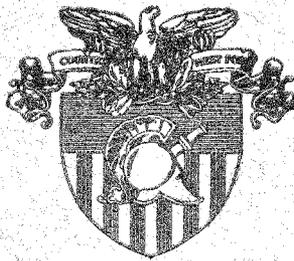


ANNUAL REPORT  
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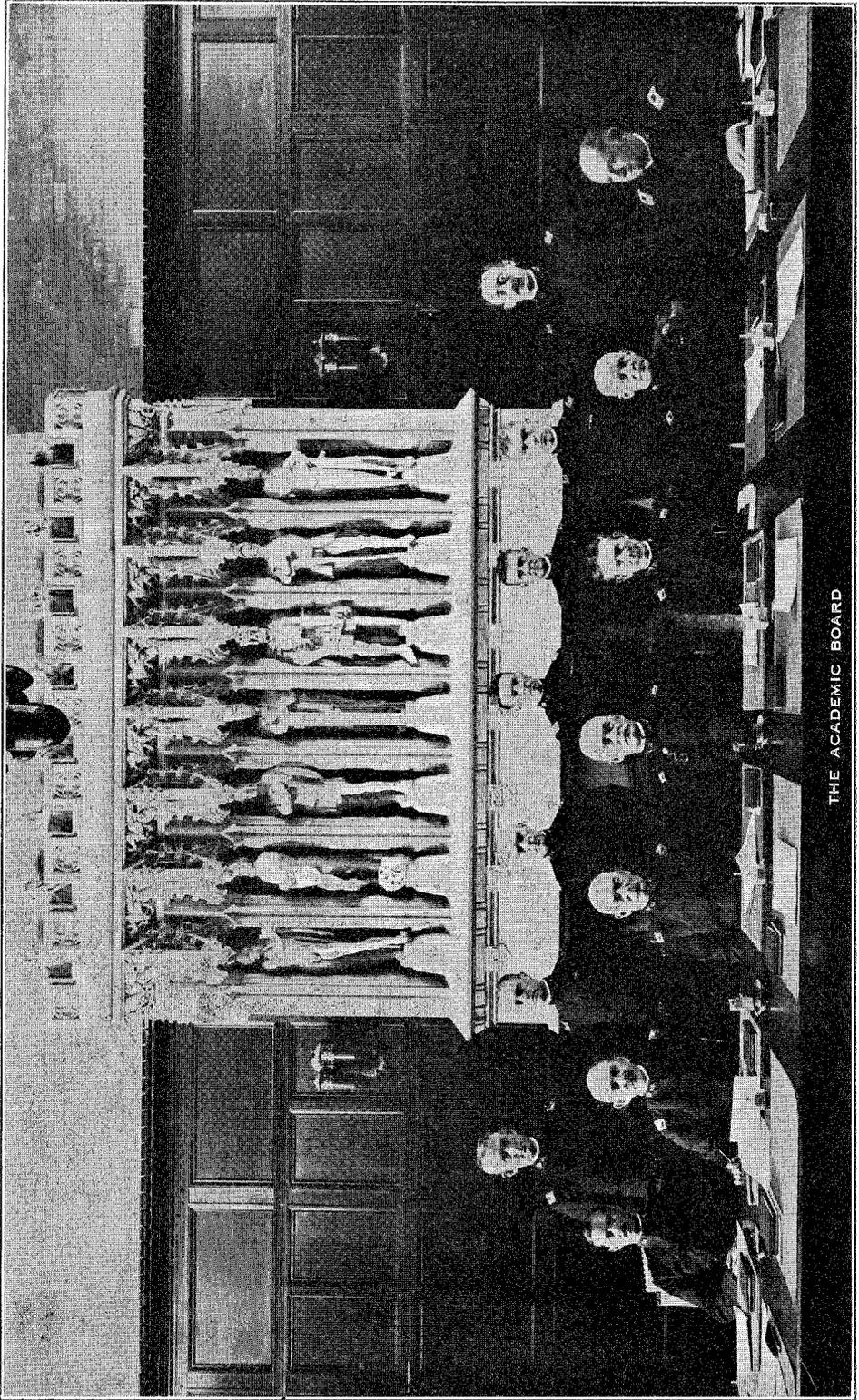


UNITED STATES  
MILITARY ACADEMY

1915

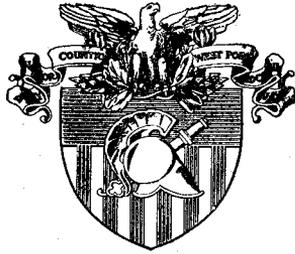






THE ACADEMIC BOARD

ANNUAL REPORT  
OF THE  
SUPERINTENDENT



UNITED STATES  
MILITARY ACADEMY

1915



**ANNUAL REPORT OF THE SUPERINTENDENT OF  
THE UNITED STATES MILITARY ACADEMY.**

Headquarters United States Military Academy,  
West Point, New York, July 1, 1915.

From: The Superintendent, U. S. M. A.  
To: The Adjutant General of the Army.  
Subject: Annual Report.

1. Following is the annual report of the Superintendent of the United States Military Academy for the fiscal year ending June 30, 1915:

**Personnel.**

The number of officers and others in prominent positions on duty at the Academy is shown in the following list:

Superintendent and staff . . . . .	5
Professors, permanent . . . . .	7
*Professors, by detail from the Army . . . . .	4
Professors, Associate, detailed . . . . .	2
Professors, Assistant, detailed . . . . .	12
Commandant of Cadets and Tactical officers . . . . .	15
Master of the Sword, Instructor of Military Gymnastics and Physical Culture . . . . .	1
Instructors and other officers . . . . .	72
Medical Corps . . . . .	3
Dental Surgeons . . . . .	2
Medical Corps, Instructors in Military Hygiene (August 28-October 10) . . . . .	4
Chaplain . . . . .	1
Librarian . . . . .	1
Civilian Instructors of Languages . . . . .	2
Civilian Instructors of Fencing and Military Gymnastics . . . . .	3
Teacher of Music . . . . .	1
Organist and Choirmaster . . . . .	1
Pay Clerk . . . . .	1
<b>Total . . . . .</b>	<b>137</b>

\*The surgeon is a detailed professor and also a member of the staff.

### The Corps of Cadets.

Since my last report, July 1, 1914, the status in the Corps of Cadets has been as shown below:

<i>July 1, 1914:</i>	Members
1st Class.....	169
2d Class.....	126
3d Class.....	162
4th Class.....	203
Total.....	660
Graduated.....	164
Discharged for deficiency in studies.....	32
Discharged for deficiency in conduct.....	1
Discharged by reason of physical disability.....	1
Dismissed.....	1
Resigned.....	10
Absent on sick leave.....	7
Suspended.....	3

The following shows the number of cadets admitted to the Fourth Class by certificate or by mental examination as a result of the March and May examinations in 1915:

	Examined mentally	Submitted certificates under G. O. No. 38, W. D., 1914, and No. 19, W. D., 1915.
March Examination.....	*52	90
May Examination.....	9	31
Total admitted.....		182

Owing to the First Class having 126 for the coming year and the law of 1910 authorizing an additional cadetship for each member of that class, there were for this year 706 cadetships authorized and 611 cadets on the rolls, leaving 95 vacancies in the Corps on July 1, 1915. This number of vacancies was reduced to †59 by the admission of 36 men on July 1, 1915.

In the interests of the country, the Army, and economy to the Government the maximum number of cadets that can be accommodated at the Academy should be kept under instruction. The plant to-day can easily handle 700 cadets. Only 44% of the active Army officers are graduates of the Academy. This can be

\*One Chinese student receiving instruction under Joint Resolution of Congress, and one Filipino cadet are included in this number.

†The discharge of 20 cadets on July 9, 1915, for deficiency in studies at the annual examination in June, 1915, which was delayed this year, brought the number of present cadet vacancies up to 79, since which time two cadets have resigned, making the total number of vacancies 81.

fully doubled in time if the Academy is kept up to its capacity of 700 cadets.

In the last decade the number of cadets at the Academy and unfilled vacancies existing are as shown below:

Year Sept. 1st	Authorized number of cadets	Unfilled vacancies	Remarks
1905	522	55	
1906	522	51	
1907	522	76	
1908	533	117	
1909	533	129	
1910	533	122	
*1911	629	57	*The law of 1910 be-
1912	631	74	comes effective—
1913	640	80	now extended to
1914	748	87	1923.
1915	706	79	

For the March and May entrance examinations this year 683 candidates were examined. Three Filipino candidates were examined in January, one being admitted. The following table shows the results:

	Examinations		Total
	March	May	
Nominations.....	528	140	*668
Qualified and directed to report for admission.....	144	†41	185
Ex-cadets to report for admission August 28.....	4	—	4
Qualified mentally, disqualified physically.....	33	7	40
Qualified physically, disqualified mentally.....	153	31	184
Mentally and physically disqualified.....	30	9	39
Qualified alternates for whom no vacancies exist (in- cluding 2 U. S. A. L. candidates).....	31	11	42
Failed to report for examination.....	117	29	146
Declined appointments.....	3	4	7
Prevented by sickness from reporting.....	1	—	1
Qualified mentally, failed to report for physical exami- nation.....	6	2	8
Appointment cancelled.....	1	—	1
Failed to report for physical, did not complete mental examination.....	12	7	19
Disqualified mentally; failed to take physical exami- nation.....	4	0	4
Qualified physically; failed to complete mental exami- nation.....	3	1	4
Rejected physically; failed to report for mental exami- nation.....	1	0	1

\*Total number appointments 683, which included 15 double appointments.

†Includes 4 men who qualified under May appointments but who were admitted June 15, and 1 man who failed to report for admission.

There is still a large number of candidates rejected physically (80 out of 483 examined), although the showing is better than last year. The principal causes of rejection are the same as they have been for years, and are this year:

- 35 for deficient height, weight, chest, &c.
- 22 for deficient vision,
- 10 for defective heart.

The physical requirements are none too rigid for those who will be expected to meet the strenuous life in field service. If those selecting candidates would insist upon their selections being first examined by an Army surgeon or some surgeon who knows and appreciates the necessity in the service of sound, robust bodies, and good eyes there would be fewer rejections for these reasons. Many of those rejected physically were absolutely hopeless cases for the military service and should never have been permitted to try to enter West Point.

Attention is also invited to the large number (146) who after being nominated as candidates failed to even report for examination. Many of these were alternates whose principals had submitted approved certificates, but there still remains a large number who fail to report for no apparent reason except perhaps indifference or fear of failure, thus preventing their districts from being represented at all. This is a condition that Senators and Congressmen can largely obviate by a careful selection of their candidates, either selecting by competitive examinations or securing a youth who can present an acceptable certificate.

With the law of 1910, which is now extended to 1923, in force, and the present standards for entrance maintained, I believe that the Academy can secure enough cadets to keep up its capacity of 700 very closely. The desire of the Academy being to secure the best and most promising material for officers in the Regular Army, there should be no lowering of its standards for entrance or of its requirements as to discipline or academic work.

With the Regular Army limited in numbers as it now is and the Corps of Cadets up to the capacity of the Academy more than all the vacancies for officers can be supplied from graduates of the Academy. If there are 700 cadets in the Corps there should be an average graduation of about 130 per year.

In order to secure cadets of perhaps a broader preparation in studies than required by the West Point entrance examinations, and to permit youths, hoping to secure appointments, to pursue a course of study that would not only prepare them to enter West Point, but to enter a first-class college as well, the following order has been issued by the War Department, and is now in force:

General Orders,  
No. 19.

War Department,  
Washington, April 7, 1915.

1. General Orders, No. 38, War Department, 1914, is rescinded and the following amended paragraphs 64 and 65 of the Regulations for the United States Military Academy are substituted therefor:

64. *Admission by examination.*—On the third Tuesday in March of each year candidates selected for appointment shall appear for mental and physical examination before boards of Army officers to be convened at such places as the War Department may designate. No candidate shall be examined at any other time unless prevented by sickness or other unavoidable cause from attending the above examination. If thus prevented, he shall report at West Point for examination before 12 o'clock noon on the 12th day of June of the same year. The Filipino candidates selected for appointment, unless otherwise notified by the War Department, shall appear for mental and physical examination on the second Tuesday in January of each year before a board of Army officers to be convened at such place in the Philippine Islands as the commanding general of the Philippine Department may designate.

Each candidate must show by examination that he is well versed in algebra, to include quadratic equations and progressions, and in plane geometry, English grammar, composition and literature, descriptive and physical geography, and general and United States history, as explained in the circular of notification.

65. *Admission by certificate.*—The Academic Board will consider and may accept in lieu of the regular mental examination:

(1) A properly attested certificate (Form I) that the candidate is a regularly enrolled student in good standing without condition in a university, college, or technical school accredited by the United States Military Academy, provided that the entrance requirements of the course he is pursuing require proficiency in subjects amounting to not less than 14 units of the list given below.

If attendance at college extends over a semester, a full record of academic work at the college, giving subjects taken and grades attained in each, must accompany the certificate; if attendance at college extends over less than a semester and the candidate was admitted to college by certificate, a certificate (Form II) from the preparatory school giving a full record of studies taken and grades attained must accompany the college certificate. If a scrutiny of the certificate submitted shows low grades, the certificate will be rejected.

A certificate indicating enrollment in or admission to an institution at any other time than that specified in the college register for regular admission or enrollment will not be accepted.

(2) A properly attested certificate (Form II) that the candidate has graduated from a preparatory school or public high school accredited by the United States Military Academy, provided that he has in his school work shown proficiency in subjects amounting to not less than 14 units of the list given below.

If a scrutiny of the certificate submitted shows evidence of low grades or of graduation at an irregular date, the certificate will be rejected.

(3) A properly attested certificate (Form III) from the College Entrance Examination Board that the candidate has shown proficiency in the examinations set by the board in subjects amounting to 14 units from the list given below. If a scrutiny of the certificate submitted shows low grades, the certificate will be rejected.

The list of subjects and the corresponding weights in units is as follows:

(a) Required.

Every certificate must show evidence of proficiency in the following subjects:

	Units.
Mathematics, A1.....	1
Mathematics, A2.....	$\frac{1}{2}$
Mathematics, C.....	1
English, A.....	2
English, B.....	1
History, A } History, B } History, C } any two.....	2
History, D }	
	$7\frac{1}{2}$

(b) Optional.

The remaining  $6\frac{1}{2}$  units may be supplied from among the following subjects:

	Units.
Mathematics, B.....	$\frac{1}{2}$
Mathematics, D.....	$\frac{1}{2}$
Mathematics, E.....	$\frac{1}{2}$
Mathematics, F.....	$\frac{1}{2}$
History, A } History, B } Any not submitted among required subjects..... } History, C } History, D }	1 1 1 1
Latin, 1.....	1
Latin, 2.....	1
Latin, 3.....	2
Latin, 4.....	1
Latin, 5.....	1
Greek, A1.....	$\frac{1}{2}$
Greek, A2.....	$\frac{1}{2}$
Greek, B.....	1
Greek, C.....	1
Greek, F.....	1
French, A.....	2

	Units.
French, B } Either one but not both.....	1
French, BC } .....	2
German, A.....	2
German, B } Either one but not both.....	1
German, BC } .....	2
Spanish.....	2
Physics.....	1
Chemistry.....	1
Biology.....	1
Botany.....	1
Physiology.....	1
Physical Geography.....	1
Drawing.....	1

35

The definition of unit and of the ground covered by the designated subjects is that of the College Entrance Examination Board. Credits must correspond to the unit values of the respective subjects. Greater credit than indicated will not be allowed; less credit will be understood as evidence that the entire subject has not been completed.

Certificates should be submitted not later than February 15. A certificate received between February 15 and the examination will receive consideration, but in view of the short time left to the Academic Board to investigate its value, no assurance will be given that such certificate can be acted on in time to exempt the candidate from the mental examination.

Candidates who are informed that their certificates have been accepted must present themselves at the regular time and place, as prescribed in paragraph 64, for physical examination. (22627560—A. G. O.)

\*

\*

\*

By order of the Secretary of War:

H. L. SCOTT,

*Brigadier General, Chief of Staff.*

Official:

H. P. McCAIN,

*The Adjutant General.*

As was to be expected some difficulty has been found in selecting the schools and colleges whose certificates could be accepted for admission mentally, and the assistance of the National Board of Education was asked by the War Department. To that Board are due many thanks for their conscientious and intelligent cooperation.

Many difficulties of a perplexing nature arise, especially with certificates that give incomplete and sometimes incorrect information. In many cases the showing is so poor or defective that those signing them should have refused to forward them because

of this insufficient showing for entrance. A great many certificates are submitted by institutions which have no good claim to be accredited when compared with the standards established by this order.

New forms of certificates have been prepared in accordance with this order and with such detailed instructions therewith that schools and colleges, as well as the candidate, can readily see just what is required.

The admission of candidates by certificates made no appreciable change this year in the percentage of vacancies filled under entrance requirements. There remain 59\* unfilled vacancies on July 1, 1915. About 65% of the cadets found deficient in the last Fourth Class were those who entered on certificates. This is the only class entered after certificate entrance was authorized.

I believe that the most certain and satisfactory way of filling vacant cadetships is by competitive examination for each, and I also believe that this method will give a much better mental average of material for cadets and for officers in the Army.

In this connection I quote again the following from my report of 1913:

"These cadetships belong to the people of the District, State, Territory, etc., and should be open competitively to all the youths eligible to compete, and it is my recommendation that *a law be enacted requiring competitive examinations to be held for each vacancy*, that youth to be appointed who passes successfully the best mental examination, and who is physically and morally qualified. The examination questions should be prepared by the Academic Board and a successful passing of the competitive examination should qualify a youth to enter, so that no other mental examination need be required. The details of conducting such examinations should, I think, be left to the Secretary of War. By announcing in the local papers some ten months or a year in advance that such a competitive examination will be held, stating its scope, it is believed that there will be a large number of eligible youths who will present themselves for examination in each district from which a vacancy is to be filled."

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\*Seventy-nine vacancies July 9, 1915.

**Inspection.**

The following is an extract from the report of the Inspector General, Lieut. Colonel D. C. Shanks, U. S. Army:

Under instructions of the War Department, contained in letter from The Adjutant General's Office, dated June 5, 1914, I inspected the Military Department and business methods of the United States Military Academy, July 15 to 25, inclusive, 1914.

The last annual inspection was made by Colonel S. C. Mills, Inspector General, July 15 to 22, 1913.

The Military Academy is commanded by Colonel Clarence P. Townsley, Coast Artillery Corps, Superintendent, and is garrisoned by the U. S. Corps of Cadets and various service detachments, aggregating 107 officers, 707 enlisted men and 663 cadets, of whom 53 officers, 526 cadets and 680 enlisted men were present in the Post.

\* \* \*  
*Battalion of Cadets.*  
\* \* \*

On July 18, I reviewed and inspected the Battalion of Cadets in full dress uniform. The cadets maintain in every respect the high standard which has made the Corps of Cadets a famous body. I have never seen any other body of men which presented as good an appearance. When it is taken into consideration that fully one-third of those in ranks were fourth classmen who had been at the Academy scarcely more than a month, the showing made was remarkable. This notably excellent showing was not only in neatness, set-up and general appearance, but in marching and manual as well. On another date, without previous notice, I inspected the cadet camp and found it in an admirable state of cleanliness and police. The latrines and baths were in excellent condition.

Possibly nothing more strongly impresses an older graduate than the practical and diversified nature of the instruction now given to cadets. The assembly for military instruction sounds at 7 a. m. From that time till recall at 12 o'clock noon, with exception of extremely brief intermissions, the cadets are kept on the move going from one to another of the various drills and exercises which keep the entire Corps busy throughout the morning hours.

\* \* \*

I was greatly impressed not only with the variety of the exercises but also with the thoroughness and the practical nature of the instruction throughout.

