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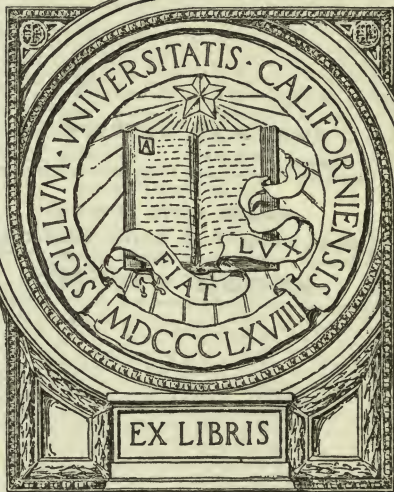
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A MANUAL FOR ASPIRANTS  
FOR COMMISSIONS IN THE  
 UNITED STATES  
MILITARY SERVICE


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By CAPT. IRA L. REEVES

GIFT OF  
Miss J. T. Vinther



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A MANUAL FOR  
ASPIRANTS FOR COMMISSIONS  
IN THE  
United States Military Service

BY  
IRA L. REEVES,  
*Captain U. S. Army.*

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FRANKLIN HUDSON PUBLISHING CO.,  
KANSAS CITY, MO.  
1910.

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A MANUAL FOR

ASPIRANTS FOR COMMISSIONS

United States Military Service

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REVISED EDITION

GIFT OF

Miss J. T. Vinther

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# CONTENTS.

	Page.
PREFACE .....	5
CHAPTER I.	
INTRODUCTORY .....	7
CHAPTER II.	
APPOINTMENTS TO THE ARMY OF GRADUATES OF THE UNITED STATES MILITARY ACADEMY.....	11
Brief History of the Academy.....	12
Appointments, How Made, Date of, Alternates....	14, 15, 16
Examination and Admission of Candidates.....	16
Qualifications .....	18
Character of Examinations.....	18
Academic Duties.....	34
Physical Examination of Cadets.....	35
Vacations and Leaves of Absence.....	35
Pay of Cadets.....	36
Deposit Prior to Admission.....	37
Promotion After Graduation.....	37
Recitation Schedule.....	38
The Course of Study by Departments.....	41
Corps Organization.....	58
Classification of Cadets.....	58
CHAPTER III.	
PROMOTION OF ENLISTED MEN.....	60
<i>Appointments in the Cavalry, Field Artillery, and Infantry</i> .....	60
Qualifications of Applicants.....	62
Application for Examination.....	62
Preliminary Physical Examination.....	64
Preliminary Moral Character and Mental Examination....	64
Final Examination.....	66
Final Physical Examination.....	67

921576

	Page.
Final Moral Character and Mental Examination.....	68
Examination as to Fitness for Mounted Service.....	69
Report of Examining Board, and Assignments.....	69
<i>Appointments in the Coast Artillery</i> .....	70
Examination for Appointment in the Coast Artillery.....	70
Qualifications of Applicants.....	70
Application for Examination.....	70
Preliminary Physical Examination.....	72
Preliminary Mental Examination.....	73
Final Examination.....	74
Final Physical Examination.....	75
Final Examination, Moral Character and Mental.....	76
Report of Examining Board.....	78
Assignments.....	78
<i>Form for Individual Record of Candidate</i> (for all Arms of the Service).....	79
<i>Specimen Questions Asked at an Examination</i> .....	(See Chapter XV.)

## CHAPTER IV.

APPOINTMENTS FROM CIVIL LIFE.....	81
Appointments to the Cavalry, Field Artillery and Infantry.....	82
Examining Boards; How Constituted.....	82
Those Eligible for Appointment.....	82
Physical Examination.....	83
Moral Character and Mental Examination.....	84
Examination as to Fitness for Mounted Service.....	86
Report of Examining Board.....	86
<i>Appointments to the Coast Artillery</i> .....	87
Applications, How Made.....	87
Examining Board, How Constituted.....	87
Qualifications of Candidates.....	88
Examination.....	88
Specimen Questions.....	(See Chapter XV.)

