

ANNUAL REPORT

OF THE

BOARD OF VISITORS

OF THE

UNITED STATES MILITARY ACADEMY,

MADE TO

THE SECRETARY OF WAR,

FOR

THE YEAR 1871.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1871.

OFFICERS OF THE MILITARY ACADEMY.

SUPERINTENDENT.

Colonel THOMAS G. PITCHER, *First Infantry.*

MILITARY STAFF.

Captain EDWARD C. BOYNTON, A. M., *Third Artillery, Adjutant.*
Captain TULLY McCREA, *First Artillery, Quartermaster.*
First Lieut. JAMES M. MARSHALL, *Fourth Artillery, Treasurer.*
Major THOMAS A. McPARLIN, M. D., *Surgeon U. S. A.*
Captain VAN BUREN HUBBARD, M. D., *Assistant Surgeon U. S. A.*

ACADEMIC STAFF.

Lieut. Col. EMORY UPTON, } *Commandant of Cadets and Instructor of ARTIL-*
1st Artillery, } *LERY, CAVALRY, AND INFANTRY TACTICS.*

Captain ALEXANDER PIPER, } *Assistant Instructor of Artillery Tactics.*
3d Artillery, }

Captain JOSEPH S. CONRAD, } *Assistant Instructor of Infantry Tactics.*
2d Infantry, }

Captain ALEXANDER S. CLARKE, } *Assistant Instructor of Infantry Tactics.*
5th Cavalry, }

Captain ALFRED E. BATES, } *Assistant Instructor of Cavalry Tactics.*
2d Cavalry, }

1st Lieut. WILLIAM S. STARRING, } *Assistant Instructor of Infantry Tactics.*
2d Artillery, }

1st Lieut. CHARLES KING, } *Assistant Instructor of Infantry, Artillery, and*
5th Cavalry, } *Cavalry Tactics.*

Bvt. 2d Lieut. EDGAR W. BASS, } *Acting Assistant Professors of Natural and Experi-*
Engineers, } *mental Philosophy.*
Bvt. 2d Lt. WILLIAM L. MARSHALL, }
Engineers, }

GEORGE L. ANDREWS *Professor of the FRENCH LANGUAGE.*

1st Lieut. GEORGE G. GREENOUGH, } *Assistant Professor of the French Language.*
4th Artillery, }

2d Lieut. THOMAS H. BARBER, } *Acting Assistant Professors of the French Lan-*
1st Artillery, } *guage.*
Cadet JAMES R. WASSON, U. S. M. A. }
Cadet Andrew H. Russell, U. S. M. A. }

Capt. THOMAS C. BRADFORD, } *Instructor of ORDNANCE AND GUNNERY.*
Ordnance, }

- 1st Lieut. EDWARD H. TOTEN, } *Assistant Instructor of Military Signaling and Tele-*
1st Artillery, } *graphy, and Acting Signal Officer.*
- 1st Lieut. JOHN C. MALLERY, } *Commanding Company E, Engineers.*
Engineers, }
- 2d Lieut. FREDERICK A. MAHAN, } *On duty with Company E, Engineers.*
Engineers, }
- ANTONÉ LORENTZ.....SWORD-MASTER.
- DENNIS H. MAHAN, LL. D.....*Professor of MILITARY AND CIVIL ENGINEERING.*
- Captain GARRETT J. LYDECKER, } *Assistant Professor of Military and Civil Engineering.*
Engineers, }
- 1st Lieut. JOHN C. MALLERY, } *Acting Assistant Professor of Military and Civil*
Engineers, } *Engineering.*
- ALBERT E. CHURCH, LL. D.....*Professor of MATHEMATICS.*
- Captain HERBERT A. HASCALL, } *Assistant Professor of Mathematics.*
5th Artillery, }
- 1st Lieut. JAMES C. POST, } *Acting Assistant Professors of Mathematics.*
Engineers, }
2d Lieut. JOHN E. GREER, } *Ordnance,*
Ordnance, }
2d Lieut. WILLIAM F. REYNOLDS, } *1st Artillery,*
1st Artillery, }
2d Lieut. ALBERT H. PAYSON, } *Engineers,*
Engineers, }
2d Lieut. PHILIP M. PRICE, Jr., } *2d Artillery,*
2d Artillery, }
- ROBERT W. WEIR, N. A.....*Professor of DRAWING.*
- 1st Lieut. EDWARD H. TOTEN, } *Assistant Professor of Drawing.*
1st Artillery, }
- 1st Lieut. RICHARD C. CHURCHILL, } *Acting Assistant Professor of Drawing.*
4th Artillery, }
- Rev. JOHN W. FRENCH, D. D.....*Chaplain and Professor of ETHICS AND LAW.*
- 1st Lieut. JOHN P. STORY, } *Assistant Professor of Ethics and Law.*
4th Artillery, }
- HENRY L. KENDRICK, LL. D.....*Professor of CHEMISTRY, MINERALOGY, AND*
GEOLOGY.
- 2d Lieut. JOHN PITMAN, } *Assistant Professor of Chemistry, Mineralogy, and*
Ordnance, } *Geology.*
- 2d Lieut. SAMUEL E. TILLMAN, } *Acting Assistant Professor of Chemistry, Mineralogy,*
4th Artillery, } *and Geology.*
- PATRICE DE JANON.....*Professor of the SPANISH LANGUAGE.*
- 1st Lieut. JAMES O'HARA, } *Assistant Professor of the Spanish Language.*
3d Artillery, }
- PETER S. MICHIE..... } *Professor of NATURAL AND EXPERIMENTAL PHI-*
 } *LOSOPHY.*
- First Lieut. JAMES MERCUR, } *Assistant Professor of Natural and Experimental*
Engineers, } *Philosophy.*

MEMBERS OF THE BOARD.