One of the things which interested me very much, because it was not there during my time as a cadet, was the physical drill under Captain Herman J. Koehler, master of the sword. During graduation week the battalion gave an exhibition in this drill which was the admiration of all who saw it, and caused considerable comment among those who know that the battalion, as a whole, had never had a single practice or rehearsal for the exhibition. Captain Koehler is one of the very best instructors I have ever seen. The well instructed graduates turned out under his guidance ought to be much more valuable to their regiments in the way of giving physical instruction than they sometimes are. The reason for this is the lack of opportunity. This matter is here dwelt upon

because of a suggestion I wish to make as to whether or not it would be advisable to make physical drill compulsory throughout the line of the Army, by War Department orders.

The thought I mean to convey is that each succeeding class turns out at West Point a considerable number of young graduates, every one of whom could and would, if he had opportunity, be of great assistance in the physical training of the men of the commands to which he is assigned. But it is often the case that, through oversight or neglect of the commanding officer, such physical training as is held is of a most perfunctory nature.

The discipline existing in the Corps of Cadets at the present time is excellent. The office of Commandant of Cadets is one of the most difficult in the army to fill satisfactorily. It requires judgment, tact, knowledge of human nature, and disciplinary ability of a high order. The present Commandant, Lieut. Colonel Morton F. Smith, impressed me as a zealous, capable, broad-minded officer, admirably fitted to the performance of his difficult duties.

Colonel Smith has introduced some new methods which seem to be giving excellent results. All cadet captains, lieutenants and sergeants are now chosen from the First Class; the corporals are taken from the Second Class, although, during the absence of the Second Class on furlough, acting corporals are appointed from the Third Class. It is Colonel Smith's aim to give every opportunity possible to first classmen to exercise authority and to gain experience as instructors in the various kinds of instruction. An examination of the foregoing schedule of drills will show what varied and excellent opportunities are now afforded to first classmen to fit themselves for the performances of the duties of commissioned officers which they are soon to assume.

In conversation with Colonel Smith, on several occasions, he outlined to me his aims and plans which were, in general, to differentiate more and more the distinction between members of the First Class and other classes; to increase more and more their sense of responsibility for the drill and instruction and discipline of the Corps; and to have them feel that they are, in a sense, young officers gaining experience rather than cadets who must be watched and disciplined.

Colonel Smith is making a valiant effort to eradicate the old, rasping, "Yearling Corporal" methods, by which I mean the constant yapping and bawling out at fourth classmen. This is done, not from any effort or wish to prevent the necessary correction and bracing of fourth classmen. The idea is not so much to benefit the new cadets as to be helpful to the cadet officers and noncommissioned officers by insisting upon more dignified and officer-like methods. In this way the graduated cadet will join his regiment with a much better idea of the proper way of handling enlisted men, and may forego the necessity of unlearning the "Yearling Corporal" idea imbibed at his alma mater.

The present scheme of devolving more upon the First Class the instruction and the discipline of the Corps is giving such excellent results that it should be encouraged and maintained. Under any circumstances the change from cadet to commissioned officer is a rather violent one. Whatever may tend to minimize this change and to bring to members of the First Class an increased sense of their responsibilities should receive proper aid and encouragement. As such an aid the Commandant believes that the re-establishment of the First Class

Club, under proper restrictions, would be helpful to first classmen while at the Academy and beneficial to them in their subsequent career. In this opinion I concur.

*Band and Field Music.*

\* \* \*

The authorized strength of the Military Academy band has remained at 40 men since 1900, at which time the strength of the Corps of Cadets was about 440 men. The present strength of the Corps is about 665 men. The longer the line at parade, reviews and other military functions, the greater is the volume of sound required. In 1900 there was one bandsman for every 11 cadets. At the present time there is one bandsman for every 16 cadets. It would seem that the time has already arrived when the question of an increase in the membership of the band should receive consideration.

I inspected the band both on the field and in their barracks. I found the appearance of the men and the condition of the barracks entirely satisfactory, and the organization in excellent shape throughout.

\* \* \*

*Medical Department.*

\* \* \*

The ceilings and interior walls of the cadet hospital need painting and kalsomining. Other items for which adequate appropriations are needed are as follows:

Tiling for the floors and wainscoting for the walls of the dining room and kitchen of the cadet mess, and same for the dispensary, including also, enamel for shelving.

Terrazo floors should be provided for halls for the first and second floors.

A large skylight fitted with suitable prism glass should be placed in the roof over the main stairway.

Tiled flooring and walls with improved plumbing, including hydrotherapeutic appliances, should be provided for the toilet room adjoining Ward McElderry.

An intercommunicating telephonic system should be installed.

All of the above are needed to bring the present cadet hospital up to the standard and requirements of a modern well equipped hospital.

*Physical requirements for admission for cadets. Teeth.*—For the past three years the condition of the teeth of cadets in the entering classes has been most unsatisfactory. Of 268 cadets entering in 1911 only 28 had good teeth; of the remaining, 140 had cavities varying from 1 to 13; 20 had exposed nerves requiring immediate attention, and 7 had marked mal-occlusion. One hundred fifty-three cadets were examined in the entering class in 1912; 43 had good teeth; 71 had from one to ten cavities; 10 needed crown and bridge work; 7 had exposed nerves; 5 had impacted wisdom teeth, and 9 had mal-occlusion. One hundred ninety-three cadets were examined in the entering class in 1913; 45 had good teeth; 111 had from 1 to 13 cavities; 3 had exposed nerves, and 19 had mal-occlusion.

The result of these conditions has been that practically the entire time of one dental surgeon is occupied during the year in putting the teeth of the Fourth Class in serviceable condition.

The present requirements as to teeth for candidates for admission are the same as for recruits, and it is believed that a higher standard should be demanded for future officers for the service.

The following is recommended: That candidates must have at least 12 of the 20 double teeth in serviceable condition; that well crowned teeth be considered as good teeth; that teeth containing large cavities or exposed nerves be considered cause for rejection, but that a candidate with unsound teeth may be accepted subject to the condition of having cavities filled and teeth put in satisfactory shape before the date set for entrance to West Point.

\* \* \*

While the interior walls and ceilings of the cadet hospital need painting to freshen them up, and while other repairs and alterations suggested above are needed, yet I found the hospital and all its appurtenances scrupulously neat and in admirable shape.

The general condition of the hospital and of the hospital corps as well as the extremely satisfactory condition of health and sanitation of the command, reflect great credit upon Lieut. Colonel Henry A. Shaw, the senior medical officer.

#### *Engineer Detachment.*

In report of inspection made by Colonel George F. Chase, Inspector General, in July, 1911, it was reported that: "The barracks of this detachment are not large enough to accommodate the number of men assigned to it." This condition still exists. The barracks occupied by the detachment were built in 1858, are of obsolete pattern, much space being wasted by reason of the small rooms. There is no amusement room and no space for one.

\* \* \*

I inspected the detachment, as well as the barracks. The general appearance of the men was excellent. While crowded and of obsolete pattern the condition of the barracks as to neatness and sanitation was very satisfactory.

#### *Ordnance Detachment.*

\* \* \*

I found nothing to criticize either in appearance of the men or the condition of the buildings or grounds. It was satisfactory throughout.

#### *Cavalry Detachment.*

\* \* \*

I found the detachment in excellent condition throughout. The barracks were in fine shape, the stables and surroundings in thorough state of police, the animals and equipments well cared for.

\* \* \*

*Field Artillery Detachment.*

\* \* \*

A comparison of the strength and duties of this detachment and those of a regular battery of field artillery shows the much greater amount of work performed by the detachment. A regular field battery with an authorized maximum strength of 133 men takes care of one 3-inch gun battery, complete, and 121 horses. The artillery detachment at West Point, with an authorized maximum strength of 136 enlisted men, takes care of one 3-inch gun battery manned, horsed, and equipped; one 2.95 inch mountain gun battery partly manned, horsed, and equipped; one 4.7 inch gun battery equipped; one primary observing station; one secondary observing station, one meteorological station. There are on hand 120 horses, besides a large and varied assortment of harness, saddles, etc. Practical instruction is given to cadets in many different things, such as:

3'' field battery, mounted and dismounted,  
 4.7'' siege battery, dismounted,  
 2.95'' mountain gun battery, mounted and dismounted,  
 Fire control station,  
 12'' mortar battery,  
 6'' seacoast battery, etc.

The care and preservation of the various armament and equipment in use imposes a much greater amount of work upon this detachment than falls to the lot of a regular battery.

This observation is especially true since the cadets who use the equipment generally have nothing to do with cleaning or caring for it. The considerations above set forth caused Colonel Mills, last year, to recommend an increase of one (1) officer, three sergeants, four corporals, two mechanics, one horseshoer, and 24 privates in the strength of this detachment. I believe there is urgent necessity for this increase and concur in Colonel Mills' recommendation.

I found the men in good shape. The barracks were in good shape, with some minor exceptions pointed out at the time to the detachment commander.

\* \* \*

*Treasurer, U. S. M. A.*

\* \* \*

The affairs of the Treasurer and of the cadet mess and cadet store are extremely well run. The Treasurer of the Academy, Major Peter Murray, Infantry, has exhibited a high degree of business ability in organizing and systematizing the varied affairs under his charge.

The cadet mess, in particular, is worthy of note as showing what may be done under careful and efficient management. \* \* \* The average cost per cadet per day for the past fiscal year was 63.7 cents, a reduction of nearly one cent per day as compared with the last fiscal year.

\* \* \*

*Laundry.*

A new laundry is a necessity. The present building is wholly inadequate. It is not worth repair or enlargement. Moreover, it is most inconveniently located. Nearly all of the employees live in Highland Falls. A new laundry, well equipped, and of adequate size, should be built on the site selected therefor, southeast of the reservoir.

West Point has pressing need of several new buildings. When I tried to get an idea of the relative urgency for these various buildings there seemed a general consensus of opinion that a new and an adequate laundry was the most pressing of all needs.

*Hotel.*

A new hotel is urgently needed. The present building is inadequate in size and lacking in toilet and bathing facilities. Many relatives and friends of cadets, as well as those called from time to time to West Point on official duties, are crowded into an archaic building of antebellum vintage. Only three bath tubs are provided for the accommodation of all its guests, male and female. The Government owes it to the Academy and to those who visit the Academy to provide a more modern and better equipped hotel. There is a general consensus of opinion, in which I concur, that the new hotel should be erected at once and on the site of the present hotel. As the site is one of the most attractive, as well as the most conspicuous on the reservation, the new building should be of stone and of design calculated to harmonize with other important buildings recently constructed.

Having lived at the present hotel during the ten days I was at West Point, I am prepared to give my vote in favor of a new hotel as the most pressing need of the Academy.

*Repairs to West Academic Building.*

The west academic building needs remodeling in order to permit adjustment to present requirements. During the past year three departments have moved from this building into the newly completed east academic building. One of the large rooms thus vacated should have a large sky-light installed to fit it for use by the drawing department. It is estimated that \$30,000 will be required for the complete rearrangement and repairs needed. This sum should be provided at the earliest practicable date.

*Children's School.*

The Academy is sadly lacking in adequate school facilities for children. A memorandum prepared at my request by Captain R. G. Alexander, Corps of Engineers, shows that last year 162 children of all grades attended school; that the school was overcrowded, necessitating attendance of the 3d and 4th grades in a room in basement of cadet chapel; that this room is wholly unsuitable in itself; that the long steep climb to the chapel in the snowy, bad weather of winter, makes it difficult for small children to attend; that the salary of the principal is only \$1,080 per year, whereas the usual salary of principals of similar schools in the vicinity ranges from \$1,300 to \$1,500, and in consequence

the principal who has held the position for the past six years has tendered his resignation. The question of larger and better building for the school and better salary for teachers is one that demands prompt remedial action.

#### *Roads and Drives.*

The roads and drives on the reservation are seriously in need of attention. Of the entire 26 miles, only about 5 miles are macadamized. Even this limited length of metaled road is far from being in a satisfactory condition. With appropriations recently available only piecemeal work could be done. An appropriation adequate to put the roads in a thorough state of repair is badly needed.

#### *New Building as Corps Headquarters and Cadet Store.*

The present cadet store is ill-arranged and overcrowded. The present commandant's office and guardhouse in the area of the old barracks consist of a few small stuffy rooms entirely unsuited to the purpose for which it is used, necessitating a sub-office in rear of the new cadet barracks. In the plan for the completion of improvements it is specified that a new building shall occupy the site of the present cadet store and old gymnasium. The new building is to be of sufficient size to accommodate both the cadet store and corps headquarters. Such a building is badly needed. On account of its central location, being between the two cadet barracks, this proposed site is the most valuable piece of ground at the Academy. There is no other site so convenient and so accessible to the entire Corps of Cadets. For this reason, in the opinion of the Inspector, it is worthy of careful consideration whether the first floor of the new building ought not to contain a new mess hall—the present mess hall being on one flank and at a distance from the north barracks. If additional barracks are ever built it can only be towards the north, and the retention of the present mess hall would then be wholly impracticable.

#### *Chaplain.*

The position of chaplain at West Point is more important than that held by any other chaplain in the Army. The present chaplain, Rev. H. Percy Silver, is unusually well fitted for the performance of his difficult and exacting duties, yet he has the pay of \$2,400 per year, an amount considerably less than that drawn by other chaplains with the rank of major, holding positions much less important. Chaplain Silver should have a compensation of at least \$3,000 a year.

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#### *Cemetery.*

The post cemetery contains about 16 acres. It has been in use since 1816. The total number of interments is 1538. The present appropriation for upkeep of the cemetery is \$1,500. An inspection of the cemetery shows the need of an increase in the appropriation, which was formerly \$2,000 per annum. I believe that the present appropriation should be increased at least \$500 per annum.

*Additional Quarters for Officers.*

There are not sufficient quarters for officers. During the past year six married officers were compelled to live in bachelor quarters. Twelve married officers were forced to double up and to live in quarters intended for six families only. At least eight additional sets of officers' quarters should be provided. The need for these additional quarters is imperative.

\* \* \*

*Hockey Court and Concrete Tennis Courts.*

Considerable grading remains to be done on the ground adjacent to the new gymnasium. This needed improvement should also contain a scheme for a concrete hockey court to be used during the winter season and several concrete tennis courts for use when hockey is not practicable. It is possible that sufficient additional ground might be found in that vicinity for a few more clay tennis courts.

*Competitive Examinations for Appointments as Cadets.*

In order that the advantages extended by West Point training may be open to all young men on the same basis, the system of competitive examination should be required by law. Not only does this give every young man an equal show with all others, but it gives to the Government the advantage of having the widest possible range for selection.

*Defective Construction.*

The brick walls of the bachelor building north of Cullum Hall are giving trouble by reason of seepage, probably due to capillary attraction. The artificial stone used as trimming in the administration building is proving quite unsatisfactory by reason of cracking, disfiguration, and dampness. The walls in both buildings have to receive some kind of waterproof treatment to prevent moisture coming through. While this matter is beyond remedy so far as these particular buildings are concerned, it is here mentioned in order that these defects may not be repeated in subsequent construction.

\* \* \*

*General Conclusions.*

That the Military Academy, under command of Colonel C. P. Townsley, Coast Artillery Corps, as Superintendent, is in admirable shape throughout; that the discipline and the esprit of the Corps of Cadets are excellent; and the military instruction efficient and progressive.

Not the least among the beneficial things Colonel Townsley is attempting is the awakening of greater and wider interest in the Academy among its former graduates. During the graduating week last June, 215 former graduates foregathered at the Academy "to imbibe anew the spirit of old West Point"—a thing good for the Academy and good for the service.

\* \* \*

### **Detail of Officers as Instructors.**

I have for two years urged that the Military Academy be made an exception in the operation of the "Detached Service Law" and that officers be detailed as instructors for four years regardless of any other detached service they may have had.

This is a matter of most serious importance to the best interests of the Academy and I feel it my duty to again urge that Congress be asked to pass a bill in accord with the above.

Pertinent to this subject I quote the following from my report of 1914: "It requires from one to two years' experience for even the best of the officers selected to become really proficient and efficient instructors. In all departments much of the first year of a detail as instructor is used in instructing the new officers, both in the subjects taught and in the methods of presenting and teaching the subjects. In the department of mathematics where officers are advanced as instructors from the fourth to the third class, a second year has to be largely devoted to such instruction, so unless an officer can remain here for a full period of four years the cadets lose that instruction to which they are entitled.

The effect of the detached service law passed in August, 1912, has been to deprive this Academy of a four-year period of instruction from officers detailed here for that purpose. Except those from the Engineer Corps not an instructor at the Academy can complete a four-year detail. As a rule officers with nine or less months beyond complete years of availability when they report must be relieved at the end of a complete year's service because it is impracticable to change instructors during the progress of a course. For instance, an officer available for three years and nine months under the detached service law can stay but three years; if two years and nine months available he can stay but two years, and so on.

It should be borne in mind that the Academy is very much limited in its selection of officers as instructors:

1st—They must be graduates of the Academy, as no others are sufficiently known here to warrant their selection;

2nd—They should be graduates who were not cadets with any class at the Academy. This cuts out all graduates of less than three years' service as officers;

3rd—They should be officers whose standing in the subject they are to teach and whose character and abilities are such as to commend them for such a detail;

4th—They should not have been too long away from the Academy and out of touch with subjects of education. Officers over eight years away from the Academy should not be detailed as instructors unless they have recently served as instructors or are known to have done work that specially fits them for the position.

These requirements, when further curtailed by the detached service law, places nearly all the officers of the Army beyond our reach for a four-years' detail. The very officers who would make desirable or even satisfactory instructors are, because of their attainments, selected for other details and so rendered unavailable as instructors.

The result of the detached service law is that we are compelled to ask for officers as instructors who, without this detached service law, would not have been considered for such duty. These officers when detailed have done their very best, and yet the results have not been up to the standard heretofore attained, and an exhaustive amount of work in instructing these instructors that is beyond all reason has been put upon the heads of the academic departments. The ill effect upon discipline of having instructors not naturally well equipped cannot even be estimated, and in this lies a most serious and bad effect of the detached service law upon the cadets at the Academy. Instructors who graduated low in their classes, and who are not temperamentally constituted to be good instructors, are now necessarily required to instruct the keen cadets standing high in their studies, and who are ready to take every advantage of an instructor's errors or peculiarities. The result is unsatisfactory not only as regards instruction but in its effect upon discipline."

In this same connection too I would recommend that officers serving at West Point with the Cavalry and Artillery Detachments be not considered on "detached service" under present laws. I quote the following from my report of 1914 on this subject:

"The officers with these two detachments are in the same relation to the troops (except in name) as if they were serving in their own company and arm. They not only perform exactly the same and all kinds of duty of their rank and arm of the service

but are instructors of cadets in these very duties on the drill ground, in marches, in camp, and in field maneuvers. I can see no justice in these officers being regarded, as they are, as on "detached duty" while at the Academy. Each of these two detachments has an enlisted strength as large as the companies of their own arm, more animals and equipment to care for, has separate stables, barracks and a company organization the same and administered the same as companies of a regiment."

In every sense they are performing duty with their own arm of the service.

### **Improvements in Buildings and Grounds.**

The appropriations authorized under various Acts of Congress beginning in 1902 for enlarging the capacity of the Academy and extensive improvements in its buildings and grounds have been entirely expended, and work of that character is now ended. There yet remain many improvements under the original plans approved by the Secretary of War and other improvements and changes, which time and conditions have made essential, that should now be authorized and appropriated for by Congress from year to year until completed.

In my last report I recommended a list (on page 13) of buildings and other improvements necessary to complete the plans, etc., initiated some years ago. In a belief that there is an extensive feeling favorable to the enlargement of this Academy to accommodate more cadets and my own belief, because of available and practicable sites for such an enlargement, that 1200 to 1300 cadets is the limit to which this Academy can be extended, I feel it now my duty to modify my previous recommendations, and this I do after consultation with members of the Academic Board, as well as an architect who had much to do with the recent constructions.

The following explanation is necessary to understand my position in recommending, in some very important particulars, a different completion of those plans than was contemplated and designed after much study by architects and others concerned.

Those plans or rather the portions not yet authorized or constructed fail to meet the necessities of the conditions existing or that will exist to properly accommodate 1200 to 1300 cadets in the following essentials:

1st.—No provision was made for proper mess-hall accommodations for 1200 to 1300 cadets. The extreme limit of the present mess hall is 730 cadets, and the building and site do not admit of any material or adequate enlargement.