## CHAPTER V.

APPOINTMENTS TO THE PORTO RICO REGIMENT OF INFANTRY.....	93
Boards for the Examination of Applicants.....	94
Qualifications for Appointment.....	94

*Contents.*

vii

	Page.
Applications for Examination.....	95
Physical Examination.....	95
Moral and Mental Examination.....	96
Examination for Promotion in the Porto Rico Regiment.....	98
Form for Individual Record of Candidate.....	98

CHAPTER VI.

APPOINTMENTS TO THE PHILIPPINE SCOUTS.....	99
Examination for Appointment.....	100
Examination for Promotion or Re-Appointment.....	104
Professional Examination of Officers of the Philippine Scouts .....	105
Form for Individual Record of Candidate for Original Appointment .....	107

CHAPTER VII.

APPOINTMENT TO THE GRADE OF THIRD LIEUTENANT IN THE PHILIPPINE CONSTABULARY.....	109
Duties of Constabulary Officers.....	109
Pay of Constabulary Officers.....	110
Cost of Living.....	110
Appointments .....	111
Leaves of Absence, Etc.....	111
Climate .....	112
Examinations and Appointments in the Constabulary.....	112
Rules for Examination.....	115
Description of Examinations.....	117
Specimen Questions.....	117

CHAPTER VIII.

COMMISSIONS IN VOLUNTEER FORCES WHICH MAY HEREAFTER BE ORGANIZED.....	124
Act of Congress Making Provision for Eligible List.....	126
Boards for the Examination of Applicants.....	127
Qualifications of Applicants.....	127
Applications for Examination.....	128
Organization of Examining Boards.....	129
The Examination.....	129
Infantry .....	137
Cavalry .....	138
Field Artillery .....	139

	Page.
Coast Artillery.....	140
Engineers .....	141
Signal Corps.....	142
Adjutant General's Department.....	143
Inspector General's Department.....	144
Quartermaster General's Department.....	144
Subsistence Department.....	145
Ordnance Department.....	146
Medical Department.....	146
Pay Department.....	147
Judge-Advocate General's Department.....	148
CHAPTER IX.	
A SHORT TALK WITH NEWLY APPOINTED OFFICERS.....	151
Oath of Office.....	151
Reports .....	152
Uniforms, Arms and Equipment.....	152
Social Customs.....	154
Library .....	154
Performance of Duty.....	154
Income and Expenditures.....	155
Habits .....	156
CHAPTER X.	
ENLISTING FOR A COMMISSION.....	157
The Disciplinary Gulf.....	157
Food and Clothing.....	157
The Enlisted Men as a Type.....	158
The Soldier's Routine.....	158
The Arms of the Service.....	159
Assistance of Officers.....	159
Some Pointers.....	160
CHAPTER XI.	
THE ENLISTED MEN.....	161
The Enlisted Men of the Regular Army.....	161
Requirements to Enter the Service.....	163
Declaration of Applicant for Enlistment.....	167
Form of Consent in Case the Applicant Is a Minor.....	168
Oath of Enlistment.....	168

*Contents.*

ix

Page.

Pay and Allowances of Enlisted Men.....169  
Location of General Recruiting Stations, U. S. Army....174

CHAPTER XII.

THE ARMY.....178  
The Military Educational System of the Army.....178  
Rank and Precedence of Officers and Non-Commissioned  
Officers .....179  
Appointments and Promotions.....181  
Military Division and Departments.....183  
Authorized Strength.....186

CHAPTER XIII.

A FEW WORDS FROM A SOLDIER'S DICTIONARY.....187

CHAPTER XIV.

MILITARY SCHOOLS AND COLLEGES.....193  
Military Instruction.....193  
Distinguished Institutions, Appointment of Honor  
Graduates .....194  
Classification of Institutions.....195  
List of Institutions.....195  
List of Institutions Having Army Details.....197

CHAPTER XV.