Appointed by the President.

Rev. BYRON SUNDERLAND, D. D., (President,) District of Columbia.
Professor ISAAC F. QUIMBY, (Secretary,) New York.
Hon. WILLIAM AIKEN, South Carolina.
Hon. A. G. EDWARDS, Missouri.
Hon. J. NEELY JOHNSON, Nevada.
Hon. WILLIAM MILLER, Alabama.
JOSEPH J. WOODS, Colonel Twelfth Iowa Volunteers, Kansas.

Appointed by the President of the Senate.

Hon. MATT. H. CARPENTER, United States Senator from Wisconsin.
Hon. O. P. MORTON, United States Senator from Indiana.

Appointed by the Speaker of the House of Representatives.

Hon. JOHN B. HAWLEY, Representative from Illinois.
Hon. SAMUEL S. BURDETT, Representative from Missouri.
Hon. LEWIS D. CAMPBELL, Representative from Ohio.

EXTRACT FROM ACT OF CONGRESS APPROVED AUGUST 8, 1846, AMENDED BY ACTS OF
MARCH 16, 1868, AND FEBRUARY 21, 1870.

That the President be authorized to appoint a Board of Visitors to attend the annual examination of the Military Academy, whose duty it shall be to report to the Secretary of War, for the information of Congress, at the commencement of the next succeeding session, the actual state of the discipline, instruction, police, administration, fiscal affairs, and other concerns of the institution: *Provided*, That the whole number of visitors each year shall not exceed seven: *Provided further*, That no compensation shall be made to said members beyond the payment of their expenses for board and lodging while at the Military Academy, and an allowance, not to exceed eight cents per mile, for traveling by the shortest mail route from their respective homes to the Academy, and back to their homes. And in addition to the other members of the Board of Visitors to be appointed by the President, according to law, to attend the annual examination of cadets at the United States Military Academy, there shall be on every such board two Senators, to be designated by the Vice-President, or President *pro tempore* of the Senate; and three members of the House of Representatives, to be designated by the Speaker of the House of Representatives, such designations respectively to be made at the session of Congress next preceding the time of such examination; and the Senators and Members so appointed shall make full report of their action as such visitors, with their views and recommendations in regard to the said Military Academy, within twenty days after the meeting of Congress, at the session next succeeding the time of their appointment.

LETTER OF TRANSMITTAL.

WASHINGTON, *July 1, 1871.*

SIR: It is proper, in transmitting to you the accompanying report of the Board of Visitors to the Military Academy for the present year, that we should explain the fact that only seven members of the board have affixed to it their signatures.

At the conclusion of our labors, several members of the board were absent. The Hon. L. D. Campbell, of the House of Representatives, was not at any time in attendance. His colleagues, the Hon. Mr. Hawley and the Hon. Mr. Burdett, and likewise the Hon. O. P. Morton of the United States Senate, were unable to remain until the close. General Quimby, the secretary of the board, was suddenly summoned from its sessions by serious illness in his family. The voluminous testimony taken by the committee on the subject of discipline requiring the service of a stenographer, could not be prepared in time to be submitted to the board before its final adjournment. This testimony has been sent by our direction to Senator Carpenter, the chairman of said committee.

The members of the board representing the Senate and House will doubtless, in performance of their further duty, make a report to Congress and present the testimony upon this subject.

Of the seven remaining members of the board, only four, as you will perceive, affixed their signatures to the report without qualification. The minority did not deem it advisable to draw up a separate report upon the topics which divided them from the majority, but have been content for the present to except to the portions indicated opposite their names.

We sincerely regret the want of unanimity in our conclusions, and all the more so, since our personal relations were throughout so full of pleasure and our parting one of unfeigned mutual respect.

But if the unanimity of former years is wanting to this report, you will do us the justice to believe that we have each been actuated by independence of thought and honesty of conviction.

Most respectfully, your obedient servant,

B. SUNDERLAND,
President of the Board.

Hon. WILLIAM W. BELKNAP,
Secretary of War.

REPORT OF THE BOARD OF VISITORS TO THE UNITED STATES MILITARY ACADEMY FOR 1871.

WEST POINT, *June*, 1871.

SIR: The Board of Visitors to the United States Military Academy at West Point, New York, for 1871, have the honor herewith to submit their report.

The board met at the time and place designated, and, being duly organized, entered upon their labors. They were first introduced by the Superintendent, Brevet Brigadier General Thomas G. Pitcher, to the academic board, and received with the customary formalities. They were daily furnished with aids, and advised of the order of exercises. All parts of the post were thrown open to their inspection. Every facility was afforded and every attention was paid to them in the progress of their investigations.