2d.—It placed a third barrack building to accommodate about 350 cadets (making a total of about 1080 cadets) to the north of the present north barracks; altogether too far away from the academic buildings and riding hall for the necessary economical use of time by cadets. The present north barracks has proved to be a serious infringement on the cadets' time and the proposed site for this third barracks would place a further and almost intolerable barrier in point of time required to go and come for each recitation during the day.

3d.—The combination of the cadet headquarters and the cadet store in one building is not a desirable, natural, or a necessary one. The building designed for this purpose, while splendid and perhaps necessary for architectural effect is far more expensive than its purposes warrant. A more natural combination would be the cadet mess hall and the cadet store. Both this mess and this store are under charge of the same officer—the Treasurer of the U. S. Military Academy—and the convenience and economy of having this main and important business under one roof is evident.

4th.—The new hotel planned is inadequate in its accommodations and on a site too far removed from the camp ground of cadets. In this connection I quote from my last year's report: "The new hotel should be placed practically on the site of the present hotel instead of against the high hills south of the old hospital as shown on the approved plans. In this view I am in accord with those of all of the members of the Academic Board, my predecessor as Superintendent, and all alumni with whom I have conversed and whose views and judgment on such matters are of value.

"Most of the guests of this hotel are relatives and friends of cadets whom they come to visit mostly during the period of the cadet encampment, so the hotel should be as near this camp as conditions admit. The site is a commanding and beautiful one, and the architecture of the building should be such as to harmonize with the other large buildings and the character of the landscape. The drawings for this hotel in the approved plans of improvement cannot be altered to suit this case; they do not

furnish the necessary capacity in bedrooms, dining rooms, parlors, or porch space, and should be discarded entirely."

5th.—*Cadet Hospital*.—The present cadet hospital is already complained of by the surgeons as deficient in necessary space and conveniences for proper handling of patients and attendants. With the Corps of Cadets increased to 1200 or 1300, it will certainly not meet the requirements and as it will not admit of proper enlargement it should be replaced by a new building. Place for this can be found along the road at the same locality as the old hospital building abandoned when present hospital was constructed.

To remedy these defects I would submit and recommend the following:

As to 1st and 3d above: That a new mess hall be built with capacity for 1300 cadets on the site proposed for the cadet store and headquarters; i. e., between the present north and south barracks; that the cadet store be in this same building. The site, I am confident, will admit such a building, it will be convenient for entrance of cadets by battalions separately from the barracks north and south of it, as well as from camp, which is a saving of time. The building can be quite as imposing and harmonious in architecture as the store and cadet headquarters now planned, and there is a real and urgent reason for such a building on this site instead of the rather forced reason for the expensive building now planned.

As to 2d above: That when the new mess hall and cadet store as above recommended is ready for use that the present mess hall be demolished and on its site and extending a hundred feet or so to the south of it a new cadet barrack building be constructed to accommodate about 350 cadets. Along the south side of the area of present south barracks a building should replace the sheds and old buildings now there to accommodate cadet headquarters, and 150 cadets, thus making a total cadet barrack capacity of 1230.

There will be other buildings necessary to meet the conditions imposed by an increase in the Corps to 1200 or 1300 cadets; such as additional officers' quarters for the greater number of instructors needed; additional cavalry stables and barracks.

The arrangement of buildings as above outlined will produce a far more convenient and suitable arrangement for 1200 to 1300

cadets than the present plans and there will result even a better architectural effect in many respects. This whole subject should again be considered by a board of interested officers and by the architects formerly consulted in the improvement plans for West Point.

I submit below a list of buildings; (1st) a list of those buildings needed if the corps of cadets is increased to 1200 or 1300 with a rough estimate of cost, this is an addition to (2d) a list of improvements that should be made whether the corps is or is not increased, agreeing except as to hotel with the present plans for development:

(1st) *Corps increased to 1200 or 1300.*

Cadet mess hall and cadet store combined.....	\$450,000.00
Cadet barracks—on site of present mess hall for 350 cadets.....	380,000.00
Cadet barracks and cadet headquarters.....	175,000.00
Cadet hospital.....	200,000.00
Cavalry barracks for another detachment of cavalry (130 men).....	125,000.00
Cavalry stables for 130 additional horses.....	90,000.00
Alterations in academic buildings—new partitions, etc.....	15,000.00
Officers' quarters (married) 24 sets.....	280,000.00
Excavations, grading, roads, revetting walls, etc.....	100,000.00
Architect's fees, etc.....	85,000.00,

Total..... \$1,900,000.00

(2d) *Improvements needed in case of no increase in Corps of Cadets beyond 730.*

*Laundry.....	\$100,000.00
Hotel on site of present hotel.....	350,000.00
Alterations to west academic building.....	30,000.00
Officers' quarters—8 sets in flats, Q. M. plans.....	85,000.00
†Children's school building.....	50,000.00
*Guardhouse and fire-engine house.....	65,000.00
*Army service barracks.....	125,000.00
*Enlarging band barracks.....	40,000.00
*Quartermaster stables and wagon sheds.....	100,000.00
*Quartermaster and commissary storehouse and shops.....	300,000.00
*Enlisted men's quarters—south end of post—10 sets.....	50,000.00
*Noncommissioned officers' quarters—2 double sets.....	20,000.00
Remodelling engineer barracks.....	10,000.00
*Post exchange.....	100,000.00
*South gate guardhouse.....	30,000.00
Completion of interior of Memorial Hall.....	25,000.00
Roads, walks, retaining walls, grading, etc.....	150,000.00
Architect's fees, etc.....	100,000.00
Demolishing old buildings.....	15,000.00

Total..... \$1,745,000.00

Lists No. 1 and 2, aggregate..... \$3,645,000.00

\*Preliminary drawings made and approved by the Secretary of War.

†Sketch plans made.

The eight sets of quarters for officers (List No. 2) are urgently needed and at once. During the last year four married officers were compelled to live in bachelor quarters and twelve married officers in quarters designed for but six. The conditions for the coming academic year are about the same as the number of officers as instructors remain about the same.

The alterations to the west academic building is another matter that should be provided for at once. Three departments have moved from this building into the new academic building, thereby vacating some large lecture rooms and laboratories that should now be rearranged and cut up into recitation rooms for use of the departments remaining in the building. One large room so vacated should have a large skylight replace most of its present roof for use by the drawing department. There are also other extensive roof repairs needed on this building.

The present laundry, an old brick structure, enlarged and altered from time to time to meet the increasing demands, is wholly inadequate, parts of it unsafe for needed modern machinery, is located under a steep bluff where heat is exhaustive in summer and even if desirable its site does not admit of remodelling and enlargement. Its employees are drawn principally from the town of Highland Falls, some two and one-half miles from the present laundry, which, in hot and inclement weather necessitates sending conveyances for these employees or closing the laundry. A new site some two miles nearer the employees has been selected and approved and where a free circulation of air will exist through and about the building. The absolute lack of capacity, insecurity, unhealthy site and remoteness from labor make an immediate appropriation for this building most important.

I do not believe the present laundry building would be permitted to remain in use in any town or city in the country where any supervision is practiced by the authorities over structures or their use.

Besides these extremely urgent items there should be provided in the annual appropriations for the next fiscal year and made available upon approval of the act, funds for the construction of a new hotel and a school building for the children at the Post—from 165 to 200 in number.

Both of these items were brought to the attention of the Senate and House Boards of Visitors during their visits to the Academy

over a year ago, and I am disposed to believe that all appreciated the necessity for these improvements and the importance of the construction of these buildings without unnecessary delay. Not only should these structures be provided for now, but the entire plan of improvement, as shown in the foregoing lists, should be authorized by Congress and appropriations made from year to year until its completion. Appropriations to this end, if made one year, omitted the next, etc., not only will result in expensive construction because of overhead charges, but is apt to produce unsatisfactory and even unsightly results. The plans and estimates shown above in list No. 2 are essentially those already approved by the Secretary of War as a proper continuation of the improvements already made at the Academy. A few items have been omitted as not necessary now or as not of sufficient urgency to be included at the present time.

If an increase of the Corps of Cadets to 1200 or 1300 is authorized this increase should be gradual and distributed over a period of four years, so as not to have the increase occur all in one class, which would have the effect of perpetuating an inequality of classes for all time; i. e., about 850 in one class and 200 to 250 in each of the other three classes.

### **Physical Training and Athletics.**

I quote below the report of Captain H. J. Koehler, U. S. Army, master of the sword and instructor of military gymnastics and physical culture. Attention is particularly invited to paragraph 3 of this report. It is believed that this physical training given cadets should be more extensively utilized at Army posts. The results have been most satisfactory in this department of instruction:

1. This instruction was carried out according to the provisions laid down in the usual program during the past year, and the results obtained were, considering everything, quite up to the satisfactory standard obtained in preceding years.

2. I feel it incumbent upon myself to again call attention to the change made in the schedule of the fourth class course three years ago, with the urgent request that some means may be devised which will obviate the deleterious effect this change has had upon this course in particular and upon the training of the other three classes in general. Attention is respectfully called to my report for last year in which this matter is discussed in detail. Under the arrangement now in force three-fifths of the time devoted to the fourth class course is now lost to that class during the month of May; a period during which the benefits

and progress far exceed those obtained during any other period of this instruction. It is suggested that this matter be brought to the notice of the fourth class committee.

3. Particular stress has been laid upon the preparation of the members of the First Class so that they may be qualified to conduct this work in the service intelligently when called upon to do so. Up to the present time this has not been done except in isolated instances, however, where it has it is very gratifying to report that the young graduates have given a very good account of themselves. What those who have been given this opportunity have accomplished others, if given the chance, would have accomplished equally well. It is therefore urged that the attention of the War Department be again called to the fact that a powerful means to the development of the efficiency of the Army in general is being allowed to go to waste for want of control and recognition from the War Department directly.

4. The instruction in the various forms of physical training, gymnastics, fencing, wrestling, boxing and swimming, coming under my direction, have been decidedly satisfactory and reflects great credit upon the instructors, all of whom have been painstaking in the discharge of their various duties.

5. Competitive athletics have been decidedly successful during the past year, both as regards the number of cadets engaged in them and the successful outcome of games. More should, however, be accomplished by encouraging even greater numbers to participate in the various sports, not for the sake of representing the Academy on any particular team, but for the good the individual gets out of them. If indulgence in athletics is to be confined to a limited few, who are already the superiors of their fellows physically, to the exclusion of those who indulge in them for the sake of physical betterment only; and if winning is to be made the sole and only desideratum, then athletics fail of their object, especially here at the Military Academy, where every student is and must continue to be upon precisely the same plane of equality with every other.

6. Every encouragement is therefore given to cadets to indulge in some form of physical activity during their hours of recreation. They are especially encouraged to take up such forms of exercise that they can continue throughout their active careers in the service, such as gymnastics, fencing, tennis, riding, golf, swimming, etc.

6. It is gratifying to report that splendid results have already been obtained in this direction, as is evidenced by the increasing number who engage in these exercises and the decreasing "gallery" about the fields where the Academy teams are being developed.

### **Academic Departments.**

The work in all academic departments has been most satisfactory and successful. The method of spending much of each recitation period in explaining and imparting instruction has been continued with gratifying results. An instructor is available daily as heretofore in each department to help cadets who desire assistance out of recitation hours and many who avail themselves

of this help undoubtedly improve their class standing, so there is no excuse for a cadet to be found deficient except a lack of ability or a failure to utilize his time properly.

### **Department of Tactics.**

This department besides having charge of the theoretical and practical instruction of cadets in drills of all arms of the service, has, under the Superintendent, supervision of all matters relative to their conduct and discipline, and because of this close relation to the cadets it is, more than any department at the Academy, responsible for the formation of their habits, character and military bearing, and I am pleased to report that the attitude and work of the officers in this department have been most gratifying.

I fully concur in the recommendations made by the head of this department in his report which follows. The title of the department should be changed to "Department of Military Instruction" as recommended; the present title is and always has been a misnomer.

Funds will again be asked to regrade and pave the area of south barracks, and to build concrete tennis courts and a hockey rink behind the new gymnasium.

The Commandant of Cadets, Lieut. Colonel M. F. Smith, submits the following report:

Pursuant to Memorandum No. 33, Headquarters, U. S. Military Academy, West Point, N. Y., May 11, 1915, I hereby submit the following report:

The prescribed courses of theoretical and practical instruction have been carried out during the year.

\* \* \*

At the end of the summer's training, during camp 1914, the Corps made a practice march, August 10 to 15. Cadets of the First Class were assigned daily as officers of infantry or with the field artillery, cavalry, or practical military engineering detail and field problems worked out each day marching from one camp to the next. The route of march was Peekskill, Lake Mohansic, Amawalk Reservoir, Lake Mahopac, Oscawana Lake and Garrison. There were no serious breaches of discipline during the march and important instruction in actual field training was given.

One hundred forty-five new cadets entered on June 15 (a few of them did not report until a day or two later) and about forty more are to report on July 1. It is again recommended that if possible, all new cadets be required to report on the same date in order that a practical system of instruction for all can be carried out. The result of having them report on different dates is most un-

satisfactory in every way, and in addition it keeps first classmen, who are detailed over them, from various drills they should be attending.

A change in the system of cadet appointments was made after graduation 1914. Cadet officers and sergeants were selected from the First Class; cadet corporals from the Second Class; and cadet acting corporals, during camp only, from the Third Class. It is believed that the results have shown this to be an excellent change. More authority has thus been placed in the hands of the First Class and the added responsibilities have undoubtedly developed a number of cadets who would not have been made noncommissioned officers under the old system and would have had little opportunity as privates to show what they could do.

Excellent results were obtained in small arms target practice during the summer. Twenty-one cadets qualified as expert riflemen; 52 qualified as sharpshooters; and 74 qualified as marksmen. It is intended during the coming summer to have one or two field firing problems if there is time.

The First Class went to Fort Wright, August 16 to 23, to receive instruction in coast artillery practice with service charges.

Satisfactory results were obtained with field artillery guns. An increase of noncommissioned officers and privates is badly needed in the detachment of field artillery in order to properly perform the work devolving upon it.

Instruction in riding has been excellent. A great many cadets took advantage Saturdays and Wednesdays, of the privilege of riding on the road. A number of games of polo were played with outside teams.

The following serious infractions of regulations occurred during the year:

For offenses against fourth classmen, resulting in special punishment, 7.

Three cadets were court-martialed for going to Highland Falls.

An investigation concerning violations of the regulations in regard to hazing is now in progress.

Under authority of the War Department, five officers of the last graduating class were kept on duty at the Military Academy for one month to assist in the instruction of new cadets.

The uniform has not been changed with the exception of the adoption of a new service hat, similar to the type generally used by officers in the service, and also a black and grey hat cord.

It is recommended that the name of the department be changed from the Department of Tactics to the Department of Military Instruction. The present name is entirely a misnomer and should be done away with. It is believed that the name suggested is the one most appropriate.

It is again recommended that if practicable, an appropriation be obtained to construct tennis courts and a hockey rink west of the gymnasium. The area of south barracks should be regraded and repaved in accordance with specifications already submitted.

### **Department of Civil and Military Engineering.**

The course in this department includes the "Art of War" besides the subjects indicated by its title. Naturally much stress is

put upon this part of the course, supplementing text-book instruction by lectures and a visit of the entire class to the Gettysburg Battlefield where this great battle is studied on the field itself.

The course was carried out satisfactorily, all cadets being proficient at the annual and semi-annual examinations.

The following report is submitted by the head of this department, Colonel G. J. Fiebeger, professor of civil and military engineering:

The course in civil and military engineering began Monday, September 2, 1914, with a class membership of 166.

The class was divided into halves, A and B, formed of the odd and even numbers according to standing in natural and experimental philosophy, and each half was divided into eight sections, according to standing. Although all sections used the same text-books, by means of omissions the subject matter was divided into five courses graduated to the ability of the students forming the sections. Transfers between sections were made every two weeks.

The course was conducted by oral and written recitations and a written general review, and was completed on December 22. Only three cadets received a mark of less than 73% on the written general review, and were required to take a written examination. All passed this examination.

The course in military engineering and the art of war was begun on January 2, 1915, with a class membership of 164, and was completed on June 4.

After a thorough preliminary study, May 2 and 3 were spent at Gettysburg visiting that battlefield.

There was no examination at the close of the course, since every cadet had made an average of at least 73% on the written recitations.

During the course lectures, illustrated by lantern slides, were delivered on recent wars and sieges.

Captain DeWitt C. Jones, Corps of Engineers, was the assistant professor.

The following officers of the Corps of Engineers were the instructors:

Captain Frederick B. Downing, Captain Edmund L. Daley, Captain James G. Steese, Captain Daniel I. Sultan, Captain George R. Goethals, 1st Lieutenant Frederick S. Strong, and 1st Lieutenant Oscar N. Sohlberg.

All of these officers rendered very satisfactory service.

### **Department of Natural and Experimental Philosophy.**

The course in this department embraces the subjects of mechanics, sound, light and astronomy. There is no course at the Academy that better develops the reasoning powers of the pupils than this course in natural and experimental philosophy.

The course has been satisfactorily conducted by the head of the department, Colonel W. B. Gordon, professor of philosophy. The following report is submitted by him:

During the academic year just closed there have been no changes in the course or administration of the department of philosophy, and the work of the year has been completed without the failure of any cadet in the branches taught in this department.

The year began with 126 members in the Second Class, one of whom was absent on sick leave. At the December examination 12 of the class had failed to make an average of 2.1 on the written general review of mechanics and were examined. All were proficient on this examination.

The class lost two members at the semi-annual examination by deficiency in chemistry—Ranson and Smith, L. L.

During the second term no examinations were held in sound, light and astronomy, as all were passed by making the average on written review required by paragraph 38, R. A. B.

During this term Cadet Hodges (absent, sick) resigned, and Cadet Cardwell was found deficient in conduct, leaving 122 members of the class to begin the first class year.

The following changes in instructors have been made for the academic year beginning September 1: Relieved: Lieutenants John C. Henderson and Lucian D. Booth. Detailed: Captain H. Dunwoody and Lieutenants Walter K. Dunn, H. J. Keeley, and L. A. Nickerson.

### **Department of Mathematics.**

Instruction in mathematics is given cadets for the first two years of their course. It embraces solid geometry, advanced algebra, analytical and descriptive geometry, conic sections, trigonometry, surveying, differential and integral calculus, and for upper sections, least squares.

In the two classes 366 cadets were under instruction and of these forty-nine were found to be deficient at examinations during the year; three of those deficient were turned back one year, and forty-six discharged.

Below is the report of the professor of mathematics, Colonel C. P. Echols. Attention is particularly invited to that portion of the report relative to the effect resulting from the six-year service law, to which I have also asked consideration previously in this report. The department of mathematics suffers as much if not more severely than any other department at the Academy because of that detached service law.

In reply to Memorandum No. 33, Headquarters, U. S. Military Academy, May 11, 1915, the following report of the department of mathematics for the year ending June 30, 1915, is submitted:

*Personnel.*—On June 30, 1914, there were on duty in the department one professor, one associate professor, one assistant professor and fourteen instructors including the assistant professor.

\* \* \*

On June 30, 1915, there are on duty in the department, one professor, one associate professor and sixteen instructors including the assistant professor.

*Instruction.*—The fourth class course was in all respects the same as that of the previous year, alternating with surveying during the last 66 days of the academic term.

Examinations were held in December and June with the following results:

	Number in Class	Deficient	Turned back	Discharged
December.....	204	23	—	23
June.....	179	12	—	12

The third class course was in all respects the same as that of the previous year, the prescribed course requiring recitations daily from September, 1914, to June, 1915.