SPECIMEN QUESTIONS.....200



## PREFACE.

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In 1901 the writer prepared a little volume called "A Manual for Aspirants for Commissions in the United States Army." It was well received and, it is hoped, served as an aid to many aspiring and ambitious young men. But the rapid changes taking place in the Army following the Spanish-American War soon placed this little work in the back-number class. An effort at revision has been repeatedly attempted, but lack of time has always prevented the completion of this work. The changes in the Service have gone on until now a revision would mean practically new matter throughout, and to call it a "revised edition" would be stretching the imagination beyond its guaranteed elasticity, so a new volume is here offered.

The former book dealt with commissions in the Regular Army only. This one includes the Porto Rico Regiment, the Philippine Scouts, the Philippine Constabulary, and the "qualified list" for commissions in a volunteer army, should one be required to meet the contingency of future wars. The very latest orders covering the examinations for appointment in the different organizations here named have been sought, and it is believed the work is strictly up to date in all these matters.

While there is considerable original matter, most, or at least a great part of it is copied from General Orders, as it is thought best to take the original as it comes from the Adjutant General's office, rather than attempt any interpretations with the possibility of causing someone to make mistakes for which they could justly hold the writer, or compiler, responsible.

It is desired to give credit, as sources of information in preparing this book, to the following: United States Army Regulations, General Orders from the Adjutant General's Office, and orders and circulars from the Headquarters of the Philippine Constabulary, Manila, P. I.

IRA L. REEVES.

*Allerton, Mass., September, 1910.*



## CHAPTER I.

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### INTRODUCTORY.

“For gold the merchant plows the main,  
The farmer plows the manor;  
But glory is the soldier’s prize,  
The soldier’s wealth is honor.”—*Burns.*

A young man seeking a commission in the United States Army is embarking upon a very creditable enterprise, and the ambition prompting such a step is laudable. It makes no difference which road is taken to arrive at the end sought, the accomplishment is difficult.

An Army officer has no sinecure. Contrary to a popular impression, his life is not made up of full-dress balls, parades, revelry, gold-laced uniforms, and big pay. No “gilded satrap” for him. It is true there are balls and parades, and he wears a gold-laced uniform—at times—but now-a-days it is the olive drab, the leather leggings, the campaign hat, and the “hike.”

In addition to an officer’s strictly military duties, there are long hours of preparation for his educational course and for his examinations for promotion.

While drills are many and taxing, there are in addition the guard duties, the court-martial duties, the boards of survey, and many other duties calling for a diversity of knowledge and a careful and painstaking training.

The pay is moderate. It compares very favorably with that of professions in civil life requiring an equal amount of preparation.

In order for an officer to succeed, his ambition must be backed

by real patriotism. He must constantly keep before him the welfare of his country, the Army, his regiment, and his company. Love of country and *esprit de corps* must be his guiding-stars.

But this chapter is introductory, and must not encroach on the duties of one of its fellows.

Recent years have worked great changes in the Army. The proportionate number of graduates of the U. S. Military Academy holding commissions in the Army, to the whole number, has greatly decreased in the face of the fact that the number graduating has gradually increased. This condition came about through increasing the Army (a direct result of the Spanish-American War), and the consequent increase in the number of officers, making it necessary to appoint many from the Army, from the volunteers, and from civil life. Should there be no more wars, and the strength of the Army remain as it now is, the percentage of graduates will again increase, and in time will return to where it was before the comparatively recent increases in the authorized strength of the Army.

At the present time the chances for enlisted men to secure appointments are good. The number offering themselves for examination will always, no doubt, greatly exceed the number of vacancies left open for the enlisted men, but this condition leaves room for a weeding-out process, making it possible to select from a large number the best of the material offered. Chapter III. is devoted to the appointment of enlisted men and the rules and regulations governing the examinations.

The civilian appointee has been largely in evidence since 1898, but the number now being appointed has dwindled into very small figures, and, unless legislation now pending increases the number of commissioned officers of the Army, the chances will remain about as they are at present. These appointments are, by recent policy, confined almost entirely to honor graduates of military schools having Army officers detailed as professors of military science and

tactics. Chapter IV. deals with appointments from civil life, and will no doubt answer all questions arising in the mind of the reader who may be interested.

