 2nd Lieutenant Francis H. Beach, 6th Cavalry,
- 2nd Lieutenant William F. Clark, 7th Cavalry,
- 2nd Lieutenant Charles C. Walcutt, jr., 8th Cavalry,
- 1st Lieutenant Montgomery D. Parker, 9th Cavalry,
- 2nd Lieutenant Alexander L. Dade, 10th Cavalry,
- 1st Lieutenant Nat. P. Plister, 1st Infantry,
- 1st Lieutenant Henry H. Benham, 2nd Infantry,
- 2nd Lieutenant Frank G. Kalk, 3rd Infantry,
- 2nd Lieutenant Austin H. Brown, 4th Infantry,
- 2nd Lieutenant Robert W. Rose, 5th Infantry,

2nd Lieutenant William C. Bennett, 6th Infantry,
 2nd Lieutenant Frederick H. Sargent, 7th Infantry,
 2nd Lieutenant George W. Ruthers, 8th Infantry,
 2nd Lieutenant William A. Campbell, 9th Infantry,
 2nd Lieutenant John M. Sigworth, 10th Infantry,
 2nd Lieutenant Charles Miller, 11th Infantry,
 2nd Lieutenant Benjamin A. Poore, 12th Infantry,
 2nd Lieutenant Michael J. O'Brien, 13th Infantry,
 2nd Lieutenant James E. Dodge, 14th Infantry,
 2nd Lieutenant Harold L. Jackson, 15th Infantry,
 2nd Lieutenant James T. Anderson, 16th Infantry,
 2nd Lieutenant Frederick S. Wild, 17th Infantry,
 2nd Lieutenant George W. Martin, 18th Infantry,
 2nd Lieutenant Arthur B. Foster, 19th Infantry,
 2nd Lieutenant Archibald A. Cabaniss, 20th Infantry,
 2nd Lieutenant Almon L. Parmeter, 21st Infantry,
 2nd Lieutenant William M. Swaine, 22nd Infantry,
 2nd Lieutenant Charles B. Hagadorn, 23rd Infantry,
 2nd Lieutenant Charles E. Tayman, 24th Infantry,
 2nd Lieutenant Thomas H. McGuire, 25th Infantry,

On January 9th, 1891, I made application to the Adjutant General that all officers of the incoming student class, who had been appointed from civil life or who had been promoted from the ranks and who had not studied the subjects of algebra, geometry and trigonometry, might be ordered to report at school on March 1st, 1891.

The object was to impart instruction in those branches from March 1st to September 1st, so that they might enter upon the regular course on more equal terms with the other members of the class. In response to this application the Major General Commanding the Army was pleased to order the following named officers to report for such preliminary instructions on that date, viz :

1st Lieutenant Charles B. Thompson, 5th Infantry,
 2nd Lieutenant George W. Ruthers, 8th Infantry,
 2nd Lieutenant Archibald A. Cabaniss, 20th Infantry,
 2nd Lieutenant Charles E. Tayman, 24th Infantry,
 2nd Lieutenant Henry A. Barber, 1st Cavalry,
 2nd Lieutenant John M. Sigworth, 10th Infantry,
 2nd Lieutenant Frederick S. Wild, 17th Infantry.

The following named officers reported for preliminary instruction in mathematics on the dates set opposite their names :

2nd Lieutenant William C. Bennett, 6th Infantry,
 August 1st, 1891.

2nd Lieutenant Thomas H. McGuire, 25th Infantry,
 August 16th, 1891.

Of these officers 1st Lieutenant (now Captain and Assistant Quartermaster) Charles B. Thompson, 5th Infantry, was relieved from duty at the school July 8th, 1891, and another officer, 2nd Lieutenant Robert W. Rose, 5th Infantry, was selected to represent his regiment.

In consequence of numerous changes in the original detail, a number of officers who would undoubtedly have been selected to take the preliminary course and who would have been greatly benefitted thereby, were detailed so late in the year, as to preclude any opportunity to avail themselves of this advantage.

The result of the experiment has been most encouraging. Not one of the officers selected for preliminary instruction in mathematics has been found deficient in the studies dependant thereon, while several, who labored under the same disadvantages and who did not receive their orders sufficiently early, but reported September 1st, have not been so fortunate. I am convinced that this preliminary instruction should be continued at least until every officer who is ap-

pointed to the army, is required to pass such an examination in those subjects, that will enable him to take up at once the school course, should he be selected as a student officer.

I am also of the opinion that January 1st is preferable to March 1st, and would therefore recommend if considered practicable, that that date be selected.

Herewith enclosed are endorsements on circular letters, (marked appendices "A. & B.") sent by the secretary of the school to a number of officers of the class, especially those taking the preliminary course, asking an expression of opinion as to its value to them. Their views endorsed upon the letter clearly indicate the great success of the experiment and fully warrant its continuance.