EXAMINATIONS.

The candidates for admission to the Academy were first examined. This being a change from the previous practice, the board were invited to witness the ordeal. Proficiency in reading, writing, spelling, grammar, arithmetic, geography, and the history of our country is required to qualify for admission. The result showed that out of ninety examined, ten were rejected for physical disability, and twenty-two for defectiveness of scholarship. (See Appendix, Exhibit No. 1.)

The examination of the first class, consisting of forty-three members, was continued for several successive days, and covered the principal topics of the last academic year. The discussions and answers in military and civil engineering, in military and international law, in mineralogy and geology, in ordnance and gunnery, and in cavalry tactics, fully evinced the attainments of the graduating class in these branches of study.

The second class, numbering sixty members, was examined in philosophy, chemistry, infantry tactics, artillery tactics, and drawing.

The third class, numbering fifty-one members, was examined in mathematics, French, Spanish, and drawing.

The fourth class, numbering fifty-five members, was examined in mathematics and French.

The acquirements of the young gentlemen in each of these classes, in their respective studies, so far as the board had opportunity to judge of them, were generally commendable.

Each cadet is examined upon two topics, one by illustrations upon the blackboard, the other by questions from the professor. In the case of the three lower classes, the interest is divided between two simultaneous examinations before respective subdivisions of the academic board. This requires either a corresponding division of the Board of Visitors, or an alternation between the two centers of attraction, which is not wholly satisfactory. In the opinion of the board, the examination should be conducted in the presence of the whole military

and academic staff and of the assembled spectators. The requisite additional time might well be occupied, in view of the obvious advantage.

MILITARY EXERCISES.

The board were fortunate in witnessing the out-door exercises, some one of which was given each day, through a period of weather unusually propitious. These exercises consisted of the battalion, skirmishing, light artillery, siege artillery, sea-coast artillery, pontoon, and squadron drills, together with practical duties in the laboratory, military signaling and telegraphy, and the use of the sword and bayonet. The exercise of the evening, mortar drill and the several exhibitions of pyrotechnics, all of which were quite superior, elicited the warmest commendation.

GRADUATION CEREMONIES.

On Monday, June 12, the board attended at the chapel on the interesting occasion when the diplomas were awarded to the graduating class by Major General George G. Meade, in the presence of the President of the United States, of the Board of Visitors, of the military and academic staffs, of the corps of cadets, and a large concourse of spectators. Senator Carpenter, a member of the board, delivered an address, and the imposing ceremony, enlivened by the stirring music of the well-appointed and efficient band of the post, was concluded by the singing of the usual parting hymn and the benediction.

RELIGIOUS SERVICES.

During their sojourn at the post, the board attended the public religious services, which are held in the chapel at half past ten o'clock every Sabbath morning, where all the officers and men, unless absent on duty, or attending religious services elsewhere, are required to be present.

The physical infirmities of the chaplain permanently disabling him for duty, his place during the past year has been supplied by such clergymen as could be secured from time to time. These services were conducted by the president of the board on two successive Sabbaths.

A second service is generally held in the afternoon, attendance upon which is entirely voluntary. Other religious meetings are quietly but earnestly maintained among a portion of the cadets themselves. And thus is furnished a gratifying evidence of the respect paid by all to the ordinances, and of the value set by many on the influence of the Christian religion.

THE CHAPLAINCY.

In connection with the chapel service, the board urgently recommend that henceforth the office of chaplain be made distinct; that the term of incumbency be limited to four years; and, as far as practicable, that the religious denominations be represented in rotation, in order that the principle so wisely adopted by the founders of the republic, and working so prosperously throughout the country, may be practically recognized at this post—that is to say, no monopoly of political patronage; no ecclesiastical establishment; no union of church and state.

THE COURSE OF INSTRUCTION.

The board have carefully considered the entire course of studies pursued at the Academy, both as to the methods of instruction, the nature of the branches pursued, and the time respectively given to each.

With regard to the *methods* of teaching in all the departments, they are able to express an almost unqualified approbation. The processes of imparting a knowledge of the subjects under discussion, seem skillfully chosen to reach the highest intelligence and culture, not so much by crowding the mind with the mere material of learning, as by training it to clear and consecutive thinking, or, in other words, teaching the art of study.

But in reference to the subjects pursued and the relative time devoted, the board respectfully suggest that an important change is imperatively demanded. In fact, considering the advanced conditions of science and civilization at the present day, it is, in the opinion of the board, absolutely indispensable to the future greater efficiency of the institution.

The four years of the academic course, as found by universal experience, constitute the maximum of time proper to be spent in the acquisition of a fundamental education, whether in the science of arms or in the liberal professions of civil life. Those studies which are essential to a military training, with those which are more closely akin to them, especially in view of the great expansion and minute accuracy of modern investigation, must of necessity consume the whole period of the academic curriculum. It has consequently been found that a number of most important branches, particularly those of elocution, English literature, belles-lettres, and ethics, have been thrust aside simply for want of time.