The *Philippine Constabulary* and the *Philippine Scouts* open new avenues of service. Both offer to the young man an interesting experience, good remuneration, and a valuable training. As must be surmised, the service is confined entirely to the Philippine archipelago. These appointments are covered in Chapters VI. and VII.

The *Porto Rico Regiment* offers but few vacancies and these, with possibly a few exceptions, will go to native Porto Ricans. It is a splendid regiment, doing garrison duty on the Island of Porto Rico. The enlisted men are natives and have shown remarkable aptitude for the military. Chapter V. deals with this regiment and the appointments in it.

Commissions in any volunteer forces which may hereafter be organized cannot fail to interest any American citizen. In the past there was no system under which officers for such a force could be at once designated with any assurance that the one necessary qualification—efficiency—had not been overlooked. It is believed that the system of examinations provided for by recent Act of Congress, and the rules and regulations published by the War Department (Chapter VIII., this volume), vitalizing the Act, will secure an eligible list of officers for volunteer regiments, which would make the work of "whipping into shape" a volunteer army a comparatively easy task.

Newly-appointed officers will no doubt be interested in a few words of advice which they will find in Chapter IX.

The matter of enlisting for a commission is treated in Chapter X. A young man who has the education and training necessary to secure a commission from the ranks will also have sufficient judgment to cause him to thoroughly consider the advisability of en-

listing for this purpose, and will, it is hoped, gain some knowledge from the reading of this chapter that will aid him in arriving at a decision.

All must be interested in the *Enlisted Man*. There could not be much of an Army without soldiers. The officer who is not interested in the soldier fails to have a proper conception of his duty. It is for the training and leading of soldiers that officers are created. The *Enlisted Man*, his pay and findings, are discussed in Chapter X.

It is hardly a function of a treatise of this kind to enter into the almost inexhaustible subject of "The Army." The one volume of Army Regulations alone is a book of nearly four hundred pages, and yet but very little comparatively can be gleaned from a perusal of its paragraphs. There are, however, a few elementary things which it seems necessary should find a place here. They are given in Chapter XII.

In addition to the "King's English," the soldier has a language of his own—his "technical" language, if you please. While the use of Army slang is much more common with the enlisted man than with the officer, it cannot but add some to a newly-appointed officer's military accomplishments to possess a talking knowledge of Army "Esperanto." *A Few Words from a Soldier's Dictionary* (Chapter XIII.) will give a vocabulary without the grammar.

Chapter XIV. has been added because of the recent policy of appointing honor graduates from institutions of learning having Army officers detailed as professors of military science and tactics. In addition to a list of these schools and their classification, other information is given which will be necessary to a young man seeking a commission by this route.

Some specimen questions asked at recent examinations are given in Chapter XV. An idea of the scope of the examination may be obtained from these.

## CHAPTER II.

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### APPOINTMENTS TO THE ARMY FROM GRADUATES OF THE UNITED STATES MILITARY ACADEMY.

BRIEF HISTORY OF THE ACADEMY.—APPOINTMENTS, HOW MADE, DATE OF, ALTERNATES.—EXAMINATION AND ADMISSION OF CANDIDATES, QUALIFICATIONS, CHARACTER OF EXAMINATIONS.—ACADEMIC DUTIES.—PHYSICAL EXAMINATION.—VACATIONS AND LEAVES OF ABSENCE.—PAY OF CADETS.—DEPOSIT PRIOR TO ADMISSION.—PROMOTION AFTER GRADUATION.—RECITATION SCHEDULE.—THE COURSE OF STUDY BY DEPARTMENTS.—CORPS ORGANIZATION.—CLASSIFICATION OF CADETS.

“I give it as my fixed opinion that, but for our graduated cadets, the war between the United States and Mexico might, and probably would, have lasted some four or five years, with, in its first half, more defeats than victories falling to our share; whereas, in less than two campaigns, we conquered a great country and a peace, without the loss of a single battle or skirmish.”—*Winfield Scott*.