Upon the assembling of the class, September 15th, 1891, one member thereof, was found to be absent therefrom without leave, viz : 2nd Lieutenant James E. Dodge, 14th Infantry. This officer had reported to me some days previously and upon September 12th, applied for two days leave of absence to go to St. Louis, Mo. He did not return at the expiration of his leave of absence and nothing was heard of him until it was reported in the newspapers that he had been arrested in Hannibal, Mo., under an assumed name for being concerned in a criminal action. He was identified by an officer sent from Fort Leavenworth, and remained in the custody of the civil authorities until March 18th, 1892, when he was brought to this post to be tried by General Court Martial. He has been so tried and is now awaiting the promulgation of the findings and sentence in his case. In the meantime another officer, 2nd Lieutenant E. T. Winston, was detailed from the 14th Infantry in his place and Lieutenant Dodge has taken no part whatever in the school course. Lieutenant Winston reported October 22nd, 1891, and has continued with the class since that time.

Since September 1st, 1831, the following named student officers have been relieved from further duty as such and assigned elsewhere :

1st Lieutenant Austin H. Brown, 4th Infantry, January 27, 1892, having been detailed as assistant instructor in drawing at the U. S. Military Academy, West Point, N. Y.

1st Lieutenant Montgomery D. Parker, 9th Cavalry, February 16th, 1892, being unable to proceed with the class on account of serious affection of the eyes.

2nd Lieutenant Thomas H. McGuire, 25th Infantry, March 29th, 1892, on account of continued ill health which would entirely prevent him from continuing the course of study.

In regard to the first named case I would respectfully state that the separation of a student officer from the school after he has commenced the course should not occur, except on account of unavoidable circumstances. I have reason to believe however that the order in this case was issued under a misapprehension, and that it is not likely to occur again.

During the month of January, 1892, the semi-annual examination of the student class took place in the studies pursued since September 1st, 1891, viz :

Military Art, (Shaw's Elements of Modern Tactics).

Engineering, (Johnson's Surveying).

Law, (Constitutional Law).

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

2nd Lieutenant T. H. McGuire, 25th Infantry, in Military Art and Engineering.

2nd Lieutenant George W. Martin, 18th Infantry, in Military Art and Engineering.

2nd Lieutenant E. T. Winston, 14th Infantry, in Military Art.

2nd Lieutenant Harold L. Jackson, 15th Infantry, in Military Art.

2nd Lieutenant John M. Sigworth, 10th Infantry, in Military Art.

They were re-examined twenty days thereafter in accordance with par. 48, school regulations, and declared proficient.

The annual examination took place in the month of June and the following officers were declared deficient by the school staff in the subjects set opposite their names, respectively.

2nd Lieutenant G. W. Martin, 18th Infantry, in Military Art (Home's Précis of Modern Tactics), and Engineering, (Richard's Military Topography).

2nd Lieutenant H. L. Jackson, 15th Infantry, in Military Art, (Home's Précis of Modern Tactics).

2nd Lieutenant W. A. Campbell, 9th Infantry, in Military Art, (Home's Précis of Modern Tactics) .

2nd Lieutenant J. M. Sigworth, 10th Infantry, in Military Art, (Home's Précis of Modern Tactics).

They were also re-examined twenty days thereafter and the following named officers were again by the school staff declared deficient :

2nd Lieutenant George T. V. Martin, 18th Infantry, and 2nd Lieutenant Harold L. Jackson, 15th Infantry.

In accordance with par. 48, a special report of the action of the school staff in these cases has been submitted for the action of the Major General Commanding the Army.

During the school year the course of study as laid down in the school regulations has been closely adhered to, and in addition, the new drill regulations have been included. This was made necessary by their adoption since the advent of the class. It is presumed that succeeding classes will be ful-

ly instructed therein before coming to the school, when, of course, the recitations in this subject will form no part of the curriculum, at least up to and including the school of the battalion.

The following is a synopsis of the work in the different departments the details of which will be found in the reports of the heads thereof herewith enclosed.

DEPARTMENT OF MILITARY ART.

This department has been continuously under the charge of Lieutenant Colonel Jacob Kline, 10th Infantry. The course as carried out has been eminently satisfactory, both to instructors and students, as also to the commandant. I cannot too highly commend the ability and zeal of Colonel Kline and his assistants in so thoroughly carrying out my wishes in this direction. In regard to the officers found deficient in this course and in the course of engineering upon re-examination, a special report has been made as required and more particularly referred to in a previous part of this report. The recommendations of Colonel Kline are substantially concurred in by me, but should be fully considered by the full staff before being adopted.

Captain A. L. Wagner, 6th Infantry, one of the assistant instructors of this department is now at Cumberland, Md., by authority of the War Department, engaged in preparing a work on the subject of "Minor Tactics," for the use of the school and army. It is hoped that this will be ready to put in the hands of the next class. Captain G. S. Wilson, 12th Infantry, has been acting in place of Captain Wagner and together with Lieutenants W. A. Shunk, 8th Cavalry, and Charles H. Barth, 12th Infantry, have been the assistant instructors in this department.

DEPARTMENT OF INFANTRY.

This department, also under the charge of Lieutenant Colonel Jacob Kline, 9th Infantry, has had for assistant instructors, Captain George S. Wilson, 12th Infantry, Captain John F. Stretch, 10th Infantry, and Captain James Fornance, 13th Infantry.