Furthermore, in view of the increasing intimacy of our country with Spanish-speaking populations, the board have been impressed with the conviction that the necessity of a knowledge of this language is not sufficiently understood. When it is remembered that the Spanish is spoken by forty-five millions of people, more than half of whom compose nations in our own hemisphere, and are annually coming into closer connection with us; when it is apparent that every year is extending and complicating our commercial and civil relations; when we consider the influence of future diplomatic intercourse, and even the possibility of military operations, we can scarcely overestimate the value of this study to the young men of the Academy. While, therefore, the board would gladly urge attention to other modern languages, as the French and German, so far as may be practicable, they deem it indispensable that the Spanish should be not only retained but even made more prominent.

PREPARATORY COURSE.

In the judgment of the board, strong reasons exist for the change they would propose. In the first place, candidates should have every possible advantage for admission to the institution; and while the examinations are fairly conducted, the terms are already as low as can well consist with the higher attainments of the subsequent course, and at the same time with the general preparations of young men for such admission. In the second place, it is to be deeply regretted that no provision has yet been made for the proficiency of the cadet in those studies which are now wholly excluded, and without a knowledge of which no man can be said to be thoroughly educated and fitted for the wider and more solemn duties of after-life.

The board, therefore, earnestly recommend that a preparatory course of at least one year should be established, and, in view of the number of annual rejections, that the minimum age of admission to the Acad

emy be fixed at eighteen years; that the method and standard of admission to the preparatory course be the same as it now is for the Academy; that at the end of this course an examination in the studies of the preparatory year be held, and that no person who cannot pass the test of such examination shall be admitted to the Academy, though he may not be required to pursue the prescribed studies with the preparatory class. And in pursuance of this end, the board likewise further recommend that a professorship of ethics and belles-lettres be established, the incumbent to be selected from civil life, and that the entire course of study be adjusted in accordance with the change proposed.

THE ACADEMIC BOARD.

The Board of Visitors for 1871, bear witness that in meeting the Superintendent and members of the military and academic staffs, they were brought into contact with gentlemen who are eminent each in his respective department. The only shadow of this reflection is that none, however useful or conspicuous, can avert the approach of inevitable change. A day must come when it is best that men should retire from the station which they have both dignified and adorned. It is the conviction of the board that such period has arrived in the case of the professor of ethics and law, of the professor of engineering, and of the professor of drawing; and that the Government should afford ample provision for that comfort in their retirement, to which they are entitled by so long a life of active and distinguished public service. And the board would further recommend that the professorship of drawing be abolished, and that hereafter this study be included in the department of engineering, and at the same time restricted to mathematical and topographical drawing.

THE LIBRARY.

A collection of some 24,000 volumes constitutes the library of the Academy. The room is spacious and finely located for the purpose. The books are in good condition, and, considering the general design as rather for miscellaneous reference than for erudite and scholastic reading, they seem to be well selected, and the utility of the collection might be augmented by such annual increase as a liberal appropriation would afford.

THE APPARATUS AND OBSERVATORY.

The board were gratified to find ample provision of philosophical and chemical apparatus, and, at the same time, surprised that no suitable rooms have been provided for practical processes and experiments. On the other hand, while they were constrained to admire the splendid fixtures and mechanism of the observatory, they regret to see in the mounted telescope the inferiority of forty years ago, and they would respectfully suggest whether it is not expedient to supersede an instrument which is not equal to the present requirements, not worthy of the institution to which it belongs, and not creditable to the American people, whose pride it should be to make everything about this national school conform to the most advanced stages of science and discovery.

INSPECTION OF BUILDINGS.

The board had the opportunity of examining the buildings at the post, with their appointments, in every detail of construction, and were grat-

ified to find the principal structures cleanly, in good order, substantial, and convenient for their purposes, so far as their capacity will admit.

The chapel, while formerly answering all the purposes of its erection, has, of late years, become insufficient to accommodate the increasing numbers in attendance, and the board regard it highly important that none should be excluded from want of room.

The hospitals are both in position and furnishing all that can be desired, yet happily they are tenanted by few. For several months past they have sheltered but some half-dozen men, to whose necessities the Government ministers faithful medical attendance.

The board would respectfully urge the erection of suitable buildings for the philosophical and chemical apparatus, for military relics, trophies, models, and other objects of interest, which have already accumulated beyond the limit of proper accommodation.

The workshops stand in the most unattractive part of the locality, where, though convenient of access from the river, which is an important consideration, they are, nevertheless, surrounded by an almost unbroken wildness of nature, heaped with piles of rubbish. These shops are built chiefly of wood. They are much decayed, and altogether too unsubstantial and precarious for the purposes to which they are devoted. It is clearly the conviction of the board that they should be replaced by others more spacious, permanent, and safe.

The works for the manufacture of gas are greatly in need of repair. Twenty thousand dollars once appropriated to this object has, by recent legislation, reverted to the Treasury.

The place for the deposition of the large quantities of coal annually used at the post is wholly unsuited, it being at the foot of a yard-wall, with no other protection or cover, and not only presenting an unsightly appearance, but also being liable to all the loss of such unnecessary exposure.