Examinations were held in December, March and June with the following results:

	Number in Class	Deficient	Turned back	Discharged
December.....	162	5	—	5
March.....	155	0	0	0
June.....	155	9	3	6

None of the three instructors (Lieutenant Perego is relieved in August) lost by the department this year has served a four-year tour at the Academy. This is regretted. Mathematics extends through two years. An instructor must remain two years to cover the subject once. No instructor in mathematics should be relieved, if the best results be hoped for, until he has completed a four-year detail. This gives the student at least an even chance of having an instructor ripened by experience. This is surely the lower limit for efficient training.

With the tour of duty reduced to three years the chances are two to one against the student's having an instructor in mathematics who has taught the subject before. A consideration of these figures to one experienced in teaching carries conviction and the hope that the four-year tour may be continued.

### **Department of Chemistry, Mineralogy and Geology.**

The course in chemistry, mineralogy and geology includes besides the subjects indicated by its title an elementary course in heat and electricity with some practical work in the operation of electrical instruments and machines. It is regretted that time does not afford an opportunity to have a more extended course in the subject of electricity, the importance of which for all Army officers is increasing so rapidly.

The work in this department has been conducted very satisfactorily. The following report is submitted by the head of this department, Lieut. Colonel Wirt Robinson, professor of chemistry:

In compliance with Memorandum No. 33, Headquarters U. S. Military Academy, May 11, 1915, I submit the following report of the department of chemistry, mineralogy and geology:

\* \* \*

The new academy building was used during the past year and has proved entirely satisfactory.

A new five-panel switchboard and a new 15 KW. A. C. generator have been mounted in the dynamo room and were of aid in the practical instruction of cadets.

The collection of minerals has been entirely gone over, the specimens cleaned, labeled and placed in the new cases where they are displayed to far greater advantage than before and are now of easy access to those who may wish to examine them.

### Department of Drawing.

This department instructs the Second and Third classes in drawing. Its work with both classes has been satisfactorily conducted. The following report is submitted by the head of the department, Lieut. Colonel E. R. Stuart, professor of drawing:

Following is the annual report of the department of drawing for the fiscal year ending June 30, 1915:

\* \* \*

The work of the Third Class in drawing has been modified somewhat by shortening the time devoted to instruction in the Use of Instruments, Geometrical and Descriptive Geometry Problems. The time saved has been utilized by transferring Isometric and Oblique Projection, and the sheet on Threaded Fastenings from the second class to the third class year. This provides for the completion of the Mechanical Drawing by February 1 of the second class year.

The shortened time devoted to the preparatory work in use of instruments and geometrical problems has, it is believed, been fully compensated by increased attention to individual instruction.

Increased attention has been paid in third class year to free-hand lettering and tracing.

One cadet was deficient in January, was conditioned, and made up his condition to the satisfaction of the department by March 10, 1915. No cadets were deficient in third class drawing at the close of the year in June.

In second class mechanical drawing, increased attention has been paid to inculcating the ability to represent objects by working drawings fully dimensioned, with sufficient practice in tracing and blue-printing to enable a cadet to

feel that he is conversant with all the operations involved in representing objects. Work in reading drawings was introduced to test the students' ability to interpret drawings. The work was interesting and valuable, and furnished a good test of the working knowledge of the student. The results were very satisfactory.

A course of increased length was given in the subject of topographical drawing and topographical sketching. The results were good, but the work of the department in the subject of topographical sketching will always be hampered by the short period of attendance which leaves only 1 hour and 20 minutes available for actual work. This restricts the operations to the immediate vicinity of the academic building where only close and difficult topography is to be found. The absence of open country with typical ground forms will always operate as a serious handicap to this instruction.

It is believed, however, that at the close of the work, all but a few cadets in the class were well grounded in dismounted sketching, ready to proceed with the practice which can be given on open ground by the department of practical military engineering.

The system of marking previously reported has been discontinued. The advantages of the system were more than counterbalanced by the grave difficulty of determining the proper weight to give to the various elements of the problems. The difficulty is being solved by gradually reducing the length of the problems, so that in the final arrangement no drawing will be undertaken which will require more than a month for its completion by the slowest members of the class. This will remove the chief difficulty of comparative marking without injuring the value of the course.

In the second class topographical sketching, seven cadets were conditioned—two by reason of absence from field work due to sickness, and five for unsatisfactory work. They are engaged in extra work to remove this condition.

During the year I have inspected the work of the Universities of Wisconsin, Minnesota, and Iowa, and conferred with the authorities of the Service Schools at Fort Leavenworth. It is of great value to the course to be able to compare my own work with the like departments of other institutions. The results of the past year were reassuring in that the inspection of the work at these institutions suggested little modification in the work of my own department.

Professor F. G. Higbee of the Iowa State University delivered a lecture to the Second Class. This gave me an opportunity to discuss the work of my department with him. Criticism of the course by professors of other institutions is very valuable, and it is hoped that each year I will be able to have at least one such visiting lecturer.

The work of the assistant professor and instructors during the past year has been very satisfactory. The operation of the detached service law and foreign service requirements have made it unusually difficult to obtain new instructors.

### **Department of Modern Languages.**

The courses in this department were successfully carried on during the year. Three classes (first, second and third) or a total

of 442 cadets were instructed for the academic year just ended, and for the coming year 440 cadets will be under instruction by this department. No other department at the Academy has so large a number, and yet the appropriation for the conduct of its routine business in the way of office help is less than for other large departments at the Academy. The recommendations of the head of this department in the report below relative to this matter are concurred in.

The following report is submitted by the head of this department, Colonel C. DeW. Willcox, professor of modern languages:

The department has had under instruction during the year, the First Class in Spanish, 164 cadets; the Second Class in Spanish, 123 cadets, and the Third Class in French, 155 cadets; a total of 442 cadets. One of the cadets of the First Class was conditioned at the semi-annual examination, but passed satisfactorily on re-examination, March 13, 1915. Two cadets were found deficient and suspended to join the next First Class. In the Second Class, two cadets were conditioned in the semi-annual examination, and passed satisfactorily on March 13. In the Third Class, three cadets were found deficient in French, one of these being also deficient in mathematics and discharged.

The text-books in Spanish remain the same, with the exception of the introduction of Olmsted and Gordon's Abridged Spanish Grammar for use by the Second Class, in lieu of the former edition by the same authors and the introduction of the latest edition of Fontaine's French Prose Composition in lieu of French Prose Composition, Francois. Some changes in text books having been approved by the War Department, which go into effect on September 1, 1915, and will be duly reported next year.

During November and December, by authority of the Academic Board, a new method of instruction was used for the lower sections of the Second Class in Spanish. Instead of having the sections report for an hour's recitation, the two sections which, by former schedule, reported to the same instructor at separate hours, were required to report together at the beginning of the first hour; and the only study required of the cadets in their rooms was that necessary to learn the vocabulary and practice for fifteen minutes in reading. The first hour's work in the section room was devoted entirely to instruction, under the personal direction of the officer instructor, aided by one of the civilian instructors. By this method uniform and rapid progress was made, and an opportunity afforded to direct the work of the cadets along proper lines, instead of requiring the individual cadet to study for himself only such matter as appeared in the text-book before him. This method was extended during January, 1915, to the entire Second Class, with manifestly good results.

Mr. Quevedo, a native instructor in Spanish, resigned on February 1, 1915. His place was filled by Mr. Ramon Jaen, a graduate of the University of Madrid, whose services have proven most satisfactory.

Owing to the European War, no officers were sent to France and to Spain to study languages during the suspension of academic duties. Four, however,

were ordered to Costa Rica to study Spanish. The department wishes again to record its appreciation of the policy of the War Department in sending instructors of languages to work in the countries of these languages. The results have been most beneficial, and will continue to increase in value as the policy is kept up.

The messenger of the department should receive extra duty pay at the rate of fifty cents per diem. I renew my recommendation to this effect.

I also urgently renew my recommendation, made at various times that foreign instructors of the department should receive heat and light allowances of a second lieutenant.

It is a pleasure to report that all the officers of the department have given efficient service during the year. The lack of native French instructors, due to the war, has been in large measure compensated by the voluntary services of Mr. Louis Vauthier, instructor of fencing, to whom the best thanks of the department are due and given.

### **Department of Law.**

Instruction is given in this department on alternate days to members of the First Class. The course includes "Elements of the Common Law," "Constitutional Law," "International Law," and "Military Law." With the brief time available for this course only a foundation in legal education can be acquired, but it is thought that with diligence on the part of the graduates they will be able to handle intelligently the ordinary legal questions they are apt to meet in actual service.

The following is the report of the professor of law, Lieut. Colonel E. A. Kreger:

During the academic year ended on June 12, 1915, the number of assistants on duty in the department of law has been four, viz.: 1st Lieut. Wiley E. Dawson, 21st Infantry, assistant professor, and 1st Lieut. Homer H. Slaughter, 14th Infantry, 1st Lieut. Emile V. Cutrer, 19th Infantry, 2d Lieut. Benjamin C. Lockwood, jr., 22d Infantry, instructors.

The work in law extends throughout the first class year, but includes only 112 recitation periods for each student, the class being divided into halves the members of which report for recitation in law upon alternate recitation days. The prescribed course includes elementary, constitutional, international and military law. The text-books used were those adopted a number of years ago. The text-books on international law were supplemented by the use of the War Department manual on the Rules of Land Warfare, and the text-book on military law by the use of the prescribed Manual for Courts-martial.

Throughout the course the more important legal principles mentioned in the text-books were emphasized by the study and discussion of leading cases, so far as the limited time available permitted. The text-book work was supple-

mented from time to time by means of informal lectures by the head of the department. These lectures usually occupied only one-third or at most one-half of the section room period for the day. The course also included a lecture on the constitution, by Ex-President Wm. H. Taft, a lecture on the law of evidence, by Professor Ralph W. Gifford, of Columbia University, and two lectures on criminal law, by Professor John W. Edgerton, of Yale.

An effort has been made to increase throughout the course the element of practical application of legal principles to facts and conditions with which the student may find it necessary to deal after he shall have become a commissioned officer. To that end not only was a considerable portion of the recitation time devoted to the solution of practical questions but the general review work was arranged so as to give a certain amount of prominence to the application of legal principles to concrete facts as distinguished from the study of those principles considered abstractly. During the course in military law, members of the class were afforded an opportunity to attend sessions of courts-martial held at West Point for the trial of enlisted men; and near the close of the work in military law the members of the class were required to participate in a moot court-martial exercise. The course was closed by devoting the section room periods for somewhat more than a week to library work, with a view to acquainting the members of the class with the proper method of consulting a law library in the solution of practical questions. The results obtained have been such as to encourage the personnel of the department to further efforts to extend the element of practical or applied work throughout the course.

All of the 164 members of the class were found proficient in the course. Of these only seven were required to undergo examination in elementary law, two in constitutional law, four in international law, and five in military law—all others having attained, in the written reviews held immediately after the completion of each subject, the rating which serves, under the regulations, to exempt the student from examination.

Upon his own request one of the instructors on duty in the department, Lieutenant Lockwood, has been ordered (Par. 25, S. O. 122, W. D., 1915) to take station in New York City from July 5 to August 14, 1915, for the purpose of attending a summer session of the Columbia University School of Law. He has arranged to take a course in evidence and in constitutional law. This request was made by Lieutenant Lockwood upon the suggestion of the undersigned, who believes that to send at least one instructor to a standard law school for a special course during each academic vacation at this institution cannot fail to be the means of strengthening the work of this department.

### **Department of Practical Military Engineering, Military Signaling and Telegraphy.**

All four classes at the Academy receive instruction in this department of one kind or another at various periods during the year. Its work is largely practical and is of great value in fixing in cadets' minds the meaning and purpose of their study in related subjects.

The courses have been conducted very satisfactorily.

Below is an extract from the report of the head of this department, Lieut. Colonel M. L. Walker, Corps of Engineers, professor of practical military engineering.

\* \* \*

*First Class.*—During the summer drill period—from July 6 to August 5—one-third of the class attended daily for instructions in reconnaissance and sketching.

The following program was carried out on the dates quoted:

1. Preliminary Position Sketch—dismounted—contouring an outline map of part of reservation, July 6, 8, and 9.
2. Position Sketching, individual, dismounted, area in vicinity of Garrison—east of Hudson River, July 10, 13 and 14.
3. Preliminary Combined Position Sketch—dismounted—Base Line—West Point Hotel to forester's lodge, July 15, 16 and 17.
4. Combined Position Sketch—dismounted—Base Line—north and south from Congers station. Transportation by rail and wagon. All day. Lunches carried. July 20, 21 and 22.
5. Preliminary Road Sketch—dismounted—east side of Hudson River, July 23, 24 and 27.
6. Road Sketching—mounted—cadets in pairs—road circuit—West Point—Eagle Valley—Highland Falls. July 28, 29 and 30.
7. Combined Road Sketch—mounted—cadets in pairs.
  - Roads (1) West Point Hotel to Ft. Montgomery,
  - (2) Catholic Chapel via Stony Lonesome to Village Farm and beyond,
  - (3) West Point Cemetery to Long Pond.
 August 1, 4 and 5.

The idea in the work in sketching is to take it up with the First Class, immediately succeeding their work along this line as second classmen in the department of drawing, so that the work progresses continuously. This proves quite a satisfactory arrangement and will be adhered to.

During the practice march of the Battalion of Cadets—August 10-15—twenty-eight cadets daily constituted the reconnaissance and sketching detail, road and area sketches were made and reproduced daily, the work being creditable to the cadets and giving them a fair idea of what would be possible in field operations.

During September and October one-third of the First Class attended instruction on all drill days, work being devoted in September to military signaling and during October to improvised bridges, rigging and use of tackle, and to becoming familiar with the general characteristics and methods of handling the various high explosives used in military demolitions.

From April 1 to May 25, 1915, the First Class attended P. M. E. instruction as in the fall, the work covering the laying out and construction of a section of an infantry field work involving the fabrication and use of all varieties of

revetting materials, including reinforced concrete. Various obstacles were employed and also the principal types of loopholes installed.

Demonstrations were given of felling trees and breaking stones by high explosives, and of the placing and firing of ground mines and fougasses.

*Third Class.*—This class attended P. M. E. instruction during the period of the summer encampment, one-third each day, from 8 a. m. to noon.

The work includes visual signaling, knots, and lashings, the use of tackle, rowing, construction of bridges with the U. S. bridge equipage, and the operation of ferries with the regular bridge material and with improvised floats.

*Fourth Class.*—During the last sixty-six days of the academic year this department alternates with mathematics, each department getting one-half of the class each day.

The first twenty days were devoted to theoretical instruction, including written general review and the written examination of such cadets as did not make proficient on the general review. During the period of theoretical instruction a complete instrumental equipment was kept in each section room, and all cadets were encouraged to familiarize themselves with all instruments by actually handling them. In addition, during release from quarters, instruments were at all times at the disposal of cadets under the supervision of qualified noncommissioned officers.

During the remaining thirteen days, cadets attended instruction in surveying from 8 a. m. to noon, being required to do no study outside of these hours.

These four-hour periods are devoted to a series of exercises carried out in the field by the cadets, under supervision of the instructors, the cadets rotating in the various duties, but each cadet being required to keep the full notes which are each day turned in for inspection by the professor and instructors. The exercises are designed to cover the field of probable duties of army officers and are as follows:

1. Measurement of base lines and determination of declination of the needle.
2. Tracing out contours and plotting same.
3. Survey of a polygon by azimuth method.
4. Differential levelling and establishing a bench mark.
5. Simple triangulation.
6. Laying out a simple curve.
7. Plane table survey.
8. Profile levelling.
9. Transit and stadia traverse.
10. Staking out a building.
11. Plane table and stadia traverse.
12. Cross section levelling.
13. Adjustment and care of instruments.

The above does not indicate the order in which exercises are given, this being decided by the limitation of the instrumental equipment, but the work is so arranged that for each party—usually consisting of four cadets—a map of a small portion of the reservation is completed.

Through the courtesy of the Chief of Engineers, U. S. Army, a large number

of surveying instruments were this year loaned from the Washington Barracks Depot for the period March 1 to June 10, 1915, and instruction was much facilitated thereby.

*General.*—During the year the equipment of this department along all lines has been maintained by expenditure of the annual appropriation of \$2000. The engineer department has supplied ponton material, except vehicles, to complete one division each of advance guard and reserve equipage. Information was received that vehicles will be supplied as soon as they can be properly cared for.

The appropriation of \$3300 now available for a corrugated iron ponton shed will give ample storage for the above, and as this building will be completed this fall the vehicles will be requisitioned for.

The Signal Corps has promptly supplied all material and apparatus needed for signal instruction, including skilled assistance in the operation of the field radio sets.

### **Department of Ordnance and Gunnery.**

The course in this department has been conducted very satisfactorily. There have been no material changes in the work covered.

The following is the report of the head of the department, Lieut. Colonel W. H. Tschappat, professor of ordnance and gunnery:

The following report of the principal operations of the department of ordnance and gunnery and the office of the post ordnance officer, during the fiscal year ending June 30, 1915, is submitted:

*Department of Ordnance and Gunnery.*—Except for slight changes in subject matter from time to time, the course in ordnance and gunnery throughout the year was the same as that for the year ending June 30, 1914.

Five cadets were required to take an examination in December, 1914, and none in June, 1915.

Practical instruction during the year included twenty-four hours shop-work in the machine and blacksmith shop during February and March. This instruction has considerable value, and, it is believed, the time devoted to it should be somewhat increased.

*Ordnance Material.*—The armament of the Post has been kept in good repair during the year. Changes and alterations ordered by the War Department have been incorporated in the field and seacoast artillery at the Post.

In addition to the regular allowance of ammunition for small arms target practice for officers and enlisted men and \$5,000 for such practice for cadets, the regular allowance of field gun ammunition was furnished for target practice for the field artillery officers stationed at the Post and a liberal allowance of field and seacoast ammunition was furnished for target practice for cadets.

*Ordnance Laboratory.*—In addition to the ordinary repair of these buildings the following new installations have been made:

Steam heat and electric lights installed in ordnance laboratory.

Eight Cooper-Hewitt electric lights installed in machine and carpenter shops.

Electric lights installed under sheds of laboratory.

Eight "South Bend" lathes, 13-inch swing, 5-ft. bed installed in machine shop.

### **Department of Military Hygiene.**

The Third Class has one month's instruction in this department. The work is valuable and practical, and has been very satisfactorily conducted by Lieut. Colonel H. A. Shaw, Medical Corps, and his assistants.

The following is the report of the head of this department:

The course in military hygiene was begun on September 1 and completed October 6, 1914.

In accordance with the custom of previous years, medical officers were detailed for temporary duty at West Point as instructors in the course, the following named reporting for this duty: Captains Will L. Pyles, Philip W. Huntington, Arthur N. Tasker and Mark D. Weed, Medical Corps, U. S. Army.

The section room work in the course was based on Lieut. Colonel Keefer's "Military Hygiene"; the use of this new and up-to-date manual as a text-book has greatly improved and systematized this part of the instruction.

Lectures were given by Professor A. C. Abbott of the University of Pennsylvania, September 25, 1914, on "Transmissible Diseases"; by Col. Valery Havard, U. S. Army, September 28, 1914, on "Sanitary Lessons of the Russo-Japanese War"; and by General A. A. Woodhull, U. S. Army, September 30, 1914, on "Sanitation as a Military Factor".

A new departure was made by giving practical instruction to small groups of cadets in the application of the principles of first aid, taking up the emergency treatment of wounds, haemorrhage, fractures and accidents. After a demonstration by the instructor in the application of the first aid packet, improvised tourniquets, splints, etc., the cadets were required to repeat the manipulations. These exercises proved to be so valuable and instructive that the six periods heretofore assigned for lectures will be devoted to practical first aid work.

### **Department of English and History.**

The course in this department has been carried out successfully and satisfactorily.

The following report is submitted by the head of this department, Lieut. Colonel L. H. Holt, professor of English and history:

In accordance with Memorandum No. 33, Headquarters, U. S. M. A., May 11, 1915, I submit herewith the annual report of the work of the department of English and history during the year 1914-1915.