“The education and manly training imparted to young men at West Point has repaid the United States a thousand times its cost, and more than verified the predictions of General Washington. Every cadet at West Point is an appointee of a member of Congress, every member having a cadet of his own nomination there, with only ten appointed by the President at large. The corps of cadets is therefore a youthful counterpart of our national House of Representatives. The same laws, the same regulations, the same instruction, books, clothing, and food are common to all, and a more democratic body never existed on earth than is the corps of cadets.”—*W. T. Sherman*.

"This institution has completed its first hundred years of life. During that century no other educational institution in the land has contributed as many names as West Point has contributed to the honor-roll of the nation's greatest citizens."—*Theodore Roosevelt.*

#### BRIEF HISTORY OF THE ACADEMY.

To General Henry Knox, famous artillery officer of the War of the Revolution, and later appointed by Congress Secretary of War, should be given the credit of first conceiving the idea of a national military academy for the education of officers for the permanent military establishment.

He, no doubt, observed from the very beginning of the War of Independence the necessity for trained engineers and artillerymen in the patriot Army. This necessity was, in a measure, supplied by foreigners, chiefly Frenchmen. He proposed a plan to establish a military academy with a fixed home, where pupils (cadets) would be educated chiefly in the theory of war, leaving the practice to be gained in active service. He made a report to a committee of Congress on the 27th of September, 1776, in which he advocated an academy "nearly on the same plan as that of Woolwich" (school for candidates for the Royal Engineers and Royal Artillery, Woolwich, England). These views were afterward supported by Alexander Hamilton and approved by Washington. The plan, however, was not carried out until 1802, when the United States Military Academy was established at West Point, N. Y., by act of Congress, approved March 16, 1802. This act authorized the President to organize and establish a Corps of Engineers, to consist of five officers and ten cadets, to be stationed at West Point. The Academy, with ten cadets present, was formally opened on July 4, 1802.

Other acts, in 1802 and 1808, authorized 40 cadets from the artillery, 100 from the infantry, 16 from the dragoons, and 20 from the riflemen. But few of these were appointed, and no provision was made for them at the Academy.

In 1810 the Academy was deprived of nearly all means of instruction, and officers and cadets had difficulty in obtaining their pay.

During the greater part of 1811 and a part of 1812 instruction was practically abandoned. In March of the latter year there was not a single instructor. Up to and including this time, however, there had been eighty-eight graduated. They had entered from all ages from twelve to thirty-four years, without mental or physical examination, and at any time of the year.

The Academy was reorganized by act of Congress of April 29, 1812, and the provisions of this act have furnished the general principles on which the Academy has since been conducted. It authorized a more adequate corps of professors and established a maximum of 250 cadets. It also prescribed an age-limit and certain mental qualifications. The present era in the Academy's history really began under the able superintendency of Major Sylvanus Thayer, Corps of Engineers, in 1817.

It was not until 1843 that a prescribed residence was a legal qualification for entrance, but the custom had grown of selecting 1 cadet from each Congressional district, and in this year it was made a law. In addition to allotting 1 cadet from each Congressional district, 1 from each Territory, 1 from the District of Columbia, 10 from the United States at large, to be appointed by the President, was authorized at the same time. Subsequent acts have increased the authorized number of appointments, but these are noted later in this chapter.

The total number of graduated cadets to date is slightly less than 5,000.

The heads of the scientific departments (mathematics, etc.), are permanent; and of the professional, such as ordnance, cavalry, are detailed for terms of four years from officers of the Army. The instructors in all departments are Army officers, usually lieuten-

ants, detailed for this purpose, and number about one instructor to ten cadets.

The instruction is thorough. A "mark" is given for each recitation, and the sum of a cadet's "marks" determines his standing in his class, and upon this standing his first promotion to the Army is based.

On graduation, the upper men of each class are usually assigned to the engineers, the next to the artillery, and then to the cavalry and infantry, in the order named.

The body of students at the Academy is known as the "United States Corps of Cadets," and constitutes an independent command. The cadets are a part of the Army, but are not commissioned officers. They rank next below veterinarians, and take precedence over all non-commissioned officers of the Regular Army.