STATE OF THE GROUNDS.

With the exception of those portions which form the sites of the workshops, the grounds, including the plain, the encampment, the cemetery, the garden, together with the forts, the walks, the roads, the wharfs, and the water-courses, are in prime condition. The principal thing now required is a system of sewerage and drainage, which has never yet been adequately provided, and which, from the natural conformation of the place and the injury of heavy storms, is very greatly needed. It would prove the only effectual remedy against the large contingent expense for repairs of damage which now annually accrues.

FISCAL AFFAIRS.

The board have, by their committee, examined the books and accounts of the post, and found an exact and competent system of checks and balances, showing in every minute detail that the fiscal affairs of the institution are conducted with rigid economy and scrupulous honesty. The vouchers and evidences of all moneys received and expended are so exhibited as to afford full satisfaction. Statements of the accounts of all appropriations and expenditures, as furnished the board by the proper accounting officers, are herewith submitted. (See Appendix, Exhibits Nos. 2, 3, and 4.)

POLICE.

The board find the police regulations efficient and admirable, extending as they do to all the duties and responsibilities of military life, and

to all parts of the grounds, walks, cemetery, garden, academic buildings, officers' houses, barracks, mess-hall, laundry, riding-hall, stables, and outbuildings. They impose at all times the strictest regimen. To the natural beauty and grandeur of the place are thus added the finishing attractions. The whole aspect and activity of the post, the neatness, order, and punctuality which mark the disposition of every article and the movements of every hour, attest, in the most striking manner, the completeness of a vigilance which stamps its impress on every hand. To this wise forecast, aided by the salubrity of nature and the protecting kindness of Providence, is due the sanitary condition of the post; the general health which prevails throughout the entire academic course.

ADMINISTRATION.

The Superintendent is charged with the administration of every department of duty and responsibility at the post, but he has generally been well sustained by his subordinates. The board are pleased to note the evidences of a wise and competent supervision of all that concerns the welfare of this community. Having some eight hundred souls directly or remotely connected with his military family, the Superintendent has not only maintained a school for more than eighty children, but he has directed the various labors of the adults in every branch of industry, and caused to be kept an account of every dollar appropriated and expended; a record of every particular of the profit and loss of the institution. To his judgment and diligence very much is due for the charming appearance of the place, and the remarkable order in which everything is conducted. Alike in the greatest and the smallest matters, whether sanitary, economic, or educational, there seems to have been a spirit of fidelity and painstaking which cannot be too highly praised. Nothing appears to have been neglected which the means placed in his hands enabled him to supply.

In view, therefore, of the arduous and complicated labors of his position, the board freely accord their tribute of approbation to an officer who, having for several years sustained the burdens of his administration with so much fidelity and success, is about to be transferred to another post.

DISCIPLINE.

In regard to the discipline of the corps of cadets, the board have made such investigation and examination as circumstances have allowed, and have sought to compare its present with its former state. And while the board are compelled to express the opinion that the discipline now existing is not as strict as formerly, they feel that it would be unjust to charge upon the officers now in command at the Academy, a result which has been produced by many extraneous causes, and has been the growth of many years.

Twenty-five years ago West Point was substantially separate from the outside world; for several months of the year a mail was not received oftener than once in three or four days. The presence of visitors was almost wholly unknown, and the officers and cadets formed a community by and of themselves. The relations existing between the officers and cadets was like that at present existing between the officers and soldiers at a military post. Cadets were permitted to visit at the quarters of professors and officers on Saturday afternoons, and at no other time. But so reserved were the manners of officers, even on such occasions, that the privilege, though recognized, was very rarely exer-

cised. There was substantially no social intercourse between the officers and the cadets.

In those days, too, the rigor of discipline put all cadets, the sons of the rich and the sons of the poor, upon a common footing. The regulations not only prohibited any cadet from receiving money from his parents and friends, but no place existed, or was permitted to exist, on the limits, where cadets could expend money. Occasionally a cadet was allowed to purchase what he pleased under the head of "sundries;" not exceeding one dollar in amount, and that only on the order of an officer in charge.

But all this has changed. West Point is now or fast becoming a place of fashionable resort. Hotels have been erected in near proximity to the post, and hundreds of visitors now repair thither where one did in former years. This influx of fashionable life has caused a relaxation of the rules in regard to cadets visiting. The great distance between officers and cadets has been gradually diminished. Cadets of the first class may now visit officers every day in the week, and officers and cadets associate together with a freedom of intercourse not formerly known. Insensibly the standard of discipline has been lowered, until the Academy has less than formerly the character of the Regular Army, and more the features of a militia establishment, where officers and men are separated while on duty, but mingle in social intercourse when the hour of drill or parade has passed.

Although the regulation in regard to cadets receiving money remains unchanged, yet, at present, a new functionary, known as the "cadet confectioner," is allowed to keep open on cadet limits a place of resort which cadets are known to frequent daily to enjoy the table, and where they may treat their fellows without stint or limit. Thus one of the elements of equality which formerly existed among the cadets is destroyed, and the son of a wealthy man may fare sumptuously, while the poor boy must confine himself to such food as the mess-hall affords.