Since January the course of instruction has been confined to the new drill regulations for officers belonging to that arm. Satisfactory progress has been made therein. Practical exercises it is expected will take place therein during this summer.

DEPARTMENT OF CAVALRY.

This department has been in charge of Major Camillo C. Carr, 8th Cavalry, since the departure of Lieutenant Colonel G. B. Sanford, 9th Cavalry, August 11th, 1891.

The course of study has been by lectures by Dr. Hunter, Veterinary Surgeon and recitations in the section room in Hippology and the new cavalry drill regulations. To this has been added practical work in the field. The progress in this department has been satisfactory in the highest degree and reflects the greatest credit upon the instructor in charge.

The assistants in this department have been :

Captain Francis Moore, 9th Cavalry,
 Captain John B. Babcock, 5th Cavalry, and
 Captain Samuel M. Swigert, 2nd Cavalry,

who have thoroughly devoted themselves to their duties.

I fully concur in the recommendation of Major Carr with regard to the "Papiér Maché Horse," and if it is not required at the U. S. Military Academy, it would be of great use here and I would be very glad to have it.

DEPARTMENT OF ENGINEERING.

This department was in charge of 1st Lieutenant H. L. Ripley, 3rd Cavalry, as instructor, from September 1st, 1891, to March 1st, 1892, when, at his own request, he was relieved from that duty and returned to his regiment. During the time Lieutenant Ripley was at the head of the department, it was conducted to my entire satisfaction, and it was with much regret that I saw him depart.

1st Lieutenant W. D. Beach, 3rd Cavalry, was detailed in place of Lieutenant Ripley and has had charge since March 1st, 1892. I am much gratified at the progress of the class in this department, which is entirely due to the ability of the instructor and his assistants.

A building for the use of this department is very much needed. There are no proper facilities for a drawing academy or rooms for well carrying out the course in photography. There is no suitable room for the care of the instruments required in this department which are very valuable and delicate. I would request that the building at the post and now used as a depot commissary store house may be turned over to me to be used as above indicated. It is admirably situated for the purpose and could be very easily adapted for any school use.

A depot commissary is not required here any more than at any other military post. He was left here when Department Headquarters moved to St. Louis. It is understood that the present Depot Commissary! Major S. T. Cushing, c. s., expects to be ordered to another post in course of a few months, and in such event I would request that the depot be abandoned, and the buildings turned over to the post.

DEPARTMENT OF LAW.

This department has been in the continuous charge of Captain J. M. J. Sanno, 7th Infantry, during the past year.

Constitutional Law was studied previous to January 1892, and International Law between January and June. During the coming year, the course of Military Law will be taken up, so that the law course will be completed as required by the school regulations.

In this course,

1st Lieutenant R. K. Evans, 12th Infantry,
1st Lieutenant E. P. Andrus, 5th Cavalry, and
1st Lieutenant Thomas Cruse, 6th Cavalry,

were the assistant instructors. Lieutenant Evans having been detailed as Military Attaché to the U. S. Legation at Berlin, Germany, has been relieved. 1st Lieutenant C. W. Penrose, 11th Infantry, having been ordered to duty at the school, will be assigned to this department for the coming year's course.

DEPARTMENT OF MILITARY HYGIENE.

The course of instruction in this department, under charge of Major John Brooke, M. D., Post Surgeon, during the past year, has been quite brief, the important part thereof taking place during the second year. I anticipate a greater development than heretofore in this very important part of the school course.

DEPARTMENT OF ARTILLERY.

It is much to be regretted that there will be no course in Artillery for the present class.

Last fall on account of scarcity of quarters the light battery stationed at this post was ordered to Fort Riley,

Kansas. It was understood at the time that this move was but temporary, that in due time new quarters would be built for the battery, and that one would be then returned to this post for station. In the mean time, that the battery would march from Fort Riley to this post so as to be here by August 1st, when the usual course of instruction of the student class in that department could take place. I have been informed, however, that this is not to be done, and therefore the instruction in that department will of necessity be omitted. I had hoped to considerably enlarge the course in this department by adding to it some instruction in high explosives. Any Infantry or Cavalry officer is liable to be sent off with a detachment to blow up a bridge, destroy buildings, etc., etc. He should know how to use the means placed at his disposal for that purpose. He should well understand their condition as to stability and means of destroying them, should they appear to have become unstable and dangerous.

Again it is highly valuable to have a battery here in order that it may be used in the general manoeuvres of the troops in which the student class is required to take part. The tactical combination of the three arms is a valuable object lesson to all officers and especially to the young officers at this school, probably the only place in this country where such instruction can be obtained.

In view of all this I earnestly request that steps be taken to return a battery to the school, and that quarters, stables, etc., be erected for them.

Immediately after the establishment of the system of Post Lyceums last November, the Secretary of the School began receiving many requests for text books and other military works. This has continued until the present time, the amount disbursed for such professional literature being over \$4000.