The quota of instructors has been maintained at ten, five in each subject, thus allowing a continuance of small sections and careful attention to the in-

dividual needs of each cadet. The operation of the detached service law has, during the academic year, caused two instructors to be relieved. One other instructor was relieved as a result of protracted illness. These places were filled by new instructors who, though inexperienced, took up their duties with energy and enthusiasm.

*English.*—Emphasis upon individual instruction during that part of the course devoted especially to composition work has been continued. There has been a noticeable improvement in the ability to use clear, direct, and concise English in written work.

The special course, introduced last year for the first time, was continued this year. The scope of the dramatic reading this year was the same as that of last year, but the readings in poetry were changed in accordance with a plan to cover in approximate chronological order the chief work of a few leading English poets. Thus the readings were in Chaucer's "Canterbury Tales", Milton's "Paradise Lost", Wordsworth's "Prelude and Excursion", Coleridge, Byron, Browning, and Masefield. With the study of Tennyson and other poets in the regular course, the special course should have afforded the cadets in the upper part of the class a fair idea of the nature and extent of the field of English poetry.

Lieutenant R. C. Richardson, jr., deserves special mention for the efficient way in which he has performed the duties of assistant professor in the English work.

*History.*—The importance of an understanding of modern history for the graduates of the Academy together with the limited amount of time which can be allowed to history study in the curriculum of the Military Academy had led me to advocate a restriction of the course to the period beginning with the French Revolution. This change has been approved, with a change in the requirements for the entrance examination in this subject.

The text-book in political science has been replaced by a book on government, written with the special needs of the cadets in mind. The new book was used for the first time during the past year.

The Academic Board has approved the extension of the special course to the history work. During the spring term a beginning was made in such special course by a series of talks to the upper sections by the instructors on selected subjects of general interest, as South America, Alaska, The Tariff Taxation, Legislative Methods, Functions of the Stock Exchange, Banking, etc. During the next few years it is expected that the work in this special course will be more completely systematized.

Lieutenant R. M. Lyon deserves special mention for the efficient way in which he has performed the duties of assistant professor in the history work.

*Lectures.*—As in previous years, the work of the department has been supplemented by lectures from representatives of other institutions. The lecturers during the past academic year have been:

- President Hadley of Yale University, on the Study of History,
- Professor Henry A. Beers of Yale University, on Shakespeare's Contemporaries in the Drama,
- Professor Allen Johnston of Yale University, on the Question of Home Rule for Ireland,
- Professor George H. Nettleton of Yale University, on Sheridan the Dramatist,

Professor John C. Adams of Yale University, on The Age of Johnson,  
 Professor James H. Robinson of Columbia University, on The Balkan Wars,  
 Professor Edward B. Reed of Yale University, on Burns and his Poetry.

In conclusion, I wish to commend most heartily the loyal enthusiasm and energy with which assistant professors and instructors have cooperated with me in the work of the department.

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### Children's School.

This school has been in charge of Captain R. G. Alexander, Corps of Engineers, and has been satisfactory in spite of difficulties.

The salary of the principal and other teachers is inadequate and much below that paid in public schools of like grade and character. An increase will be asked for in my estimate of funds for the next fiscal year.

As will be seen in the following report, two grades—48 pupils—were forced to use the basement of the cadet chapel for a school room due to a lack of space in the present school building. This is most unsatisfactory in results. The room is poorly lighted by small windows on one side only, has no suitable toilet conveniences, and is on a hill, 150 or more feet above the homes of the children attending, and in the winter time is frequently accessible only to the larger and stronger ones able to wade through the snow. It is also distant from the school building, and the teacher is unable to have the help of the principal and other teachers. A new school building should be built in keeping with school buildings now built for our State public schools.

Following is the report of the officer in charge of the school:

The organization of the school was as follows:

	Grade.	No. of Pupils.
Mr. Edgar P. Paulsen, principal.....	} 8th	16
	} 7th	15
Miss Therese Schattan.....	} 6th	18
Miss Margaret Noonan.....	} 5th	18
Miss Amy J. Driscoll.....	} 4th	27
	} 3d	21
Miss Anna M. O'Connor.....	} 2d	18
	} 1st	21
<b>Total.....</b>		<b>154</b>
Number of boys registered.....		78
Number of girls registered.....		76

Mr. Paulsen was employed at the beginning of the school year to fill the vacancy caused by the resignation of Mr. Edmund Cocks; likewise Miss Amy J. Driscoll to fill the vacancy caused by the resignation of Miss Agnes Meagher. In addition to the regular studies of the grades, Miss Driscoll instructed the girls of the 3d and 4th grades in sewing and Miss Noonan gave similar instruction to all girls of the remaining six grades.

During the latter part of January the entire eighth grade, sixteen pupils, took and successfully passed the Regents' Examinations of the University of the State of New York in the preliminary subjects. The average mark for the class on the examination was  $88\frac{2}{3}\%$ , which is considered a very creditable showing. All sixteen pupils of this grade were therefore graduated from the school on February 1 and the majority of them at once entered high school at Highland Falls. The number of graduates for the year was increased to twenty-three when seven more pupils qualified on the Regents' Examination in June.

Special efforts have been made for the past few years to hasten in every way the preparation of the older pupils for high school work, as many were above the normal age for the eighth grade. As a result the age of pupils in the various grades has been reduced to what it normally should be, and it is anticipated that hereafter pupils will be graduated from the school in June only.

The progress of the pupils during the year was satisfactory as attested by the results of the Regents' Examinations and the regular grade examinations. As in the previous year the Palmer System of penmanship was used with good results. Much practical work in sewing was accomplished by the girls of the higher grades including the making of models and also of full sized dresses and other garments for themselves.

Considerable attention was paid to athletics, particularly for the boys. Though handicapped by lack of playgrounds, baseball and football teams were organized and games played with juvenile teams from nearby towns and academies. The results were manifest in improved deportment and increased interest in school work. Suits for the football team were presented by Chaplain Silver.

A new departure this term was the instituting of a monthly inspection of the school building and pupils by a medical officer under the supervision of the Post surgeon. The primary object was the control of the spread of contagious diseases. In addition to this it is believed that the inspections will be of value in the detecting of cases of adenoids, defective eyesight, etc., that might otherwise remain undetected and seriously interfere with the education of the children affected.

A flag and flagpole having been presented to the school by the West Point Spanish War Veterans, the flag was raised on Memorial Day with appropriate ceremonies participated in by the pupils of the school, the West Point Boy Scouts, and the various patriotic societies of the Post.

For lack of room in the main school building, the third and fourth grades, as in the preceding year, attended in the basement of the cadet chapel and their work was seriously handicapped thereby. The room used was not designed for a schoolroom, and is only fairly satisfactory for the purpose. As before, the isolated and exposed location of the chapel materially cut down the at-

tendance in these two grades during inclement weather. The teacher there, in addition to the regular third and fourth-grade work, has to instruct in sewing and writing without the assistance of the teachers specially qualified and designated to supervise that work in the other grades, and was at the same time deprived of the immediate support and assistance of the principal of the school.

It is earnestly hoped that the present school building, unsatisfactory in both size and arrangement, may be replaced in the near future by an adequate one, and it is believed that a building of the social center type now being built in many cities, would best fit the peculiar needs of this Post. At present, for lack of any room, neither school entertainments nor joint exercises of the several grades can be held, nor is there any common place on the Post for enlisted men and their families to meet for recreation and social pleasures.

Such a building containing sufficient class-rooms and rooms for manual training and domestic science, together with a swimming pool and a combination gymnasium and auditorium has rather recently been built in Lexington, Ky., and has proven very successful. Judging from a photograph it is a building well made and of pleasing appearance. The cost was only forty-five thousand dollars.

With regard to salaries, it is recommended that when possible the salary of the principal be increased to an amount equal to that received for similar work in neighboring towns. Otherwise it will be impossible to secure and retain a man of satisfactory qualifications and experience.

The appropriation of \$4120 for the maintenance of the school was expended as follows:

Pay of principal .....	\$1080.00
Pay of four grade teachers .....	2400.00
Pay of janitor .....	100.00
Purchase of books, stationery and other supplies .....	537.69
Balance on hand at end of year .....	2.31
	<hr/>
Total .....	\$4120.00

### Headquarters Office.

The work of this office has been satisfactorily and efficiently handled by Captain C. C. Carter, Coast Artillery Corps. His recommendations in paragraphs 2, 3, and 4 of his report are approved and urged:

1. On December 3, 1914, pursuant to General Orders, No. 38, these Headquarters, 1914, I relieved Captain George Vidmer, Cavalry, as adjutant of the United States Military Academy, secretary of the Academic Board, and in command of the U. S. Military Academy Band and Detachment of Field Music, and Post Non-commissioned Staff.

2. *Headquarters Offices.*—The office force as at present organized consists of the chief clerk, Superintendent's stenographer, disciplinary, academic, military, mail and record, and the printing and binding divisions. The office

force for all these divisions, excepting the printing and binding division, consists of nine civilian and five enlisted clerks; in the printing and binding division there are employed six civilians and six enlisted men. The work of all departments of the office has been satisfactorily performed during the past year, and so far as the current work is concerned has been kept up to date and not allowed in any case to get behind. In the administration of the office there is pressing need for an accurate index to the cadet records through which the full record of all cadets who at any time were members of this institution can be obtained without reference to more than one document. At present, in order to get information usually asked for in connection with former cadets, it is necessary to refer to three or more documents. The academic division, to which this work of permanent cadet records is assigned, is not able to keep up to date anything more than the current work involved in that division. It is believed that if another extra-duty detail were added to the division the index before referred to could be completed in a limited time and kept up to date. If this is not done the work of bringing up the permanent records and putting them in easily available form must give way to urgent current work such as candidates' examinations, certificates, academic records, etc., and can receive attention only at odd times. This means that it will probably be years before this part of the work is in the shape in which it should be. The work is planned and the necessary record cards have been printed. The records of the Academic Board are kept in this division and it is absolutely essential that they be up to date at all times. This has been done.

The current work in the printing and binding division has been satisfactory, but in many instances it has been necessary to rush the work unreasonably. To avoid complaints, and to get the work done as nearly as practicable on time requires a great deal of care and supervision on the part of the head of this division, and on account of work coming in late and being required as soon as practicable, a rearrangement of the schedule is often necessary. The amount of work in the printing and binding division has increased during the past twelve months approximately 25%, and this work has been carried without additional force.

The office force as a whole has rendered most efficient and loyal service. Very little time has been lost through illness, and leaves of absence authorized by law have been arranged with regard to the urgency of the work in the office.

The following recommendations as regards increased pay are made:

An increase of \$300 is requested for the chief clerk at these headquarters who does not now receive the pay of other chief clerks at the various military headquarters although the duties of the position are just as responsible, if not more exacting, as the work of the Military Academy embraces all that is done at any large headquarters, and in addition thereto the work incidental to the Military Academy proper. A similar request has been submitted for the past six years, and I earnestly recommend that the increase be allowed this year.

An increase of \$600 is asked for two clerks who are now the heads of important divisions, and who are now receiving \$1200 and \$1000 each, which is entirely incommensurate with the duties performed by them. By increasing their salaries to \$1400 each will only give them what their duties warrant and

place them on a status with two other clerks performing similar duties and who are paid \$1400.

The assistant to the head of the military division has been in the service a number of years and an increase of \$100 in his salary is recommended.

3. *U. S. Military Academy Band.*—The band as at present organized consists of one leader who is also the teacher of music, one band sergeant who is assistant leader, twelve enlisted musicians at \$45 each per month, twelve at \$36 each per month and sixteen at \$30 each per month.

There has been no increase in the personnel of the band since 1900, at which time the strength of the Corps of Cadets was about 440 men; the present strength of the Corps is 647. At reviews, daily parades, and other formations where the entire corps is present and which the band attends, the volume of music is not sufficient to give satisfactory march music. The amount of brass in the band has been increased so far as is commensurate with proper balance for a military band. It should, however, be increased still further and this should be done by adding additional numbers to the band.

It is recommended that the band be increased by ten enlisted musicians, rated as follows:

Three at \$45 each per month, three at \$36 each per month, and four at \$30 each per month. This will admit of adding the proper volume to the band music.

4. *The Detachment of Field Music.*—The field music as at present organized consists of one sergeant, one corporal, and 22 privates; the proportion of noncommissioned officers to privates is entirely too small, either for proper administration or for proper advancement in the field music. Little, if any hope can be held out to any private in the field music that he can within any reasonable length of time become a noncommissioned officer. For purposes of administration and in order to hold out to these men something in the way of advancement one remedy is to increase the field music by three noncommissioned officers; i. e., one sergeant and two corporals. This would give approximately the proper ratio of noncommissioned officers to privates in a military organization, following the system used throughout other branches of the service. However, on account of the duties assigned to the field music it is believed that the same result, if not better, could be obtained by increasing the enlisted strength by one corporal only, and instead of 22 privates have 10 privates first class, with pay of a private 1st class engineers, and 12 privates. With the additional noncommissioned officer thus recommended proper administration can be carried out, and something can be held out in the way of advancement to privates of the field music. Under the present organization it is impossible to get men of prior service to enlist for the field music, and they usually leave after one enlistment. It is believed that this condition would be remedied by the recommendation made above.

### Quartermaster's Department.

The work of this department has been efficiently and satisfactorily performed under charge of Major E. J. Timberlake, Coast Artillery Corps.

The report of the quartermaster quoted below is so complete as to require no comment. Attention is particularly invited to his remarks on the following points:

Army Service Detachment and the advisability of its increase (paragraph 3);

Civil employees and the Civil Service Regulations regarding them (paragraph 4);

Increase of appropriation for maintenance of post cemetery (paragraph 6);

Sale of machinery not suitable or needed (paragraph 9);

New laundry (paragraph 15);

Construction of new quartermaster storehouse (paragraph 16);

Repairs to west academic building (paragraph 17);

Repairs and improvement of roads, etc., increase of appropriation needed (paragraph 18);

all of which items are approved and appropriate action by Congress urged.

The report of the quartermaster follows:

1. Report of the operations of the Quartermaster Corps, quartermaster and disbursing officer, United States Military Academy, in charge of construction, and treasurer, Special Contingent Fund, for the period from July 1, 1914, to June 30, 1915.

2. *Quartermaster Corps*.—The general duties of the Quartermaster Corps, as defined in paragraph 1000, Army Regulations, 1913, are carried on by this office under the direction of the Superintendent and in accordance with orders and instructions of the War Department making this an independent Post. With respect to the work carried on by the enlisted men of the Quartermaster Corps and under expenditures from funds of the Quartermaster Corps, this office is governed by the various circulars and instructions of the Quartermaster General.

The work pertaining more directly to the Military Academy and provided for in the Appropriation Act for the support of the Academy, is carried on and expenditures made under the direction of the Superintendent as authorized by the Secretary of War. Besides the reduction in clerical work mentioned in last report, further reduction has been made by combining the two cash books, formerly used for Military Academy appropriations, into one. This also simplifies the records. The office employees have been reorganized on a much more satisfactory and efficient basis.

Since the last annual report one additional sergeant, chauffeur, and one sergeant, fuel overseer, have been authorized for the quartermaster corps detachment. The sergeant, chauffeur, is in charge of the launch "Florence", and the fuel overseer performs duties prescribed by G. O., 57, W. D., 1914. It has been recommended that the detachment be further increased by one

sergeant, forage-master. The work required of the detachment has been performed satisfactorily.

3. *Army Service Detachment.*—This detachment is provided for in the annual appropriation for the support of the Military Academy and has an authorized strength of 201 enlisted men. This organization constitutes the principal enlisted working force here. They are employed as teamsters, chauffeurs, clerks, custodians in the academy buildings, messengers, mail carriers, telephone operators, watchmen, and as mechanics and laborers in the repair and improvement of the buildings, grounds, roads, docks, and other public utilities pertaining to the Academy. The detachment has met the requirements in a satisfactory manner within its capacity.

This detachment should be increased so that certain civilian employees could be dispensed with. The idea in forming the Army Service Detachment was that certain classes of permanent civilian employees should be replaced by an enlisted force of men capable of performing the necessary work. The growth of the Academy has brought up new needs and duties much beyond the present strength of the detachment to perform, and from time to time it has become necessary to hire civilians. To carry out the idea of the Army Service Detachment to replace civilian mechanics and laborers as far as practicable, and to relieve other detachments from calls upon them, an item for the next Military Academy estimates will ask for an increase in the detachment. The number of noncommissioned officers in the detachment is far below the proportion in other organizations. By all reasoning it should be greater. Throughout the year the work to be carried on requires a large number of laborers working on numerous jobs, necessitating overseers. Good overseers, those who will require the laborers to keep diligently at their work, and work in an efficient, advantageous manner, are few. A good overseer will do much more and better work with the same gang of men, than a poor indifferent overseer will, and yet not work the men any harder. These overseers should be enlisted men and should be noncommissioned officers, sergeants.

Numerous other men are performing duties that if they were in the Quartermaster Corps, would be sergeants, as forage-master, blacksmiths, carpenters, electricians, and various mechanics. They should have in this organization the same rank they would have, were they members of the Quartermaster Corps, and performing similar duties.

4. *Civilian Employees.*—In addition to the civilian employees provided for as "Permanent Establishment" in the Military Academy Appropriation Act, it has been necessary to employ a varying number of civilians to perform the work provided for in the lump-sum appropriations. Those employed depends upon the amount of work provided for, but which cannot be done by the permanent employees and enlisted men of the Quartermaster Department. The employment under the lump-sum appropriations is regulated by letter from the Secretary of War, dated April 29, 1913, published in Memorandum 15, Headquarters United States Military Academy, May 3, 1913.

Beginning October, 1914, Civil Service Regulations drawn especially to cover the employees of the Academy, not covered by regular Civil Service rules, were received from the War Department and put in force. They have

had now eight months' trial, but until the outdoor season came on, the real trial did not begin. The regulations are believed to be advantageous for employees on a permanent or practically permanent basis, but for a majority of the employees on per diem basis it hampers the work greatly. A great many men on the per diem basis are hired for work of a temporary nature, two weeks, a month, not longer than three months. The best men do not care to go to the trouble to get their names on the eligible list for such jobs, or if they do, many times they have employment elsewhere, and we are compelled to take inferior men, whose names are on the eligible list, while if the rules did not apply, we could hunt up more desirable, better men. A recommendation will be made to have the regulations modified so as not to apply to per diem men on temporary jobs. The correspondence of the office has been increased considerably as a result of the rules, without any material benefit being derived from them.

5. *Transportation.*—The usual work of police, fuel, forage, freights, etc., has been performed satisfactorily by the transportation at this Post during the fiscal year 1915. The three large gasoline trucks have proven most satisfactory as an economical and expeditious means of handling all classes of freight.

In December, 1914, two Buick three-quarter ton trucks for jobbing work were purchased at a cost of \$1290 each. These trucks have proved themselves almost invaluable in getting mechanics, tools, materials, etc., to and from the many small jobs of repair about the Post, and for deliveries about the Post.

February 27, 1915, a trailer built by the Trailer Transportation Company, was received for trial and report. This was attached to one of our large freight trucks and tested out under various conditions. It is not believed to be of any value for use at this Post. The only time it might be of advantage would be when the cadets go on their week's march and camping trip in the summer. Its cost, \$750, would prohibit its being kept for this purpose alone.

The work about the Post the past year has shown the need of dumping wagons, and the Quartermaster General has authorized the purchase of three such wagons, and they will be purchased in the immediate future.

6. *Post Cemetery.*—The number of interments in the cemetery during the fiscal year was 42, making a total to date of 1577.

The care and maintenance is provided for in the Military Academy appropriations. The present appropriation \$1500 is not sufficient to maintain it in a suitable manner. The increase in the number of interments, and the increase in space occupied requires increase in the work. It is recommended that an appropriation of \$2000 be asked in the 1917 estimates. In some previous years this amount has been appropriated, and it is again very necessary.

7. *Fire Department.*—The appropriation of \$1000 for purchase and repair of fire apparatus has been expended as follows: 1 automatic ring expander; 66 hand fire-extinguishers; 4½ dozen brass expansion rings; 12 cans fyro fluid for charges; 730 charges for fire-extinguishers; 1 dozen hooks for extinguishers; 700 feet fire-hose; 24 hydrant wrenches. It will not be necessary to buy any hose during the fiscal year 1916.