Many other causes might be mentioned as contributing to the present condition of things, and many other illustrations of the change from the custom of former years might be given. But those members of the board who have been appointed by the Vice-President and Speaker of the House of Representatives, and whose duty it is by law specially made to report to Congress upon this subject, will doubtless do so at length, and therefore this board pass the subject without as full a consideration as would otherwise be demanded. But this board, feeling the importance of a high state of discipline to the efficiency of the Academy, to accomplish the purpose for which it is maintained, earnestly recommend a return to the stricter kind of discipline which was administered years ago. An army must be governed by different methods and upon different principles from a civil society, and to an army and to every military establishment discipline is a necessity.

With a view to this end, in the opinion of this board, the superintendent and commandant of cadets should always be officers of high rank, who, by their age and military distinction, can command not only the respect but the implicit obedience of the cadets.

RECOMMENDATIONS.

The board are not insensible to the delicacy of making recommendations which involve considerable drafts upon the Treasury of the country at a time when an enormous debt weighs it down, and the strictest economy should be the public policy. Yet, without doubt, it is the

duty of Congress to make liberal provisions for this post, so long as the institution is maintained as the sole national military school. The board of the present year have endeavored to point out the most pressing necessities, and call to them the attention of the Government.

They would respectfully suggest that the amount which last year relapsed to the Treasury may be reappropriated, with such other sums as may be necessary to these important objects.

The board would also respectfully suggest that the loss of clothing and other articles of the cadets by the fire which occurred during the last winter, and which some of them can ill afford to bear, should be reimbursed by the generosity of the Government, inasmuch as the evidence in each case is clear and definite, and there are satisfactory vouchers for the full amount of loss sustained by each cadet.

CONCLUSION.

It remains only for the Board of Vistors for 1871, in taking leave of the subject of their investigations, to avow the sentiment of heart-felt pride which, upon the whole view of the case, they experience in regard to this great national military school. When we reflect on its historic associations, on the number of its illustrious sons who have gone out to adorn every department of human enterprise, as well as to defend the country in times of peril; when we see the great benefits thus conferred on so many youths of the republic, and the necessity of the continuance of such an institution, not only for maintaining the national defense, but also for upholding the high standard of scientific attainments, there can be no question among the candid and patriotic as to the feasibility and the duty of giving it a prompt and generous support.

It must, indeed, expect to encounter the criticism and opposition of its enemies, and if these be wisely improved, they may be overruled for the still higher good to which it is reaching forward. The board have only to express the hope that the results of the past may be transcended by the achievements of the future, and that the Academy may flourish as one of the strongest and noblest monuments of the nation.

A. G. EDWARDS, *of Missouri.*

J. NEELY JOHNSON, *of Nevada.*

J. J. WOODS, *of Kansas.*

MATT. H. CARPENTER, *of Wisconsin.*

With the exception of the article on discipline.

B. SUNDERLAND, *of Washington, D. C.,*

President of the Board.

WM. MILLER, *of Tuscaloosa, Alabama.*

With the exception of the article on discipline, and also the article on the retirement of professors.

WILLIAM AIKEN, *of South Carolina.*

Hon. WILLIAM W. BELKNAP,

United States Secretary of War.

EXHIBIT No. 1.

Statement showing the number of new cadets who have reported for examination, who have been rejected, and on what account, from 1867 to 1871, inclusive.

Years.	Number reported for examination.	Number rejected.	Rejected on what account.						Physical disability.
			Literary incompetency.						
			Writing, including orthography.	Reading.	Arithmetic.	Geography.	Grammar.	History.	
1867	74	19	15	2	8	7	8	9	2
1868	113	37	12	8	16	15	25	19	4
1869	111	30	13	4	9	13	16	13	8
1870	144	78	31	16	29	44	56	40	4
1871	90	32	6	2	11	12	15	15	10
Total	532	196	77	32	73	91	120	96	23

ADJUTANT'S OFFICE, U. S. MILITARY ACADEMY,
West Point, N. Y., June 10, 1871.

EDWARD C. BOYNTON,
Bvt. Major and Adjutant.

EXHIBIT No. 2.

Statement of the moneys received and expended by the treasurer of the Military Academy on account of the cadets, for the year ending April 30, 1871.

Balance on hand May 1, 1870	\$11, 253 66
Moneys deposited by cadets during the twelve months ending April 30, 1871	14, 688 05
Equipment fund returned:	
Each cadet has \$4 a month withheld from his pay, and the whole amount returned to him when he graduates or is discharged	8, 508 00
Traveling pay	641 71
Pay:	
Each cadet receives \$50 79 per month	132, 054 76
Total receipts	167, 146 18
Board:	
An auditing board examines the accounts of the purveyor every two months, and the whole amount is charged pro rata among the cadets.	\$50, 471 01
Washing:	
Prices of washing for blankets, pants, coats, and jackets, 7 cents; shirts, drawers, sheets, &c., 5 cents; socks, gloves, belts, &c., 3 cents	9, 762 37
Store of commissary:	
Conducted by commissary of cadets; the articles supplied are uniform clothing and room furniture	20, 349 20
Store of commissary, clothing department:	
Text-books, stationery, shoes, &c., and the necessary repairs to the same, all of which is subject to the inspection of the clothing board.	26, 778 48
Store of commissary, shoe department	6, 009 49
Postage	469 19