The erection of a large building, sufficient to accommodate twenty-four unmarried officers was begun last fall. Owing to inclement weather work ceased during the winter. It is expected that it will be ready for occupancy before cold weather sets in, when the old barrack buildings, known as McPherson and Thomas Halls, as well as the old hospital, known as Hancock Hall, may be entirely abandoned. They have become more and more unsanitary, and in some parts of the buildings it is unsafe for persons to live. They should be torn down and new quarters erected in their place.

It gives me great pleasure to call the special attention of the War Department to the ability and attention to duty shown by 1st Lieutenant W. S. Scott, 1st Cavalry, Secretary of the School, who has devoted all his energies to ensure its success.

Very Respectfully,

Your Obedient Servant,

Colonel 12th Infantry,

Commandant.

The Adjutant General, U. S. Army,

Washington, D. C.

REPORT OF THE INSTRUCTOR, DEPARTMENTS
OF MILITARY ART AND INFANTRY,



U. S. INFANTRY AND CAVALRY SCHOOL,
Departments of Military Art and Infantry,

FORT LEAVENWORTH, KANSAS, July 16th, 1892.

To the

Secretary U. S. Infantry and Cavalry School,

Fort Leavenworth, Kansas.

SIR:—

In compliance with instructions I have the honor to submit the following report for the first year ending May 31st, 1892.

DEPARTMENT OF MILITARY ART.

The first half of the term was devoted to Minor Tactics, The instruction was in Shaw's Elements of Modern Tactics with practical instruction in advance guard, outposts, mounted and dismounted patrols. This latter part (practical) was more extended than at any time since I have been in charge of the department. Every student officer was required to fill the different positions from commander of the whole force to that of the smallest fraction, *i. e.*, that of commander of an officers patrol, making in patrol duty by an interchange of sections, seventy-two (72) exercises. The interest and zeal displayed amply repaid the additional labor on the part of the assistant instructors,

At the end of the course the usual examination was held. Four officers failed to pass a satisfactory examination, and were re-examined within twenty days, when all showed their proficiency.

The second half of the term of the first year was devoted to Home's *Précis of Modern Tactics*. At the examination at the end of the term four officers failed to pass, and at the re-examination two of the four were recommended as deficient. Their cases await the action of the school staff. Of the four officers who failed on the examinations, three were in both, I submit that some action is necessary, and I recommend a return to the latter clause of the regulations prepared by a board of officers under G. O. No. 17, Headquarters of the Army, A. G. O., March 27th, 1888. The regulation referred to is embodied in the last part of par. 49, regulations of 1885, prepared to meet cases of this sort. It reads : * * * * " and if successful, shall be placed in relative merit in the particular subject and in general merit, below all those who, in the first instance, were found proficient by the staff." In one of the cases of re-examination, the failure to pass was not due to want of knowledge in the subject, but to carelessness, and yet, the reward for this carelessness under the present regulations, is the taking of standing over other officers, who have performed hard and faithful work. I think the loss of standing for failure at examination, especially when this failure is due to neglect, just. "A student officer, whose "proficiency in any subject has been questioned and" "in whose case an answer favorable to him has only been " "reached by a re-examination, certainly should not in the " "merit roll stand above any one, whose proficiency in said " "subject has never been doubted." In this connection I desire to say that to my mind, the best evidence of an officer's proficiency is the test afforded by an examination, and not

the combined marks of the term and the examination. The term marks should only be used to arrive at the standing at the end of the course and for the inspection of the commandant, who thereby can keep himself informed of the work done by the officers during the term. *Failure at re-examination is deficiency* and the officer should be at once reported and recommended to be returned to his regiment.

In addition to practical work at the school, the student officers had the benefit of field exercises, conducted at the post under the immediate supervision of the commandant.

DEPARTMENT OF INFANTRY.

The latter part of the term was assigned to infantry drill regulations and covered the school of the soldier, company, battalion, extended order and ceremonies. A satisfactory examination was passed by all the officers in this department.

Respectfully submitted,

JACOB KLINE,

Lieutenant Colonel 9th Infantry,

Instructor.

U. S. INFANTRY AND CAVALRY SCHOOL.

Fort Leavenworth, Kansas, August 1, 1892.

OFFICIAL COPY :

W. S. SCOTT,

1st Lieutenant 1st Cavalry,

Secretary.

REPORT OF THE SENIOR INSTRUTOR, DEPARTMENT OF CAVALRY,



U. S. INFANTRY AND CAVALRY SCHOOL,

Department of Cavalry.

FORT LEAVENWORTH, KANSAS, *July 8, 1892.*

The Secretary U. S. Infantry and Cavalry School,

Fort Leavenworth, Kansas.

SIR. e

In obedience to verbal instructions, I have the honor to submit the following report relative to the course pursued in this department during the school year terminating May 31, 1892.

At the beginning of the course, in September, 1891, the cavalry officers of the class were examined in Upton's Tactics, up to and including battalion drill—the new drill regulations not having been received—and all pronounced proficient.

In order to give the student officers a thorough foundation on which to base their study of the subject of Hippology, and to supply the deficiencies of the existing text book, Fitzwygram, the six (6) days allotted to the Department of Cavalry, in January, 1892, were devoted to a series of carefully prepared lectures on the subjects of Anatomy and Physiology.