The Military Academy Appropriation Act 1915 carried an item of \$2500 for the purchase of a gasoline fire-engine. After corresponding with several

makers, bids were invited for a suitable engine on specifications prepared in this office. There was only one bidder, whose bid was far in excess of the appropriation. A contract was finally made with the Waterous Engine Works Company and they delivered and tested satisfactorily a gasoline fire-engine, horse drawn, April 1, 1915. Its cost with all equipment was \$2500. It is superior in efficiency to any engine the Academy has had, and on account of its light weight, two horses can draw it to any place it will be required to go, with ease and speed.

The 1916 appropriation carries an item of \$10,000 for a motor-driven gasoline fire-engine. Bids are being invited for this engine and when delivered it is thought the Academy will be well equipped with fire-apparatus. This apparatus will carry 1200 feet of hose, several ladders and fire-extinguishers, making it a complete fire-fighting outfit in itself.

Two fires occurred during the year. One, August 1, 1914, when a portion of the artillery stable burned, causing a loss to the building of about \$21,000. The second fire was the quartermaster stable No. 2, January 25, 1915, causing a loss of about \$7,000.

The fire department did excellent work in both cases, saving three-fifths of the artillery stable, and preventing spread of the fire to nearby buildings in the second case.

On the Post there are 111 sets of quarters and buildings not equipped with the hand chemical fire-extinguishers. A great part of the 1916 appropriation for fire-extinguishing apparatus will be expended towards equipping all buildings.

In each of the main sally-ports of the two cadet barrack buildings has been placed 450 feet of fire-hose on suitable racks, always available for cadet use in any of the nearby buildings.

8. *Power Plant.*—During the fiscal year 8112 tons of buckwheat coal have been purchased at a cost of \$25,471.38.

The Military Academy appropriation provides for two additional boilers of same capacity as those now installed. When added, the plant will always have a reserve boiler capacity of 50%. These two boilers are to be equipped with automatic stokers which will add to their efficiency and will permit a cheaper grade of coal being used. It is proposed to equip the other boilers with automatic stokers as funds will permit. When so equipped the plant can be operated at a saving of about \$10,000 per year, with a greater efficiency, and the reserve boiler capacity will be 100%.

It is recommended that the item for altering the coal-conveyor apparatus be again included in the Military Academy estimates. This alteration is necessary to enable the conveyor to be used in all winter weather.

9. *Old Power Plant.*—Since my last report, this plant has been put out of commission. A heating plant was installed under the quartermaster shops, and four motors were rewound to operate from the new power plant, so there is no use for the old power plant as a power plant. The machinery will not be further needed or suitable, and it is recommended that it be sold through advertisement and bids.

10. *Heating and Ventilating System.*—In May, 1914, Mr. John Turner, the heating and ventilating engineer, resigned. His successor, Mr. P. J. Bryant,

is a live, wide-awake, progressive employee, and has worked untiringly at the system, and has the system in better condition than it has been for some years. At his suggestions various improvements have been made, resulting in efficiency and economy.

11. *Gas Plant.*—The new superintendent of the gas plant reported for duty. Numerous minor repairs about the plant have been made, some gas-mains extended. One of the benches was renewed in September, 1914, at a cost of \$412.10 and two will be renewed at an early date, now under contract at a cost of \$848.70.

With improvements in purifiers the quality of gas has been greatly improved. The revenue derived from gas, coke, and tar is covered into the Special Contingent Fund and applied to the payment of employees at gas works; purchase of gas coal, if the appropriation is not sufficient, and for miscellaneous expenses not otherwise provided for. Seventeen new gas meters have been installed; seven in buildings not heretofore equipped, and ten replacements for old worn-out meters.

Gas has been charged at the rate of 75 cents per 1000 cu. ft.; coke at \$1.25 per 18 bushels; and tar, if available, is sold to the highest bidder. The rate for gas should be raised. The cost to manufacture has exceeded the price sold throughout the year. It is recommended that the price for the next year be placed at 80 cents per 1000 cu. ft. The cost of manufacture has varied between 77 and 88 cents per 1000 cu. ft. The average for the eleven months (the cost has been figured) is 80.3 cents per 1000 cu. ft.

During the past twelve months 13,762,000 cu. ft. of gas, 123,461 bushels of coke, and 16,485 gallons of tar were manufactured. 1,648.5 tons of coal were used for this purpose.

12. *Special Contingent Fund.*—This fund is derived from rentals and the sale of gas, electricity, coke, tar, wood, and miscellaneous sources. Expenditures from this fund are made under the direction of the Superintendent, under provisions of Chapter 212, Revised Statutes, Act of Congress, approved May 1, 1888.

The statement of this fund for the fiscal year is included in report No. 3.

13. *Hotel.*—As stated in previous reports, the hotel is very old and inadequate, with few if any modern conveniences and necessities, but as far as the building permits, it has been operated in a generally satisfactory manner by the present lessee.

Expenditures on hotel for fiscal year 1915 were \$495.88.

14. *Forestry Department.*—A woods foreman and four woodsmen have been employed during the year, and other laborers have been hired from time to time as required, all paid from the Special Contingent Fund. Since July, 1914, 2,434 cords of wood, 200 chestnut poles, 5,131 cross-ties have been cut. The most of this wood is unfit for domestic consumption and is ordinarily sold for use in brick kilns. All the above material will be sold during the fiscal year 1916. Wood on hand last report was sold and the proceeds \$3,828 will be covered into the Special Contingent Fund.

In addition to the above, about 165,000 ft. of logs for rough lumber have been turned out. This lumber is used about the Post for small bridges, stable floors, hand-rails, etc.

The following trees were planted: 15,000 two-year old European larch; 10,000 two-year old Norway spruce, and 20,000 two and three-year old white pines. In addition, 108 shade trees were set out on the Post.

15. *Laundry*.—Attention is again invited to the poor condition of the old laundry building. The building has been braced and secured as much as possible. It never was built with the view of being filled with heavy machinery and it is not considered beyond danger. A new building should be provided.

16. *Public Works*.—Among the most pressing necessities in further improvements, are the new quartermaster buildings, especially the storehouse. The quartermaster stores and supplies are stored all over the Post wherever space can be found. This is bad from many points of view. It is impossible to receive, issue and keep check on supplies and materials under the present conditions. Too many storekeepers are required or too many people must have access to different buildings in order to prevent great delays in the many operations that are always going on. It would be economy to the Government to build the storehouse at once and put an end to the haphazard, shiftless methods forced upon the department by the present conditions.

17. *General Repairs and Upkeep*.—The necessary repairs and improvements to public buildings and quarters have been made as far as practicable. The most necessary alterations and repairs to the west academic building, brought about by the transfer of certain academic departments to the east academic building, were made at a cost of \$2,416.66 from the appropriation "Repairs and Improvements". The most pressing need for this building now is repairs to the roof. These repairs are so extensive that the estimated cost is about \$9,000, and it is recommended that this item be urged in the 1917 estimates.

Repairs have been made as necessary to the north and south cadet barracks, consisting of repairs to plastering, painting, reflooring 48 rooms and 12 halls with composition flooring. This flooring, though more expensive to put in, is far more sanitary and highly satisfactory. It will last for years, and be of great economy in the end. It is proposed to put in additional floors of this material as funds will permit.

The 1916 appropriation has an item for repairs to porches of south barracks. This work, consisting of reinforced-concrete floors and skylights in the roof, will be begun July 1, 1916.

Copper flashing has been placed beneath the copings of north cadet guard-house, and under a great part of the coping of the headquarters building, with the object of stopping leaks.

An effort will be made to stop the leakage through walls of the headquarters and bachelor buildings by the application of special materials guaranteed to waterproof. These applications will be made in the near future. It is hoped that a satisfactory material has been found for the purpose.

18. *Roads*.—The appropriation for the upkeep of the roads and walks is not sufficient.

Of 27½ miles of road on the reservation, only about five miles are macadam, and most of the five miles has only macadam surfacing, having no foundation course.

The work of upkeep during the past year has consisted chiefly in the following: Asphalt macadam road built from front of library to south of power plant; from south dock to top of hill in front of quarters No. 86; from hotel to in front of quarters No. 25; and a cut-off near Battery Byrne; surfacing from hotel to academic buildings and from quarters No. 45 to quarters No. 61; patching roads from academic buildings to south gate; putting road oil on various roads at north end of Post; dragging dirt roads, blasting dangerous boulders on cliff above south road to south dock; hauling materials to make fill on roads washed out by heavy rains.

In the building of the asphalt macadam roads it was found that the stone from our quarry was entirely too soft for good road building, especially the surfacing coat. Before it is thoroughly rolled it is ground into fine particles. For the surface coats in the last two mentioned asphalt macadam roads, trap rock was bought, and in future road-work of permanent nature, this material will be used.

Granolithic walks were constructed from riding hall to south end of power plant, and about 200 lineal feet from headquarters building towards railroad station.

It is recommended that an appropriation of \$10,000 at least, for roads, be urged for the fiscal year 1917. For lack of proper foundation, it requires the greater part of the present appropriation to keep the roads in repair. If an appropriation sufficient to rebuild the main roads can not be obtained in one sum, a sufficient amount should be obtained that a part may be rebuilt each year. The cost of upkeep of the present inferior roads is excessive and growing more so each year.

19. *Organ.*—The damage to the organ in cadet chapel, caused by the bursting of a steam pipe, February 7, 1914, has been repaired and the echo organ moved to a better location, all by the makers at a cost of \$768.77, paid out of the Special Contingent Fund.

20. *Receipts and Disbursements.*—Receipts and disbursements are shown in statements attached marked Nos. 1 and 2.

*Personnel.*—Captain F. B. Watson, Q. M. Corps, assistant to quartermaster, since December 3, 1912.

Captain G. D. Arrowsmith, Q. M. Corps, assistant to the quartermaster since March 13, 1914.

First Lieutenant Raymond E. Lee, C. A. C., assistant to the quartermaster since September 8, 1913.

These officers have been most energetic, willing and efficient in the performance of their respective duties.

No. 1.—Statement of funds pertaining to the Quartermaster Corps, at West Point, N. Y., received, disbursed and deposited during the fiscal year 1915, from July 1, 1914, to June 30, 1915.

APPROPRIATIONS	On hand July 1, 1914	Received since	Total to be accounted for	Disbursed and deposited	On hand July 1, 1915	Total disbursed, deposited and on hand
Pay of the Army . . . . .	\$18,779.15	\$330,031.90	\$348,811.05	\$337,761.20	\$11,049.85	\$348,811.05
Pay of the Military Academy . . . . .	42,616.06	759,968.70	802,584.76	762,665.91	39,918.85	802,584.76
Pay of Army Deposit fund . . . . .	.....	14,070.38	14,070.38	12,176.00	1,894.38	14,070.38
Soldiers' Deposits . . . . .	.....	5,514.00	5,514.00	5,514.00	.....	5,514.00
Pay Collections . . . . .	.....	5,415.90	5,415.90	5,415.90	.....	5,415.90
Subsistence of the Army . . . . .	3,847.74	179,369.80	182,217.54	183,217.54	.....	183,217.54
Regular Supplies . . . . .	811.01	110,848.78	111,659.79	111,659.79	.....	111,659.79
Incidental Expenses . . . . .	2.00	6,723.37	6,724.37	6,724.37	.....	6,724.37
Military Post Exchanges . . . . .	.....	221.00	221.00	221.00	.....	221.00
Horses for C. A. & E. . . . .	.....	160.48	160.48	160.48	.....	160.48
Barracks and Quarters . . . . .	.....	7,990.70	7,990.70	7,593.19	397.51	7,990.07
Transportation of the Army . . . . .	.....	26,918.55	26,918.55	20,682.39	6,236.16	26,918.55
R., W., & D. . . . .	.....	8,528.23	8,528.23	8,523.70	4.53	8,528.23
Water & Sewers M. P. . . . .	.....	1,948.78	1,948.78	1,948.78	.....	1,948.78
Clothing and Equipage . . . . .	.....	2,771.43	2,771.43	2,771.43	.....	2,771.43
Shooting Galleries & Ranges . . . . .	118.25	1,717.00	1,835.25	1,684.50	150.75	1,835.25
Disposition of Remains . . . . .	.....	81.80	81.80	81.80	.....	81.80
Headstones, etc . . . . .	.....	16.50	16.50	16.50	.....	16.50
Income Tax . . . . .	.....	123.40	123.40	123.40	.....	123.40
Miscellaneous Receipts . . . . .	.....	1,685.96	1,685.96	1,685.96	.....	1,685.96
Totals . . . . .	\$66,174.21	\$1,464,105.66	\$1,530,279.87	\$1,470,627.84	\$59,652.03	\$1,530,279.87

No. 2.—Statement of funds received and disbursed from appropriations for the United States Military Academy at West Point, N. Y., during the fiscal year ending June 30, 1915.

	DR.	Current and ordinary expenses	Misc. items and incidental expenses	Buildings and Grounds	No Year Buildings and Grounds	Misc. receipts sales at auction	Total
Balance on hand July 1, 1914:				\$158.05			\$158.05
Fiscal year, 1913-14		\$8,257.94	\$4,018.25	2,831.50			15,107.69
Fiscal year, 1914		.06	2,180.02				2,180.08
Fiscal year, 1914-15					\$38,687.08		38,687.08
No year, buildings and grounds							
Received since July 1, 1914:							
Fiscal year, 1915		135,438.59	50,930.30	39,310.00			225,678.89
Fiscal year, 1915-16		4,300.00	3,400.00				7,700.00
No year, buildings and grounds					5,397.10		5,397.10
Miscellaneous receipts						\$121.56	121.56
Cash collections		.67	.45				1.12
Totals		\$147,997.26	\$60,529.02	\$42,299.55	\$44,084.18	\$121.56	\$295,031.57
CR.							
Deposited since July 1, 1914:							
Fiscal year, 1913-14				.50			.50
Fiscal year, 1914		1,438.42	169.37	1,048.38			2,656.17
Fiscal year, 1914-15		.06					.06
Fiscal year, 1915		40.42	49.09				89.51
No year, buildings and grounds					822.55		822.55
Miscellaneous receipts						121.56	121.56
Disbursed since July 1, 1914:							
Fiscal year, 1913-14				157.55			157.55
Fiscal year, 1914		6,820.19	3,849.33	1,783.12			12,452.64
Fiscal year, 1914-15			1,779.61				1,779.61
Fiscal year, 1915		126,992.23	48,223.58	37,155.94			212,371.75
Fiscal year, 1915-16		3,516.48	614.82				4,131.30
No year, buildings and grounds					35,893.38		35,893.38
Balance on hand June 30, 1915		9,189.46	5,843.22	2,154.06	7,338.25		24,524.99
Totals		\$147,997.26	\$60,529.02	\$42,299.55	\$44,084.18	\$121.56	\$295,031.57

*No 3.—Statement of receipts and expenditures pertaining to the Special Contingent Fund, U. S. M. A., for the fiscal year 1915.*

July 1, 1914. Balance on hand.....		\$1,758.76	
June 30, 1915. By amounts received:			
Rents:			
Hotel.....	\$100.00		
Post Office Department.....	200.00		
Stables.....	300.00		
Electric light plant.....	700.00		
Store and restaurant.....	250.00		
Western Union Telegraph Co.....	60.00	1,610.00	
Sale of:			
Wood (forestry).....	\$ 3,128.00		
Electric current and gas.....	12,801.03		
Coke.....	405.00		
Tar.....	8.67		
Miscellaneous.....	897.51	17,240.21	
June 30, 1915. Total to be accounted for.....		\$20,608.97	
June 30, 1915. Total expended.....		19,740.81	
Balance, June 30, 1915.....		\$ 868.16	

**Treasurer U. S. Military Academy and Quartermaster and Commissary for the Battalion of Cadets.**

The duties of the treasurer have been ably conducted by Captain G. H. Estes, 20th Infantry, since the relief of Major Peter Murray, in August, 1914.

His report given below shows clearly the essential features of the business conducted by this department.

I fully concur with his recommendations as to a new cadet laundry, and the increase of the ration authorized cadets in the Academy Bill from 30 cents to 40 cents per day.

The following report is submitted by the treasurer:

Under current instructions the following report of the operations of the departments under my charge for the fiscal year ending June 30, 1915, is submitted:

\* \* \*

The cadet supply departments under the charge of the treasurer are:

The treasurer's office,	The cadet store,
The cadet mess,	The cadet laundry.

In the operation of the various departments the following employees are required:

Treasurer's office.....	1 chief clerk, 4 clerks,
Cadet store.....	1 manager, 3 clerks, 1 porter,
Tailoring department.....	37 men, 10 women,
Shoe shop.....	4 men,
Cadet mess.....	1 steward, 1 assistant steward, 63 employees,
Cadet laundry.....	1 manager, 64 employees,

involving a total monthly pay roll of \$7,806.71 for all departments. With the exception of the chief clerk, treasurer's office, who is of the Civil Service and paid from the Military Academy appropriations, and the assistant steward of the cadet mess, who is a quartermaster sergeant on the active list, the wages of all employees are charged to the department in which employed. The wages of clerks employed in the treasurer's office are charged against the cadet store.

*Treasurer's Office.*—Statement of business June 30, 1915:

<i>Assets.</i>		<i>Liabilities.</i>	
Accounts receivable.....	\$ 3,109.90	Accounts payable.....	\$ 18,967.91
Cadet store stock.....	47,177.29	Cadet store.....	1,329.10
Cadet mess stock.....	12,523.76	Equipment fund.....	150,450.04
Cadet laundry stock.....	965.50	Dialectic society.....	269.89
Treasurer's cash.....	124,547.47	Glee club.....	.80
Pay due.....	26,815.37	Miscellaneous fund.....	2.89
Tennis club.....	246.97	Y. M. C. A.....	247.88
		Canoe fund.....	10.50
		Golf club.....	13.00
		Reserve fund, store.....	37,885.70
		Reserve fund, mess.....	1,042.31
		Reserve fund laundry....	5,166.24
	\$215,386.26		\$215,386.26

The total business for the year ending June 30, 1915:

Receipts.....	\$705,696.46
Disbursements.....	581,148.99

The treasurer's office is the office of record and account for all the cadet supply departments under the charge of the treasurer.

The following was the condition of cadets' personal financial standing May 31, 1915:

4th Class, out of debt average	\$35.83 per man,
3d Class, out of debt average	\$80.82 per man,
2d Class, out of debt average	\$77.04 per man.

The standing of the 1st Class is not considered here, since commencing early in the year they are paying for their uniforms and equipment as officers, furnished by the cadet store and charged against their savings. This takes no account of the sum of \$14 per month reserved from each cadet's pay, credited to his equipment fund and given to him on graduation. In this connection

attention is invited to the importance of the initial deposit required of cadets. The deposit of a large percentage of cadets does not exceed \$100 and quite a number fall below that amount. In order that the cadets should be on the same financial basis and that no cadet, due to his larger deposit, should have the advantage of being able to purchase athletic supplies and other luxuries debarred to the cadets in debt, it is recommended that the requirement of at least \$100 deposit be strictly enforced as a prerequisite for admittance.

To accustom the cadets of the graduating class to business methods, and to enable them to discount bills from dealers for their uniforms and equipment, on May 31, 1915, an account, with an initial deposit of \$300 was opened with banks at New York City or Highland Falls for each cadet of the 1st Class, and he was furnished with deposit-book and check-book.

To accustom cadets to handling their finances it would appear desirable to throw the responsibility for their accounts more into their own hands during the last year at the Academy, by fixing a minimum balance below which they could not reduce their accounts and permitting the expenditure of all in excess of this at the discretion of the cadet for any authorized item.