Barber and shoeblick:	
Each cadet is charged 38 cents per month for shoeblicking, 10 cents for hair-cutting, and 15 cents for varnishing accoutrements.....	1, 812 64
Confectioner	212 00
Baths:	
Charged at 6 cents each.....	710 48
Making fires and policing barracks:	
Charged pro rata.....	1, 116 61
Printing:	
For the use of cadets.....	311 31
Dialectic Society:	
Charged by subscription.....	261 59
Gas:	
Each cadet is charged 50 cents per month.....	1, 297 50
Dentistry.....	1, 197 27
Damages, Quartermaster's Department:	
Collected for damage to Government property, (broken windows, &c.)	31 20
Damages, ordnance, United States:	
Collected for damage to Government property, (guns, &c.).....	56 53
Damages, mess:	
Collected for damage at mess-hall, (broken dishes, &c.).....	150 81
Subscriptions to boat-clubs.....	894 18
Subscriptions to newspapers:	
One paper allowed to be taken by any cadet upon receiving the superintendent's permission.....	279 40
Subscriptions to theatricals:	
Entertainment given by the cadets on the evening of December 31...	118 30
Subscriptions to dancing:	
Paid dancing-master, &c.....	627 91
Subscriptions to invitation-cards:	
For hops, theatricals, &c.....	1, 005 85
Subscriptions to hops:	
Necessary music, attendants, and incidental expenses.....	317 99
Subscriptions to albums:	
Allowed only to graduates just prior to their leaving.....	155 63
Subscriptions to monument:	
Subscribed.....	400 40
Subscriptions to lectures:	
Payment of lecturers, &c.....	410 00
Subscriptions to cadet-band:	
For theatricals of December 31.....	56 75
Subscriptions to class-rings:	
Allowed only to graduates.....	639 00
Oath of allegiance:	
Notary's fees, 25 cents each.....	28 50
Freight:	
For cadets.....	3 52
Expressage:	
For cadets.....	188 51
Cash paid discharged and graduated cadets.....	24, 671 32
Balance on hand April 30, 1871.....	6, 013 24
Balance of equipment fund April 30, 1871, (amount collected during the year).....	10, 288 00
Total expenditures.....	167, 146 18

EXHIBIT No. 3.

EQUIPMENT FUND.*

May 1st, 1870: By balance on hand.....		\$17, 300 00
Receipts for year ending April 30, 1871.....		10, 288 00
Paid graduates, &c., for year ending April 30, 1871.....	\$8, 508 00	
Balance on hand May 1st, 1871.....	19, 080 00	
	27, 588 00	27, 588 00

* Each cadet has \$4 per month withheld from his pay, and the whole amount is returned to him when he graduates or is discharged.

GAS FUND.*

May 1st, 1870: By balance on hand.....		\$3,419 21
Receipts for year ending April 30, 1871.....		3,277 94
Amount paid out for year ending April 30, 1871.....	†\$3,357 60	
Balance on hand May 1st, 1871.....	3,339 55	
	6,697 15	6,697 15

DRAWING-BOARD AND TRIANGLE FUND.‡

May 1st, 1870: By balance on hand.....		\$380 45
Amount paid out for year ending April 30, 1871.....	\$165 58	
Balance on hand May 1st, 1871.....	214 87	
	380 45	380 45

MISCELLANEOUS FUND.§

May 1st, 1870: By balance on hand.....		\$148 76
Receipts for year ending April 30, 1871.....		14 63
Amount paid out for year ending April 30, 1871.....	\$58 13	
Balance on hand May 1st, 1871.....	105 26	
	163 39	163 39
Balance.....		\$21,248 42
Total receipts.....		13,580 57
Total payments.....	\$12,089 31	
Total amount remaining on hand.....	22,739 68	
	34,828 99	34,828 99

* Created by the payment of 25 cents per 100 cubic feet by all consumers excepting cadets, who pay 50 cents each per month.

† Expended in the necessary production of gas and repairs to the gas-works.

‡ This fund was created for the purpose of replacing drawing-boards, triangles, &c., destroyed by cadets, and is accrued by charging cadets with articles thus destroyed.

§ Accumulation of fractional amounts on such expenditures are charged to the cadets *pro rata*, expended in books, &c., for office, postage on cadet muster-rolls, &c.

EXHIBIT NO. 4.

Statement of money received and expended under each appropriation during the fiscal year ending June 30, 1871.