These lectures, freed as far as possible from technical terms, were delivered by Doctor Hunter, Veterinary Surgeon, a gentleman peculiarly fitted by his education and training to impart information through the medium of lectures. The subject of the anatomy of the bony frame was illustrated by means of an articulated skeleton of the horse, prepared at the school, and by such separate bones and prepared specimens as could be obtained.

The lectures on physiology could not be so well illustrated for want of proper material.

Last year a very fine stereopticon was purchased for the use of the school with the object of employing it specially in the course of Hippology, but owing to the impossibility of purchasing veterinary anatomical slides for it, and the absence of facilities in the school-on account of the destruction of the former photographic rooms-for making them, the results expected from its use have not yet been accomplished. As soon as rooms are again provided for the development and finishing of wet plates, representations of every part of the horse's anatomy can be obtained to illustrate the lectures given.

In January, 1892, the whole class took up the subject of Hippology, Fitzwygram's "Horses and Stables" being used as a text book. The class was divided into three sections, under charge of the following assistant instructors :

Captain Francis Moore, 9th Cavalry,
 Captain John B. Babcock, 5th Cavalry,
 Captain Samuel M. Swigert, 2nd Cavalry.

The instructors exchanged sections at regular intervals so as to preserve, as far as possible, absolute fairness in the marks given for recitation s.

The recitations were attended by myself as often as was

deemed necessary to see that the prescribed course was being conducted in an efficient and satisfactory manner.

As Fitzwygram's work was not written for use as a text book in schools, a modification of the plan heretofore pursued in studying it was adopted, with the object of making its study more rational and effective. For this reason, the course began with chapter LX, on Conformation, and the other subjects were taken up in the following order: Principles and Details of Shoeing, Diseases of the Foot, Age as indicated by the Teeth, Watering, Feeding and Forage, Stable Management, the Blood, the Pulse and Absorbents, the Mucous Membranes and the Nervous System, Good Nursing, Infection and Contagion, Colic and Inflammation of the Intestines, Conformation of the Hoek, Spavin and Splint.

The nineteen days allotted to the Department of Cavalry in March, 1892, except the last two, were devoted to the foregoing subjects, which were employed in testing, at the cavalry stables, the knowledge acquired by the student officers in judging the ages of horses by their teeth, and in inspecting diseased, injured and unsound horses. The examination of diseased and injured horses assembled for their inspection, assisted by the explanation of their causes, origin and treatment, given by the Veterinary Surgeon, should have the effect of indelibly impressing on the minds of the student officers all the facts pertaining to them.

In April and May thirteen days were employed in the instruction of the cavalry officers of the class in the new drill regulations, and six days allowed for reviewing the lessons taken in advance. The advance lessons began with the School of the Troop and embraced the School of the Squadron, Extended Order drill, complete, the Employment of Cavalry, Marches, Camping, and Stable Duty.

The portion of the drill book not embraced in the foregoing was omitted for two reasons: first, the books were not received here until late in March, 1892, so that it was impossible to go over the whole of the drill regulations during the remaining portion of the school year; and second, it was desired to employ the time available for the instruction of the student officers in that portion of the drill regulations necessary for them to know in order to command troops in the field exercises to take place in the summer and fall.

It is believed that there will be ample time in the next school year to complete the course in Hippology, in addition to making a thorough study of the subject of "Bits and Biting."

The work done in the Department of Cavalry has been of a highly satisfactory character. The instructors have all shown themselves capable, zealous in the discharge of their duties, and worthy of the respect and confidence of the officers undergoing instruction. The student officers have displayed a commendable spirit in the pursuit of a course of study—Hippology—entirely foreign to and unconnected with any other in the course, and therefore presenting many difficulties, which entitles them to more credit for their labors than might, at first glance, seem to be due them.

The examination, which was a written one, produced a set of papers which, while of varying merit, as might be expected, reflect credit on all the writers; while some of them might well be classed among professional papers of a very high order of merit.

I take advantage of this opportunity to ask that renewed efforts be made to obtain the papier maché horse now at the Military Academy at West Point, as from all accounts, no use whatever is made of it there, for want of time. It

would be of immense value in this School in instructing officers in the subject of the anatomy of the horse.

Very respectfully,

Your obedient servant,

C. c. c. CARR,

Major 8th Cavalry, U. S. Army,

Senior Instructor, Department of Cavalry.

U. S. INFANTRY AND CAVALRY SCHOOL,

FORT LEAVENWORTH, KANSAS, *August 1st, 1892.*

OFFICIAL COPY :

W, s. SCOTT,

1st *Lieutenant 1st Cavalry,*

Secretary.

REPORT OF INSTRUCTOR, DEPARTMENT OF
ENGINEERING.



U. S. INFANTRY AND CAVALRY SCHOOL,
Department of Engineering.

FORT LEAVENWORTH, KANSAS, *July 1, 1892.*

To the

Secretary U. S. Infantry and Cavalry School,

SIR :

In accordance with par. 55, regulations of the U. S. Infantry and Cavalry School, I have the honor to submit to the school staff the following report and recommendations

I assumed charge of the Department of Engineering on March 1st, 1892, in compliance with par. 4, S. O. 293, A. G. O., Dec. 17th, 1891, and post orders No. 45, of March 1st, 1892, and have been ably assisted, in my duties, by 1st Lieutenant E. A. Root, 19th Infantry, and 2nd Lieutenant John T. Haines, 5th Cavalry.