*Cadet Store.*—The total business of the cadet store for the year ending June 30, 1915, was \$195,824.08, at an expense of \$52,088.67 for operating. This includes freight and express. As the store is self-supporting, funds to cover this cost of operating must be produced, either from profits on sales or by direct levy on cadets, to cover same. The former method has been employed since the establishment of the institution, a flat percentage of profit, varying from 5 to 10 per cent being charged at various times. During the last year the plan of supplying stores to cadets at cost and to all others at a flat advance of 10 per cent over cost was tried out, resulting in a deficit for the year ending May 31, 1915, of \$740.39, which was covered by an assessment of \$1.20 charged against each cadet. It is believed this is a more desirable condition, however, than accumulating a surplus, for the handling and disposal of which there appears to be no authority of law. If goods are sold to cadets at gross cost the discounts resulting from cash payments to dealers by the store will be about sufficient to cover cost of operating.

The equipment of the corps with white coats and white caps for summer wear was completed, the coats being manufactured in the tailoring department, cadet store, the caps being manufactured by a military furnisher in New York. Change from leather to rubber heels on the cadet shoe was made during the year, all shoes under new contract being so equipped and the heels of old shoes being changed as they came in for repair at the shoe shop.

The entire interior of the cadet store building has been overhauled, repainted, and enlarged, a dining-room for employees installed, and the shoe shop removed to a frame building near the cadet store building. The expenses of these alterations and improvements were charged against the surplus fund, cadet store, under authority of letter, office of the Chief of Staff, March 24, 1913. The amount of business transacted by the cadet store is out of all proportion to the physical size of the plant, which is inconveniently arranged and wholly inadequate in every particular.

*Cadet Laundry.*—The importance of a new laundry building has been urged unsuccessfully now for many years, and it seems unnecessary to mention this again other than to draw attention to the danger of a serious accident occurring through the collapse of the building, which was never built to carry the great load of machinery now installed there, and which I consider to be in an unsafe condition. The laundry is self-supporting, and the cost to cadets for work done has been reduced to the minimum to cover operating expenses. The total business of the laundry for the year amounted to \$27,223.99. The dry cleaning department of the laundry did a business of \$3,108.82 for the year. Several new machines to facilitate handling work, or to replace those worn out, were installed during the year. These included an ingenious machine devised by the manager, cadet laundry, for ironing the white caps of cadets.

*Cadet Mess.*—It cost \$30,358.61 to operate the cadet mess for the year, in addition to the amount paid for food supplies. This is all borne by the cadets. The cost of board for the year was 64 cents per day. The high standard of the mess has been maintained in every particular and improved where such was possible.

In the annual Army appropriation bill, Subsistence of the Army, there is carried: "For payments of commutation of rations to the cadets of the United States Military Academy, in lieu of regular established ration, at the rate of 30 cents per ration". The subsistence allowance for cadets is analogous to the same allowance for the enlisted men, U. S. Army. The cost of the latter per man is .248 cents per diem, and in addition the enlisted man is subjected to no charge for the preparation and service of his food. The cadet at present pays from his salary the expenses of wages of all employees of the cadet mess, for the supply and upkeep of china, linen, tableware, silverware, for cleaning material, and for laundry and mess linen, as well as freight, express and all delivery expenses connected with the food and other supplies for the mess. When the commutation of rations for cadets was fixed at 30 cents, in 1902, the value of the enlisted ration was 18 cents. Under the same proportionate increase in cost of supplies the cadet ration should now be 41 + cents. The increase of 10 cents in the ration allowance for cadets will just about pay for the services of the employees of the mess, leaving the various other items to be borne by the cadet, as well as the difference between the actual cost of food supplies and the present 30-cent ration. This increase suggested would place the cadets, U. S. M. A., on about the same footing as the midshipmen at the Naval Academy in the matter of pay and subsistence, as the employees of the midshipmen's mess are paid from Congressional appropriation.

### **Health and Sanitation.**

The health of officers, cadets and enlisted men has been excellent, while the percentages of daily sick, admissions to hospital, and days lost are slightly more than last year, there has been nothing connected with the ailments to indicate any lack of the most excellent sanitary conditions.

Attention is asked to the remarks of the surgeon relative to requirements as to teeth for entrance of cadets. The present immense amount of work required of the two dentists makes it imperative that new cadets should have their teeth in good condition when they enter and that the established standard should be strictly adhered to.

Although not referred to in the surgeon's report this year, I wish to call attention to his remarks of last year regarding a minimum standard for eyes at time of graduation. It is believed that a standard should be established to govern the examining board at graduation, as well as at admission. Many cases arise showing a marked deterioration of eyes since admission, with sometimes indications that the deterioration has been and will be progressive. The board has no standard now to govern its action in such cases, and in order that this board, differing in membership each year, may act with uniformity some standard should be established.

The report of the surgeon, Lieut. Colonel H. A. Shaw, Medical Corps, follows:

Pursuant to instructions contained in Memorandum 33, U. S. M. A., May 11, 1915, the following report is submitted upon the work of the medical department with reference to health and sanitary conditions of this command:

*Corps of Cadets.*—Health conditions have in the main been very satisfactory. Influenza in epidemic form appeared late in February, 1915, lasting about two months, and numbered 63 cases, nearly all of them being mild. There were, however, a few serious complications: four had frontal sinus involvement; one empyema of the antrum; three had acute otitis media of whom two developed mastoiditis and came to operation; both made excellent recoveries. Four cases of benign tertian malaria occurred among members of the Fourth Class, all within four days in August. In spite of vigorous treatment with quinine, continued for several weeks, three of these cases recurred during the following spring. One case of pulmonary tuberculosis was discovered and transferred to Fort Bayard, New Mexico. Three cases of acute articular rheumatism occurred, in February, March and April, respectively; endocarditis developed as a complication in each case. Two are now on sick leave and one on furlough with his class. Only two cadets have been dangerously ill during the year, one with suppurative appendicitis, making a complete recovery after operation, and the other a case of acute articular rheumatism with complications.

The following table shows the hospital admission rates per thousand and the non-effective rates for hospital and quarters cases for the past nine years:

Table I.

YEAR	Mean actual strength command	ADMISSIONS		NON-EFFECTIVE		
		Cases	Rate per 1000	Rates per 1000		
				Hospital	Quarters	Hospital & Quarters
1906-07	440	682	1550	35.22	19.31	54.52
1907-08	404	641	1536	32.17	31.18	63.36
1908-09	422	992	2350	32.77	27.01	59.71
1909-10	417	987	2366	35.73	21.58	57.31
1910-11	407	780	1916	28.25	8.10	36.60
1911-12	531	764	1438	17.70	5.20	23.14
1912-13	515	587	1139	16.89	3.90	20.97
1913-14	562	612	1088	11.92	4.45	16.54
1914-15	612	690	1127	19.83	8.40	28.22

There were 690 hospital admissions during the past year, equivalent to an annual admission rate of 1127 per thousand, an increase of 39 per thousand over the rate of the preceding year; these are the smallest admission rates recorded during the past nine years. The average number of days treatment of each case was 6.4 as compared with 4.0 for the preceding year, the average for the preceding four years being 4.8 days.

The non-effective rate (average number of cadets constantly in hospital) was 19.83 per thousand as compared with 11.92 for 1914, the average rate for the preceding four years, 1911 to 1914, being 18.69 per thousand.

Of the total number of hospital admissions, injuries and other affections due to external causes furnished the greatest proportion, 156 or 22.6%; diseases of the digestive system 154, or 22.3%; diseases of the respiratory system 149, or 21.5%; general specific diseases (including 63 cases of influenza) 118, or 17.1%, and skin diseases 61, or 8.8%.

Of the affections due to external causes 49 were due to accidents during riding, 36 were football injuries, 13 were due to accidents during gymnastic exercises, 11 were from badly-fitting shoes, 7 from basketball, 3 from baseball, and 37 from miscellaneous causes.

The number of football injuries requiring hospital treatment occurring among cadets on the football squad was slightly larger than last year, 36 as compared with 28, and the total number of days lost in treatment in hospital was 221 as compared with 157. It is, however, gratifying to note that the serious injuries were conspicuously absent and no case of permanent disability has resulted from any injury incurred during the season. Synovitis of the knee is perhaps the most serious of the common football injuries, as it is frequently the result of a displaced cartilage which in turn often causes numerous recurrent attacks of synovitis. No injury of this nature occurred as the result of football. The very considerable increase in the number of days lost by treatment in hospital of football injuries was mainly due to three minor fractures, requiring in the aggregate 101 days' treatment. All of them made perfect recoveries. The following table shows the number of football injuries during the past eight seasons and the number of days lost by treatment in hospital:

Table II.

Year	Number of cases	Days lost in hospital	Average days per case
1907	25	117	4.6
1908	62	362	5.8
1909	34	174	5.0
1910	27	210	7.7
1911	34	169	4.9
1912	35	259	7.4
1913	28	157	5.6
1914	36	221	6.1

Upon the recommendation of this office, the War Department has increased the requirements in regard to the teeth of applicants for entrance to the Military Academy, so that now candidates must have at least 12 of the 20 double teeth in serviceable condition, while teeth containing large cavities or exposed nerves constitute cause for rejection. It is believed that strict adherence to these requirements will have a most beneficial effect by making certain that cadets begin their course with mouths in proper condition. Heretofore much valuable time has been sacrificed, both of fourth classmen and of dental surgeons in the treatment of conditions which should have been remedied before admission.

The present cadet shoe has proved to be very satisfactory and has not caused serious disability in any case where the foot has been properly fitted.

During the early part of the summer a large number of cadets belonging mainly to the Fourth Class reported with chafed and blistered feet, abrasions, corns and other conditions indicating badly-fitting shoes. An examination was finally made of every cadet in the Fourth Class; his feet were carefully measured, his shoes inspected and the size noted. It was found that 31% of the class showed blisters, corns, bunions, chafing, or other abnormalities of the feet, and of these cadets all but one were wearing shoes from a half size to two whole sizes too short; in five cases the shoes were actually shorter than the feet. It was thus evident that the greater part of the foot trouble was due to faulty shoes. In order to make certain that cadets in the new class were supplied with proper shoes recommendation was made that the principles of shoe fitting as prescribed in general orders for enlisted men be carried out in regard to cadets. This was accordingly done with members of the entering class and it is believed that much of the foot trouble which has always been noted in the summer camp will be eliminated.

#### *Enlisted Men.*

The following table shows the admission and the non-effective rates per thousand among enlisted men for the past six years:

Table III.

	1911	1912	1913	1914	1915
Admissions to sick report.....	622	401	415	302	359
Rates per thousand.....	825	626	603	468	501
Non-effective rate.....	17.87	14.81	15.26	11.25	9.35
Mean annual strength of command.....	649	648	688	702	716

These rates are remarkably low as compared with those of the Army at large, which are as follows:

	1910	1911	1912	1913
Admission rate (Army).....	885	879	823	671
Non-effective rate (Army).....	35.93	33.28	30.10	24.33

The number of admissions for transmissible diseases was also small, the most important being venereal 25, influenza 18, malaria 6, and pneumonia 4. The rate for venereal disease is about one-third that for the Army at large.

#### *Civilian Population.*

The year has been marked by the absence of typhoid fever, scarlet fever and diphtheria. A number of cases of mild whooping-cough appeared in children in the families of officers and enlisted men during the winter and spring; there was one case of measles and two of German measles.

Routine inspections of school children have been made to discover unrecognized contagious disease, to insure adequate protection against smallpox and to demonstrate evident physical defects easily correctible, such as bad teeth, enlarged tonsils, etc.

#### *Sanitation.*

The general sanitary conditions at this station are excellent. The drainage area from which the water supply is obtained has been reported by experts as superior to the average in the State as regards freedom from danger of pollution and the filtration system in operation at the Post insures water free from contamination under ordinary conditions.

Of the two sources of supply, Queensboro and Popolopen streams, water from the former has never been found to contain colon bacillus. Water from Popolopen occasionally shows a few organisms of the colon bacillus group due to the fact that the drainage area of the stream is more thickly inhabited. On one occasion during the past summer, the filtered water from Lusk Reservoir was found to contain colon bacillus. Investigation showed that excessive amounts of water were being used and that the filters were working beyond their capacity. Cutting down in the amount of water passed through the filter beds was promptly followed by the disappearance of the organism.

Anti-mosquito measures, such as ditching and draining, grass cutting and oiling stagnant water have been vigorously prosecuted during the mosquito-breeding season. The malarial record, while not equaling that of the previous year, is still small. The admission rates for malaria for cadets and for enlisted men are shown by the following table:

*Table IV.*

	1908	1909	1910	1911	1912	1913	1914	1915
Cadets.....	19.	126.3	127.6	58.9	88.5	25.2	0	11.4
Enlisted men.....	69.4	72.2	76.2	36.9	41.6	23.2	5.6	8.3

Of the 7 cadet admissions for malaria, 3 were recurrences; of the 6 enlisted men, 3 were recurrences.

Special effort has been made to limit fly breeding by enforcing more stringent regulations in regard to the handling of manure and garbage.

*Hospital Building.*

The greatest need of the medical department at this station is a new cadet hospital. The present building dates from 1875 and is inadequate in size and general arrangements to the needs of the Academy. It lacks facilities for the hospital treatment of officers and of women and children; for the open-air treatment of bed cases and for treatment of cases requiring isolation; the surgical operating department is inadequate; the squadrooms for the hospital corps are unsuitable and there are no reading or recreation rooms for the detachment. As soon as funds are made available, sketch plans of a modern hospital will be drawn and it is hoped that every effort will be made to secure an appropriation for its construction.

The following tables show the character and amount of certain of the professional work done during the year:

*Dental Operations.**Table V.*

	Officers and Enl. men	Cadets	Civilians	Total
Fillings . . . . .	675	2033	737	3445
Bridges . . . . .	9	21	10	40
Crowns . . . . .	21	51	31	103
Orthodontia . . . . .	14	72	14	100
Miscellaneous treatments . . . . .	1196	2334	1248	4778
Consultations and operations . . . . .	9	21	22	52
<b>Total . . . . .</b>	<b>1924</b>	<b>4532</b>	<b>2062</b>	<b>8518</b>

*Surgical Operations.**Table VI.*

	Officers	Cadets	Enl. Men	Civilians	Total
Abscesses, incision and drainage of . . . . .	1	2	10	1	14
Abortion, incomplete, curettage . . . . .				3	3
Adhesions, breaking up . . . . .			1		1
Adenoids, excision of . . . . .		1		30	31
Amputation, distal phalanx, thumb . . . . .				1	1
Appendicectomies . . . . .		10	3	3	16
Blood clot, incision and drainage of . . . . .	1	1			2
Cellulitis, incision and drainage for . . . . .	1		1		2
Chin, infected, incision, curettage and drainage of . . . . .		1			1
Circumcisions . . . . .		13	1	11	25
Corns, excision of . . . . .	1	4			5
Cyst of prepuce, dissection of . . . . .			2		2
Dislocation, reduction of . . . . .			3	1	4
Fractures, reduction of . . . . .	1	3	1	3	8
Hemorrhoids, excision of . . . . .	1	4	6	1	12
Herniotomies . . . . .		1	1	1	3

Table continued on next page.

	Officers	Cadets	Enl. Men	Civilians	Total
Ingrowing toe nails, excision of . . . . .		3	3	1	7
Lipoma, excision of . . . . .		1			1
Mastoiditis, simple, complete operations for . . . . .		2			2
Maxillary antrum, tapping of . . . . .		1			1
Middle turbinal, excision of . . . . .	1	2			3
Moles, excision of . . . . .	2	1		1	4
Necrosis, 5th toe, right foot, curettage	1				1
Paracentesis, membrana tympani . . . . .		3		4	7
Sebaceous cyst, excision of . . . . .		2			2
Tonsillectomies . . . . .	1	1		18	20
Uterus, curettage and dilation of . . . . .				7	7
Varicocele, excision of . . . . .		1			1
Warts, excision of . . . . .	2	8			10
Wound of abdomen, closing and replacing intestines . . . . .			1		1
<b>Total . . . . .</b>	<b>13</b>	<b>65</b>	<b>33</b>	<b>86</b>	<b>197</b>

*Laboratory Work.**Table VII.*

Examination of blood . . . . .	34
“ faeces . . . . .	15
“ urine . . . . .	659
“ pus . . . . .	13
“ throat cultures . . . . .	111
“ water . . . . .	12

*Miscellaneous.**Table VIII.*

Radiograms . . . . .	445
Eye refractions . . . . .	201
Typhoid prophylactics . . . . .	226
Vaccinations . . . . .	228
Surgical dressings . . . . .	4580
Prescriptions filled . . . . .	3828

There have been 18 births and 6 deaths during the year, as follows:

*Births.*

Males . . . . .	8
Females . . . . .	10
<b>Total . . . . .</b>	<b>18</b>

*Deaths.*

Cause	Enlisted Men	Civilian Adults	Children
Pneumonia, acute lobar, right complicated by purulent pericarditis and empyema . . . . .	1		
Gunshot wound of head . . . . .	1		
Mitral insufficiency with broken compensation . . . . .	1		
Chronic interstitial nephritis . . . . .		1	
Influenza . . . . .		1	
Premature birth . . . . .			1

## The Library.

The following report submitted by Major J. E. Runcie, librarian, is complete in itself and calls for no comment:

Herewith I have the honor to submit a brief report of the work of the library of the Military Academy during the year ending with this date and of its present condition:

*Accessions.*—The number of volumes in the library on July 1, 1914, was 93,261. June 30, 1915, the catalogues show 95,550 volumes, showing an increase of 2,289 volumes. This is considered a satisfactory growth for the library, as it is believed not to be wise to fill the available space with books of minor or transient interest which would encumber the catalogues and in a comparatively short time would necessarily be removed to make room for more valuable material.

An effort has been continued to enlarge our material relating to the history of the Regular Army and the several volunteer armies of the United States. It is believed that, in addition to this, special effort should be made to secure a collection covering the history of the Confederate armies of the Civil War as a desirable and interesting addition to the history of our country as well as the history of military science and art.

A number of volumes no longer needed or useful in the library have been transferred to the libraries of other service schools under the authority heretofore granted for that purpose.

*Gifts.*—The year has been made memorable by the deposit in the library of an original portrait of our founder, George Washington, bequeathed to the Corps of Cadets by the late Miss Anna Bartlett Warner, and by the wise direction of the Superintendent hung in the library, where it is most accessible to the cadets for whose inspiration Miss Warner bequeathed it.

The thanks of the library are due to Mrs. Peter S. Michie for the gift of a bronze bust of General Grant; to General James H. Wilson, U. S. A., retired, for a bronze bust of himself; to General John Pitman, U. S. A., retired, for a large and interesting collection of photographs showing in detail the appearance of West Point about the year 1870; and to all friends who have remembered the library during the year.

*Catalogues.*—All the catalogues of the library, general and special, have been kept up to date, and it is believed that every item in the collections of the library is accessible with a minimum expenditure of time and labor.

*Building.*—Additional measures have been taken during the year for the prevention of fire in the library building and for the extinction of any fire which may start. All gas pipes have been removed from the building, additional fire extinguishers have been placed where they will be readily accessible in case of need, the electric wiring is frequently and carefully inspected, and it is believed that the building and its contents are now as secure from the risk of fire as all precautions can make it.

The interior of the library building has not been painted since it was remodelled for the purpose of the library fourteen years ago. Such painting and a few

minor repairs are now needed, and a special estimate has been made for the funds required for that purpose.

*Cadet Limits.*—Until a year ago the upper floor of the library building was off cadet limits and inaccessible to cadets. As all of the military books are on that floor the wisdom of excluding cadets from access to the collections was not apparent, and, on the recommendation of the librarian, the Superintendent removed the restriction. The result has been satisfactory. Many cadets have availed themselves of the opportunity to consult the books in the military collections, which cannot fail to stimulate their interest in subjects relating to their profession as soldiers.

*Inventory.*—The first complete inventory of the contents of the library, so far as the records show, discloses that 1107 volumes noted in the catalogues are missing from the shelves. Many of the missing volumes are no doubt accounted for as duplicates which have been removed from the shelves without removing the corresponding cards from the catalogues. An examination of the missing titles shows that not more than 300 volumes of any value to the library have disappeared. Unquestionably a large number of the missing books have been deliberately stolen, but under the system which permits free access to the library's shelves it is believed to be impossible to prevent such thefts. The total loss is, however, surprisingly small when compared with the losses in other libraries, in many of which access to the shelves is not freely permitted.