Heads of appropriations.	Balance unexpended June 30, 1870.	Appropriated for fiscal year ending June 30, 1871.	Received from other sources.	Available for fiscal year ending June 30, 1871.	Expended, to include May 31, 1871.	Covered into the United States Treasury for tax, July 1, 1870.	Undrawn in United States Treasury.	On deposit with the Assistant Treasurer United States, New York.	Balance available for fiscal year ending June 30, 1871.
Current and ordinary expenses.....	\$2,550 11			\$2,550 11					
Increase and expense of library.....	1,301 62			3,301 62	3,154 43			\$1,147 19	\$1,147 19
Warning apparatus for academic buildings.....	12,014 35			12,014 35	8,000 00			4,014 35	4,014 35
Forage for artillery and cavalry horses.....	4,007 30			4,007 30	8,888 79			3,118 60	3,118 60
Gas-pipes, gasmeters, and retorts.....	534 21			1,134 21	451 26			672 95	672 95
Models for the department of cavalry.....	305 62			305 62				305 62	305 62
Furniture for hospital for cadets.....	1 44	250 00		251 44	60 93			190 51	190 51
Targets and batteries for artillery exercise.....	268 67			268 67				268 67	268 67
Supplying horses for cavalry and artillery practice.....	1,339 93			1,339 93				1,339 93	1,339 93
Sewers to river from supper, &c., barracks.....	843 71			843 71	5 00			838 71	838 71
Repairs to officers' quarters.....	942 76			942 76				942 76	942 76
Iron girders for academic buildings.....	339 54			339 54	369 54				
Mess-room and kitchen of cadet-hospital.....	277 30			277 30	6 00			271 30	271 30
Purchase of fuel for mess-hall and shops.....		3,000 00		3,000 00	3,000 00				
Refitting academic building and barracks.....	1,191 25			1,191 25	897 80				
Removal and reconstruction of magazine.....	1,875 78			1,875 78	1,875 78				
Ventilating and heating the barracks, &c.....	31,045 53			31,305 53	13,638 83			17,666 70	17,666 70
Miscellaneous items and incidental expenses.....	209 20		\$260 00	2,309 20	309 20				
Models for the department of engineering.....	2,026 40			2,026 40	861 12			1,165 28	1,165 28
Increasing supply of water.....	19 69			19 69	10 69				
Fire-proof building for public offices.....	98 79	25,000 00		25,098 79	25,000 00				
Furniture for soldiers' hospital.....	17 57	100 00		117 57	117 57				
Removal and enlargement of gas-works.....	5,130 61			5,130 61				5,130 61	5,130 61
Breast-height wall of water-battery.....	576 44			576 44	576 44				
Addition to soldiers' hospital.....	32 87			32 87					
Materials for quarters for school-ten officers.....	1,423 40			1,423 40	711 69			711 70	711 70
Contingencies for superintendent.....	4 59	1,000 00		1,004 59	999 09			5 50	5 50
Expenses of the board of visitors.....	2,022 46			2,022 46	43 12			1,979 34	1,979 34
Enlarging, improving, and repairing cemetery.....	3,546 31			3,546 31	2,563 93			1,342 38	1,342 38
Permanent dock on wharf.....	2,500 00			2,500 00				2,500 00	2,500 00
Repairing roads.....	500 00			500 00	500 00				
Repairs and improvements.....	20,000 00			20,000 00	19,454 11			545 89	545 89
									\$2 71
									513 18

Fuel and apparatus.....	14,000 00	14,000 00	11,219 32	2,780 68	2,780 68
Forage for draught animals.....	1,260 00	1,260 00	1,260 00	79 00	79 00
Postage and telegrams.....	200 00	200 00	121 00	110 96	110 96
Stationery.....	500 00	500 00	389 04	366 40	366 40
Transportation.....	1,200 00	1,200 00	833 60	563 53	563 53
New press, type, and materials for office and diplomas.....	1,300 00	1,300 00	736 47	43 10	43 10
Cadet-registers, class-reports, and blanks.....	200 00	200 00	154 90	25 00	25 00
Compensation to pressman and lithographer.....	100 00	100 00	75 00	137 50	137 50
Clerks to disbursing officers and quartermasters.....	1,650 00	1,650 00	1,509 79	125 00	125 00
Clerks to adjutants.....	1,500 00	1,500 00	1,372 92	125 00	125 00
For contingent expenses of the departments of mathematics, &c.....	1,500 00	1,500 00	2 08	333 00	333 00
Miscellaneous and incidental expenses.....	1,500 00	1,500 00	1,165 00	1,935 33	1,935 33
Departments of drawing, ethics, French, Spanish, chemistry, &c.....	3,350 00	3,350 00	1,414 67	1,905 26	1,905 26
Repairs and additions to officers' quarters.....	7,690 00	7,690 00	5,784 74	2,628 29	2,628 29
Rebuilding the north wharf.....	4,010 00	4,010 00	1,381 71	369 30	369 30
Grading, draining, and improving the artillery and cavalry drill-ground.....	3,000 00	3,000 00	2,630 70
Repairing and putting new roof on cadet-quarters.....	2,000 00	2,000 00	2,000 00
Total.....	50,000 00	50,000 00	3,997 61	6,002 39	46,002 39
		\$40,000 00			
	76,947 42	260 00	120,075 43	7 50	60,974 49
	152,850 00	230,057 42			100,974 49

* Refunded by Morris, Tasker & Co. for labor.

UNITED STATES MILITARY ACADEMY,
West Point, N. Y., June 8, 1871.

T. G. PITCHER,
Brevet Brigadier General United States Army, Superintendent.