Work in this department has been apportioned as follows, during the past year, viz :

First half of 1st term,

Recitations thirty-four half days,

Practical work twenty-two half days,

Examination two half days (included in time as allowed per schedule).

Second half of 1st term,

Recitations twenty-one half days,

Drawing twenty-one half days,

Practical work sixteen half days,

Examinations four half days. (Not in schedule).

It was impossible to complete the course laid out in practical work during the second half term, by reason of continuous stormy weather, the rainy days being devoted to drawing, but it is my intention, with the Commandant's approval, to supplement the course in Topography (now completed as regards recitations and examinations), by having as extended a course during the summer and fall, in mounted reconnaissance work, as time will permit.

The department is indebted to Captain J. W. Pope, Asst. Q. M., Commandant of the Military Prison, for having had made, by prison labor, and without expense to the school, except for compasses, thirty-six hard wood sketching cases and rulers, for use in mounted reconnaissance work. Heretofore the student officers have had but three sketching cases to work with and have consequently lacked much practical experience and instruction in one of the most important branches taught in the department.

To have purchased and imported the sketching cases would have cost something over \$250.00.

There is one point in the system of marking in vogue, as required by par. 27, school regulations, that could, I believe, be changed with much benefit to this particular department, and that is, the system of daily marks. This subject has been given careful consideration, and its advantages and disadvantages appear to me to be about as follows:

Advantages:

1st. It requires of the student a continuous and careful attention to the work in hand during the term, in order to retain class standing.

2nd. It tends to inculcate self reliance by demanding thought and study of the student in the preparation of a lesson, especially in the solution of knotty points, that, under other circumstances, might be left to the instructor to explain.

3rd. It is a material aid in classifying the students on graduation; and may prevent a student who has neglected his work during the term but who has the faculty of "craming for examination," from attaining a higher standing than one whose continuous daily work shows him to be more deserving of honors.

Disadvantages :

1st. It makes each recitation partake, more or less, of the character of an examination, instead of being, what it should be, an hour devoted to instruction and explanation.

2nd. The instructor is continually hampered, in imparting information, by the fact that his mind must at the same time be diverted from the main issue, that of instruction, to that of assigning a numerical value to the student's knowledge of the subject.

3rd. It is a well established fact that the majority of students will, for the sake of a good mark, avoid asking questions, or evade direct answers on points which are not quite clear to them, thus defeating the very end for which instruction is furnished.

4th. It is unjust to officers promoted from the ranks (in the majority of cases) to place them, from the start, on the same footing with graduates of the Military Academy, and expect them to compete for marks on equal terms; whereas, on review, after the subject has been gone over, explained, and discussed, they would stand a more equal chance.

The disadvantages under the third heading are more marked where the students differ greatly as to previous train-

ing and knowledge of the subject (as is the case with the students here) for the reason that it is mortifying to a man's pride to show ignorance on a subject, that may not be displayed by keeping silent.

It would seem that the Engineering Department stands alone as regards most of the reasons, pro and con, given above, and on this account the argument is not intended to apply to other branches.

It is believed that if the system of marking were done away with and the recitation mark confined exclusively to the partial and general reviews of the subject, it would secure more uniform justice, besides allowing instructors to devote their entire attention to instruction, and induce student officers to, in all cases, have doubtful points cleared up, on the advance lessons.

The method and relative value of examinations are very satisfactory.

I would therefore recommend that the proper authorities be requested to modify par. 27, regulations U. S. Infantry and Cavalry School, by inserting after the word "commandant," the words "except that, in the Department of Engineering, the marks shall be kept only on partial and on general reviews."

I am

Very respectfully,

Your obedient servant,

WM. D. BEACH,

1st Lieutenant 3d Cavalry,

Instructor.

U. S. INFANTRY AND CAVALRY SCHOOL,

FORT LEAVENWORTH, KANSAS, *August 1st, 1892*

OFFICIAL COPY:

W. S. SCOTT,

1st Lieutenant 1st Cavalry,

Secretary,

REPORT OF THE INSTRUCTOR, DEPARTMENT
OF LAW,



U. S. INFANTRY AND CAVALRY SCHOOL,
Department of Law,

FORT LEAVENWORTH, KANSAS, July 1st, 1892.

To the

Secretary U. S. Infantry and Cavalry School,

Present.

SIR:—

I have the honor to report that during the past academic year this department has given instruction to the student officers in Constitutional and International: law, a total of forty-three (43) recitations.

The course in Constitutional law commenced November 16, 1891, and consisted of such settled general principles as pertain particularly to the federal system or both federal and state alike ; the total number of lessons were twenty-five, (25) of which fourteen were advance. International law was taken up February 6, 1892, and comprised ten (10) advanced lessons with eight (8) in review. Theoretical instruction in the new drill regulations having been decided upon, the course in International law was necessarily limited and embraced only a portion of the fundamental principles of the science having direct reference to those engaged in the military profession.