#### *Statistics of Circulation.*

Month	CADETS				OTHER THAN CADETS				Total Circulation	Av. per Day
	Fiction		Non-Fiction		Fiction		Non-Fiction			
	No. Vols.	%	No. Vols.	%	No. Vols.	%	No. Vols.	%		
1914										
Dec.	590	80	149	20	375	57	284	43	1398	51
1915										
Jan.	666	68	307	32	410	52	382	48	1767	57
Feb.	547	68	260	32	384	58	279	42	1470	53
Mar.	591	66	304	34	474	65	248	35	1617	52
Apr.	451	67	218	33	353	48	380	52	1402	47
May	400	60	271	40	330	48	368	52	1369	44
June	179	70	70	28	284	55	227	45	760	26

#### **Museum.**

The ordnance museum occupies several large rooms in the new headquarter building, and is open for visitors and cadets daily. It contains a most valuable collection of models of guns, seacoast and field, and of small arms of all ages and kinds; also numerous military relics of value and historical interest; particularly valuable is the collection of flags, many of which are now displayed as indicated in the following report by the professor of ordnance and gunnery, Lieut. Colonel W. H. Tschappat, in charge of the museum:

During the year the following flags have been put in the best possible condition and then stitched in between netting:

- (1) British Union Jack of the 7th Royal Fusileers; captured during the Revolution. The funds for repairing this flag were supplied by the West Point Chapter, Daughters of the American Revolution.
- (2) National Color of the 1st Regiment, U. S. Infantry; period 1791-1792.
- (3) Regimental color of the 11th U. S. Infantry; War of 1812.
- (4) Two U. S. National Guidons of the Civil War.

In addition to the above, the National Color of the 3d Regiment of Riflemen, 1814-1815, is about 65 per cent completed; and two weeks' work has been done on one of the Anspach-Baireuth Regimental Colors, which was surrendered at Yorktown, during the Revolution. Funds for doing the work on the Anspach-Baireuth Color have been supplied by Colonial Chapter, New York City, Daughters of the Revolution.

A total of fourteen flags have been repaired up to the present time; they are as follows:

- (1) British Union Jack, 7th Royal Fusileers, captured during the Revolution.
- (2) Anspach-Baireuth Regimental Color; probably surrendered at Yorktown during the Revolution.
- (3) National Color, 1st U. S. Infantry, 1791-1792.
- (4) Regimental Color, 4th U. S. Infantry, 1796-1811.
- (5) Regimental Color, 11th U. S. Infantry, 1812-1814.
- (6) Guidon, 1st Regiment of Mounted Riflemen, Mexican War.
- (7) Blue Silk Guidon; Mexican War period.
- (8) Blue Silk Guidon; Civil War period.
- (9) Headquarters Flag, Cavalry Reserve Brigade, 1st Division, Cavalry Corps, Army of the Potomac, Civil War.
- (10) Five U. S. Artillery or Cavalry National Guidons; Civil War, after April 19, 1862.

The following articles were received during the year:

- June 12, 1914—Three Indian paintings, on cotton cloth, of the battle of the Little Big Horn (Custer Massacre), June 25, 1876; painted by White Bird, a Northern Cheyenne Indian, and presented by Captain R. L. Livermore, U. S. A., retired.
- June 15, 1914—Sword with scabbard which was presented to Colonel Sylvanus Thayer, by the survivors of the class that entered the U. S. M. A. in 1817. Purchased with money subscribed by officers of the U. S. Army, cadets, and patriotic friends of the U. S. M. A. from Miss Moulton, a relative of Colonel Thayer.
- June 24, 1914—Cuban machete used in the Spanish-American War; gift of Mrs. John Haynes Lord, Montclair, N. J.
- August 26, 1914—Storm and recruiting flag that was hauled down at Headquarters, District of Mindanao, P. I., when that district was discontinued on April 22, 1914, from Major General Thomas H. Barry, U. S. Army.
- October 5, 1914—One "Pepper Box" of Allen's Revolving Pistol; gift of 1st Class Private Morris Swett, U. S. M. A. Detachment of Engineers.

- October 24, 1914—Lantern used by General U. S. Grant at Appomattox, during the Civil War; gift of Mrs. F. D. Grant.
- November 7, 1914—One picture, a view of West Point from Fort Putnam with the autographs of members of the Class of 1853 inscribed thereon. Gift of Mrs. D. H. Boughton, daughter of General Thomas Wilson, Class of 1853.
- November 16, 1914—A collection of Indian curios; gift of General B. J. D. Irwin, U. S. A., retired.
- December 12, 1914—Twelve obsolete flags, 1877–1898; from Army War College, Washington, D. C.
- December 14, 1914—A fired field gun shell, made in the S. P. R. R. shops at Pananea, Sonora, Mexico, and fired by the Constitutionals of Mexico. Gift of Gerald Clark Brant, 1st Lieut., 7th Cavalry, U. S. Army.
- January 28, 1915—One Cooper revolver, carried in Civil War by G. Jos. Moore. Gift of Russell V. Venable, 1st Lieut., 22d Infantry, U. S. Army.
- March 19, 1915—Two copies of the French aeroplane darts. Gift of Mr. Chas. F. Warner, principal, Technical High School, Springfield, Mass.
- June 12, 1915—One rare specimen of coral from the Island of Basilan, Southern Philippines. One specimen of cloth, the work of Cotta Batta Moros, Island of Mindanao, P. I. Gift of Mrs. and General Samuel S. Sumner, U. S. Army, retired.

During the year twenty-two wrought-iron bands with flag brackets were put up and fastened to the twenty-two columns in the two halls on the first floor; this now permits the display of 166 flags. One double door, Library Bureau, wall case, size 80"x80"x16" was installed for the display of Indian curios; twelve swing frames were made for the display of commissions of former graduates, and four large frames were made for the display of Indian pictures and an old view of West Point. The sixteen wood cases for the display of flags, etc., were lined or relined with linen.

A catalogue of cannon, machine guns, etc., at the United States Military Academy was gotten in print during the year, and 429 obsolete cannon and machine guns were supplied with numbered bronze plates, to identify them with the numbers assigned them in the catalogue.

### Water Supply.

The following report of Lieut. Colonel M. L. Walker, Corps of Engineers, in charge of the water supply, is so complete that no comments are necessary:

The water-supply system has given practically no trouble during the past twelve months, and is in excellent condition.

Water has been secured from Queensboro Brook, except the periods June 15 to November 17, 1914, and June 15 to 30, 1915, when it was necessary, due to the failure of Queensboro supply, to draw on Popolopen Creek.

The sanitary conditions on both Queensboro Brook and Popolopen Creek have in the main been satisfactory, but constant inspection is necessary to see that these conditions are maintained.

The water throughout the year has been clear and soft and the filtered water satisfactory from a bacteriological standpoint except for a short period during August, 1914. Examination of both raw and filtered water is made monthly by the surgeon.

Owing to the limited capacity of our filter beds and clear-water house, the large demand for water in case of a considerable fire on the Post renders it necessary to turn raw water into the mains. This was done during August, 1914, at the time of the burning of the artillery stable, and probably accounts for the unsatisfactory condition noted in the paragraph above. A separate system for fire purposes, use of power plants, stables, sprinkling, etc., is the proper solution of this difficulty. This would relieve the filters of a great amount of work and would increase their efficiency with resultant improvement in the filtered water.

As noted in last year's report the consumption of water at this Post has been excessive, indicating either leaks in the distributing system or waste. Through the courtesy of the Engineer Commissioner of the District of Columbia a petometer survey of the system was made during October, 1914, by skilled observers from the District force, the work being done under the supervision and paid for by the Post quartermaster.

No leaks were discovered, some wastage was located, but it is significant that while the survey was going on the consumption decreased from some 1,300,000 gals. per day to less than 1,000,000 gals. per day. Some wastage has been stopped by cutting off the operation of automatic flushes during periods when toilets are not used. While there has been a slight increase in daily consumption since the petometer survey was completed, conditions are now satisfactory.

Lusk reservoir was full to overflowing except seventy days during the year.

The maximum recorded daily consumption was 1,417,000 gals. September 24, 1914, and the minimum on December 5, 1914, 781,000 gals. The average has been 1,110,651 + gals. per day. Total for the year, 405,477,000 gals.

#### *Personnel.*

I assumed charge of the various activities reported upon herein on August 22, 1914, relieving Lieut. Colonel G. A. Youngberg (Major, Corps of Engineers). My thanks are due to the officers, the enlisted men, and civilians connected with the affairs for which I am responsible, who have one and all rendered satisfactory service.

#### **Chaplain.**

I regard the duties and influence of a chaplain at West Point as about the most important of any in the military service. There are over six hundred cadets, and a population of nearly a thousand people on the Post to whom he administers. He not only con-

ducts the church services, Sunday schools, young men's clubs, girls' friendly society and other social improvement organizations, but assists the Cadets' Young Men's Christian Association, which has an attendance of from 100 to 200 at its meetings and a membership including nearly the entire Corps of Cadets. His good influence in these and all the other pastoral duties common in all parishes cannot be overestimated.

The pay of the chaplain is not at all adequate for this important position at West Point, and should be increased from that of a captain \$2400 to that of a major \$3000, and I shall ask again for this increase in my next annual estimates for the Military Academy.

#### **The Chapel Organist and Choirmaster.**

The organist and choirmaster is another person who is inadequately paid. For four years my predecessor and myself have urged without success an increase in his pay from \$1200 a year to the pay and allowances (without the rank) of a second lieutenant, and these efforts are warmly approved by the Secretary of War. The present incumbent, Mr. Frederick C. Mayer, is a musician and an organist of rare ability, and besides has a temperament and individuality that appeal most strongly and favorably to cadets. It is because of these attainments and qualities that he is able to maintain a voluntary choir of over eighty cadets for chapel services and train them in music to a degree that has made this feature a pride and a delight to all who attend the church services at West Point. Like the services of our present chaplain, the good and inspiring influences of the present choirmaster and organist cannot be overestimated, and the modest increase asked in his pay is by no means a full measure for the benefits received by the cadets and others at West Point.

#### **Detachments.**

The following detachments are maintained at West Point as necessary in connection with the instruction of cadets, maintenance of buildings and grounds and as clerical and other help about the offices of various departments at the Academy:

The engineer detachment,  
 The artillery detachment,  
 The cavalry detachment,  
 The army service detachment,  
 The Quartermaster Corps.

The engineer detachment is under the charge of the professor of practical military engineering, and the engineer officers detailed to assist him. It furnishes the personnel for the assistance of these officers in instructing cadets, as well as the labor connected therewith in ponton bridges, surveying, signaling, telegraphy, etc., all as indicated in the report of the professor of practical military engineering on page 74. It also does guard and other military duty.

The army service detachment is under the quartermaster and furnishes laborers, skilled and unskilled, for the upkeep of buildings and grounds, police and the usual work about a military post.

The Quartermaster Corps, in addition to the usual duties performed at other posts, also assists in the instruction of cadets in packing, etc.

The cavalry and artillery detachments are each under the command of a line officer detailed for that purpose and who are each assisted by a lieutenant of the line. These detachments have charge of stables and animals and the horse and battery equipments used in cadet, as well as in their own instruction; they also furnish men to assist in such instruction and they perform both stable and post guard duty.

The artillery detachment should be materially increased. It has now about the same number of men as a field battery, but has three times the equipment in guns and some twenty more animals to care for. It not only performs all the duties connected with cadet drills, firings, etc., but is itself drilled and instructed the same as any field battery, and furnishes the personnel for service practice by the field artillery officers stationed at West Point.

#### **Ordnance Detachment.**

The following report is submitted by the commanding officer of this detachment, Lieutenant Colonel W. H. Tschappat :

The enlisted strength of the detachment was increased during the year from 19 to 22 men. The work of the detachment consists principally in furnishing the enlisted personnel required in the museum; caring for all seacoast batteries at the Post; repairing, altering and handling target material for cadet small-arm practice; receiving and issuing ammunition for target practice and other ordnance material and keeping in good order the grounds and buildings pertaining to the ordnance laboratory. This work has been satisfactorily performed during the year.

### The U. S. M. A. Detachment of Engineers.

The following is quoted from the report of Lieut. Colonel M. L. Walker, professor of practical military engineering (Major, Corps of Engineers), who has had charge of this detachment. His recommendations regarding enlargement, etc., of the engineer barracks, are concurred in:

This organization is under the command of the professor of practical military engineering. It performs guard duty and some garrison police, assists in all cadet instruction, and itself receives practically the same instruction as is given to other engineer troops of the Army.

The authorized strength of the detachment is 100 men and the average strength during the year has been 98.05. Recruits were asked for and received in October, 1914, and March, 1915, to fill all vacancies. This has proved more satisfactory than have men dribble in throughout the year. The recruits supplied have been excellent material and experiences during the year indicate that better results are obtained from green recruits of good quality than from assignment of reenlisted men.

The instruction and discipline of the detachment is believed to have been satisfactory during the year.

The following shows the total days of fatigue of the duty men of this organization during the year:

Erecting and removing grandstand for football and baseball . . . . .	470 days
Cutting and storing ice . . . . .	354 days

In addition an average of ten men have been on continuous daily extra or special duty on the Post in various capacities not connected with this department.

As reported last year, the barracks are inadequate to house the detachment properly, there being space for but 70 men. At this time some 30 men are married and are either supplied with married quarters or rent quarters for themselves in the neighborhood.

The barrack should be enlarged and modernized.

The club for enlisted men mentioned in last annual report has been successfully maintained by the efforts of the chaplain, assisted by Sergeant Williams of this detachment, the detachment commander co-operating. An attractive meeting place is provided for the enlisted men at the north end of the garrison, and it is believed much good is accomplished thereby.

### **Improvement to Roads and Grounds.**

These improvements refer to the bridle-paths and roads connecting the wooded and hilly section of the reservation with the main roads.

This work was prosecuted during the year in accordance with the original plans designated by Olmsted Brothers. Work was confined to the continuation of construction on the road connecting Fort Putnam with Redoubt No. 4. This portion of the trail previously built is rather elaborate and expensive construction, and in order to preserve appearance this character of construction had to be adhered to during the year. Upon completion of this trail, in the summer of 1915, it is intended to revert to construction of bridle paths, thereby getting much greater mileage for the money.

In addition to prosecution of construction on the trail from Fort Putnam to Redoubt No. 4, considerable work was done rearranging dangerous grades on the trail near Fort Putnam and near the beginning of the Dassori trail.

With the prevalence of automobile traffic on all roads these trails are a real necessity for proper horse-back exercise of officers stationed here and great and increasing use is made of them for this purpose.

### **The Board of Visitors.**

So far as I have been officially informed there has been no Board of Visitors appointed from either the Senate or House Military Committees of Congress since my report a year ago, and no visit to the Academy has been made by such a Board during the past year.

Ever since the law of March 4, 1909, became effective these visits have been made by committees selected from the Military Committees of Congress, and because of their other pressing duties their visits invariably have been too brief to obtain a thorough understanding of the conditions and necessities of the Academy.

I believe better results would obtain if these committees were composed in part of men prominent in educational work, and that these committees should visit the Academy in October or November while the academic duties are in progress, and remain here several days. Another matter in this connection appeals to me of importance—some years ago it was the custom for the Board of Visitors to make a written report setting forth their views and recommendations as the result of their inspection. If these boards—composed as I recommend part from Military Committees of Congress, and part from men prominent in education—could

remain here sufficiently long to become thoroughly acquainted with the workings and needs of the Academy, and would make an independent written report thereon, I am sure it would be of assistance to Congress in making many of the appropriations for the Academy and would also be of value to the Academy in its educational work.

### **Alumni.**

There were nearly 300 of the Alumni who visited the Academy this year during graduating week; a larger number than ever before, except perhaps during the Centennial year—1902. Special efforts were made to induce them to come and it was gratifying to see so many of them with us, and to feel the splendid influence of their abiding faith and pride in our Alma Mater. There were reunion dinners at West Point by the Classes of '65, '67, '69, '70, '75, '85, '90, '95, 1905 and 1910, while the Class of '80 had its reunion dinner in New York. The Class of '67 is among the most enthusiastic of those who return to their Alma Mater, and its members have, I believe, agreed to return for a reunion dinner at West Point at every graduation period. In this connection I am gratified to see the increasing interest and attendance at Alumni dinners held in Boston, New York, Chicago, and Honolulu each year about March 16th, the anniversary of the creation of the Military Academy.

It is my hope that the Alumni will return to West Point in increasing numbers from year to year and give cheer and support to those here on duty, mingle their pride with ours and each others as loyal sons of the Military Academy, and if not at West Point then at the March Alumni dinners. There is much that the Alumni can do for the Academy in the support of its high ideals and best traditions, and they can do this better, whether in the service or out of it, if they will return often to their Alma Mater and imbibe anew the spirit of West Point, see what has been changed and what retained of the West Point they knew, not only in the buildings and grounds, but in the instruction, drilling and handling of cadets.

### **Gifts to the Academy.**

There has been tendered as a gift and accepted for the Military Academy a bronze equestrian statue of General Washington.

The statue is now being cast, and its granite pedestal being cut in the quarries of Maine. It is hoped that all will be in readiness for the unveiling with appropriate ceremonies about October 15 this year.\* The donor does not wish his name revealed and will only approve of this magnificent gift being described as "Donated by a patriotic citizen and veteran of the Civil War". I am sure that all graduates and everyone associated with West Point will be deeply grateful to this modest donor for his splendid gift. It has long been a cherished idea of many graduates that such a statue should be erected on West Point grounds, but few before now have believed that they would live to see it. I desire to here record my appreciation and thanks in behalf of the Academy to this veteran and patriotic friend of West Point.

*Washington's Portrait.*—Miss Anna Bartlett Warner, who died last February, and who with her sister Susan, lived so long at Constitution Island and endeared herself to so many cadets through her Bible classes, bequeathed to the Corps of Cadets a portrait of Washington painted by Gilbert Stuart. It has been renovated by an expert, and now hangs in the library, and is considered by many who have seen it as one of the very best of the Washington portraits by this distinguished artist. Attention is invited to the appropriate reference to this portrait in the report of the librarian on page 67.

*Constitution Island.*—In 1909, Constitution Island lying on the east bank of the Hudson River across from West Point became the property of the Government and a part of the West Point Military Reservation, but not until the death of Miss Anna B. Warner, a joint donor with Mrs. Russell Sage, did the Government undertake any control or occupancy of this property, permitting Miss Warner to live out her beautiful long life in the home that was hers so many years.

This island has now been taken charge of by the Government, a caretaker placed in charge, and for the present paid from funds supplied by the Quartermaster's Department. In my estimate of funds for the ensuing year I shall ask that funds be authorized in the Military Academy Bill for this caretaker. There are many articles left in the house occupied by Miss Warner of

\* Since writing this a delay in the delivery of the stone pedestal will materially change this date.

historical interest and intimately associated with her life. It is desired to have these kept there, the smaller articles placed in cases, and that the house be fitted up as an historical museum. The cost will be modest—about \$700 or \$800—and when once established as a museum there should be little if any expense in the upkeep beyond what would be necessary anyway for the caretaker and usual repairs to the house, etc., to maintain the place in habitable shape.

I see no present use for this island for Military Academy purposes. The time may come, however, when it will be found to be valuable for the Academy's use. It should unquestionably be retained as a part of this reservation and its use by the Government or others never permitted for purposes not in accord with the memories surrounding this home of those who so endeared themselves to the Corps of Cadets.

#### **Acknowledgments.**

The Superintendent's advisers and assistants in the conduct of the affairs of the Academy are the Academic Board, the Staff, and its assistants. Their advice and help has been efficient and loyal and always given in the spirit of harmony and cooperation for the best interests of the Academy.

To them and all others concerned in the administration of the Academy all thanks are due for such success as has been attained.

C. P. TOWNSLEY,  
Colonel, Coast Artillery Corps,  
*Superintendent.*