The examinations were written and developed on the part of all the student officers a knowledge of both subjects as to require no examinations, which was very gratifying when taking into consideration that the assistant instructors were without any previous experience.

I am sir,

Very Respectfully,

Your Obedient Servant,

J. M. J. SANNO,

Captain 7th Infantry.

Instructor.

U. S. INFANTRY AND CAVALRY SCHOOL,

FORT LEAVENWORTH, KANSAS, *August 1st, 1892.*

OFFICIAL COPY :

W, S. SCOTT,

1st Lieutenant 1st Cavalry,

Secretary.

REPORT OF THE INSTRUCTOR, DEPARTMENT OF
MILITARY HYGIENE,



U. S. INFANTRY AND CAVALRY SCHOOL,

Department of Military Hygiene.

FORT LEAVENWORTH, KANSAS, *June 21, 1892.*

To the

Secretary U. S. Infantry and Cavalry School,

Fort Leavenworth, Kansas.

SIR:—

I have the honor to report, for the information of the Commandant, that the instruction given in the Department of Military Hygiene, during the first year of this course, consisted of four lectures, on early aid to the injured, etc., with demonstrations, given on December 15th, 16th, 17th, and 18th, 1891.

The subjects were, the early treatment of fractures, dislocations, wounds, (including poisoned wounds) hemorrhage, asphyxia by drowning, etc., heat-stroke, burns and frost-bite, with brief allusions to the subject of preventable diseases. No examinations were held, as so much of the instruction was in the shape of demonstration as to hardly admit of written examination.

The members of the class manifested a great deal of interest in the course.

Very respectfully,

JOHN BROOKE,

Surgeon U. S. Army.

Instructor.

U. S. INFANTRY AND CAVALRY SCHOOL,

Fort Leavenworth, Kansas, *August 1, 1892.*

OFFICIAL COPY :

W. S. SCOTT,

1st Lieutenant 1st Cavalry,

Secretary.

APPENDIX "A."

Endorsements on circular letter, sent to student officers, not graduates of the U. S. Military Academy, who were ordered to the school for preliminary instruction in mathematics :

U. S. INFANTRY AND CAVALRY SCHOOL,

Fort Leavenworth, Kansas, May 31, 1892.

SIR : - -

The Com mandant directs that you endorse hereon, whether or not the preliminary course in mathematics at the school proved beneficial to you in the pursuit of your studies in the Department of Engineering ; and, whether in your opinion the knowledge thus obtained justifies the continuation of such details for future classes.

It is requested that you make any recommendations regarding the preliminary course that experience has suggested.

Very respectfully,

Your obedient servant,

W. s. SCOTT,

1st Lieutenant 1st Cavalry,

Secretary.

2. - L - :: ———— ::

Fort Leavenworth, Kansas, June 1, 1892.

Respectfully returned to the Secretary U. S. Infantry and Cavalry School. The course in mathematics referred to within was beneficial to me, and I believe would be to any officer who has not studied or reviewed the subjects for a number of years. For my part, I was very glad to go over those subjects, and as a result, consider myself greatly benefited thereby. The course as marked out and given was

quite extensive and thorough, and I know of no recommendation I might make, unless it be, do away with the marking system in the preliminary course.

G. W. RUTHERS,
1st Lieutenant 8th Infantry.

Fort Leavenworth, Kansas, June 4, 1892.

Respectfully returned to the Secretary U. S. Infantry and Cavalry School. I am of the opinion that the preliminary course in mathematics was of considerable benefit to me, not only in preparation for the course in Engineering, but in acquainting me with the system and method in use at the school. I am also of the opinion that if the course were commenced in January, and made to embrace the preliminary study of instruments, etc., it would be of benefit to those who had not had instruction in the subject.

FREDERICK S. WILD,
2nd Lieutenant 17th Infantry.

Fort Leavenworth, Kansas, June 9, 1892.

Respectfully returned to the Secretary U. S. Infantry and Cavalry School. The preliminary course in mathematics at this school proved very beneficial to me in the pursuit of my studies in the Department of Engineering, and in my opinion such details should be continued for future classes. I would recommend :

That the preliminary course extend through at least six months.

That the text books of the last course be retained, the same omissions being made in algebra as before, but that the entire geometry and trigonometry be taken.

That immediately upon the nomination of officers as principals or alternates for the regular course, they be informed concerning the preliminary course and the text books used therein, thus enabling those needing it, to prepare for it.

A. A. CABANISS,
2nd Lieutenant 20th Infantry.

Fort Leavenworth, Kansas, June 10, 1892.

Respectfully returned to the Secretary U. S. Infantry and Cavalry School with the remark, that I have been largely benefitted by my preliminary course, while pursuing studies in the Department of Engineering at this school. My recommendation is, that the length of the preliminary course be extended so as not to commence later than January instead of March, and that more instruction be given in the application of the mathematics taught, by working out problems on the ground by use of the different instruments used in the regular course.

J. M. SIGWORTH,
2nd Lieutenant 10th Infantry.

Fort Leavenworth, Kansas, June 18, 1892.

Respectfully returned. The course in mathematics referred to has been of the greatest benefit to me. Judging from the knowledge gained in my particular case—and I had studied the branches taught at a college—I would say that the continuation of the course would be fully justified. I have no suggestions to make.

HENRY A. BARBER,
2nd Lieutenant 1st Cavalry.

Fort Leavenworth, Kansas, June 20th, 1892.

Respectfully returned. The preliminary course was of great benefit to me and I think the details should be continued.

CHARLES E. TAYMAN,
2nd Lieutenant 24th Infantry.

Fort Leavenworth, Kansas, June 29, 1892.

Respectfully returned. The excellence of the preliminary course at the U. S. Infantry and Cavalry School, as intended for those who have not had the advantages of a mathematical education, or who have not practiced surveying, is so apparent to those who have benefitted by it as to earnestly urge its continuance for the benefit of others, similarly placed, who follow. A suggestion is advanced as to the extension of the time devoted to practical use of instruments used in surveying. Attention is especially invited to the fact that officers designated to attend the two years course and who need the preliminary course, should be here at its commencement and not be retained to perform post duties until the preliminary course is half, three quarters, or entirely over, as is often done.

W. C . BENNETT,
2nd Lieutenant 6th Infantry.

U. S. INFANTRY AND CAVALRY SCHOOL,

Fort Leavenworth, Kansas, August 1, 1892.

OFFICIAL:

W. s. SCOTT,
1st -Lieu tenant 1st Cavalry,
Secretary.

APPENDIX "B."

Endorsements on circular letter, sent to student officers, not graduates of the U. S. Military Academy, who did not receive 8 preliminary course in mathematics.

U. S. INFANTRY AND CAVALRY SCHOOL,

Fort Leavenworth, Kansas, May 30, 1892.

SIR :-

The Commandant directs that you endorse hereon, whether in your opinion a preliminary course in mathematics, similar to the one pursued by certain members of the present class, would have materially aided you in the pursuit of your studies in the Department of Engineering, from your knowledge of the comparative difficulty in mastering the studies in that department by those who did, and those who did not receive this instruction.

Very respectfully,

Your obedient servant,,

W. S. SCOTT,

1 st Lieutenant fat Cavalry,

Secretary.

❖————❖

Fort Leavenworth, Kansas, May 31, 1892.

Respectfully returned. In my opinion the preliminary course is necessary. If not had previous to the term work, a student must always necessarily go over it in addition to his other work during the first term.

H. H. BENHAM,

1st Lieutenant 2nd Infantry.

Fort Leavenworth, Kansas, May 31, 1892.

Respectfully returned. I do not think the course in question would have aided me. In regard to the officers who had never studied these subjects of mathematics I can say nothing as I have never heard any of them in recitation. I am of the opinion that some of the subjects in the Department of Engineering cannot be mastered without a knowledge of algebra and trigonometry.

J. F. ANDERSON,
1st Lieutenant 25th Infantry.

Fort Leavenworth, Kansas, May 31, 1892.

Respectfully returned. I am positive that the preliminary course in mathematics would have been very beneficial to me and believe that it has greatly assisted those who have been so fortunate as to have taken it, in the course of Engineering.

ROBERT W. ROSE,
2nd Lieutenant 5th Infantry.

Fort Leavenworth, Kansas, May 31st, 1892.

Respectfully returned. It is my opinion that the course in mathematics as pursued by several members of the present class, would have been of much benefit to me in the subject of Engineering ; and that more might have been accomplished with less work, had I the aid of that course.

I am unable to judge of the difficulties other members may have had in mastering the subject.

M. M. MCNAMEE,
2nd Lieutenant 3rd Cavalry.

Fort Leavenworth, Kansas, May 31 , 1892.

Respectfully returned. Having had a previous course in these studies I did not feel the want of it, but think that such a preliminary course would be very beneficial to those who have not had it.

I? . H. SARGENT,
2nd Lieutenant 7th Infantry.

Fort Leavenworth, Kansas, May 31, 1892.

Respectfully returned to the Secretary U. S. Infantry and Cavalry School. A preliminary course in mathematics, for officers promoted from the ranks and who have not previously had a similar course, is, in my opinion, if not absolutely necessary, at least very desirable in all cases. Without such a course such officers are placed at a disadvantage and must either pursue additional studies after the opening of the regular course, or forego the advantage which a thorough knowledge of the elementary principles in these studies gives. In regard to my own case I would say, that such a course, lasting about four months, would have been of very material benefit to me, as it would have obviated the necessity of devoting a great deal of time to these studies which are not included in the regular course, and given more time for the work on hand at the time.

I am unable to say whether the difficulties experienced in mastering the studies in the Department of Engineering by those who did receive this preliminary instruction were less than those experienced by myself, but certainly think they would be less.

CHARLES MILLER,
2nd Lieutenant 11th Infantry.

t-361

U. S. INFANTRY AND CAVALRY SCHOOL,

Fort Leavenworth, Kansas, August 1, 1892.

OFFICIAL:

W. S. SCOTT,
1st Lieutenant 1st Cavalry,
Secretary.