The average attendance for the past five years has been 459; the authorized number is 523.

Communications relating to matters connected with the Military Academy should be addressed to the Adjutant General of the Army, Washington, D. C. Information as to appointments, examinations, vacancies, etc., can always be had by applying to his office. The latest information, at date of this publication, is as follows:

## APPOINTMENTS.

### HOW MADE.

Each Congressional district and Territory—the District of Columbia and also Porto Rico—is entitled to have one cadet at the Academy. Each State is also entitled to have two cadets from the State at large, and forty are allowed from the United States at large. The law, however, provides that for six years from July 1, 1910, whenever any cadet shall have finished three years of his course at the Academy, his successor may be admitted. The appointment



from a Congressional district is made upon the recommendation of the Representative in Congress from that district, and those from a State at large upon the recommendations of the senators of the State. Similarly the appointment from a Territory is made upon the recommendation of the delegate in Congress. The appointment from the District of Columbia is made on the recommendation of the Commissioners of the District. Each person appointed must be an actual resident of the State, District, or Territory from which the appointment is made.

The appointments from the United States at large are made by the President of the United States upon his own selection. The cadet from Porto Rico, who must be a native of that island, is appointed by the President on the recommendation of the resident Commissioner.

The Secretary of War is authorized to permit not exceeding four Filipinos, to be designated, one for each class, by the Philippine Commission, to receive instruction at the United States Military Academy at West Point: Provided, That the Filipinos undergoing instruction shall receive the same pay, allowances, and emoluments as are authorized by law for cadets at the Military Academy appointed from the United States, to be paid out of the same appropriations: And provided further, That said Filipinos undergoing instruction on graduation shall be eligible only to commissions in the Philippine Scouts. And the provisions of Section 1321, Revised Statutes, are modified in the case of the Filipinos undergoing instruction, so as to require them to engage to serve for eight years, unless sooner discharged, in the Philippine Scouts.

#### DATE OF APPOINTMENTS.

Appointments are required by law to be made *one year in advance* of the date of admission, except in cases where, by reason of death or other cause, a vacancy occurs which cannot be provided for

by such appointment in advance. These vacancies are filled in time for the next examination.

#### ALTERNATES.

For each candidate appointed there should be nominated *two alternates*. The principal and each alternate will receive from the War Department a letter of appointment, and must appear for examination at the time and place therein designated.\* The fitness for admission to the Academy of the principal and the alternates will be determined as prescribed in paragraphs 19 and 20, Regulations United States Military Academy. If the principal fails to qualify, either mentally or physically, then the qualifications of the alternates will be considered, and if only one has met the requirements, he will be admitted; if both alternates have met the requirements, the better qualified will be admitted. The alternates, like the principal, should be designated *one year in advance* of the date of admission.

#### EXAMINATION AND ADMISSION OF CANDIDATES.

The following are extracts from the Regulations of the Military Academy relating to the examination of candidates for admission, and will be strictly adhered to:

"19. On the second Tuesday in January of each year candidates selected for appointment (except the Filipino candidates) shall appear for mental and physical examination before boards of Army officers to be convened at such places as the War Department may designate. 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 October of each year before a board of Army officers to be convened at such place in the Philippine Islands as the Commanding General

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\*The board before which a candidate is directed to appear will be, without exception, the one convened at the place nearest or most convenient to his home, or to the school at which he is in regular attendance at the time of appointment.

of the Philippine Division may designate. Candidates who pass will be admitted to the Academy without further examination upon reporting in person to the Superintendent before 12 o'clock noon on the first day of March following the examination.

"20. Each candidate, before admission to the Academy, must show by examination, as prescribed in paragraph 19, that he is well versed in algebra, to include quadratic equations and progressions, plane geometry, English grammar, composition and literature, descriptive and physical geography, and general and United States history, as explained in the circulars of notification. No rejected candidate shall be re-examined, except upon recommendation of the Academic Board.

"22. Immediately after reporting to the Superintendent for admission, and before receiving his warrant of appointment, the candidate is required to sign an engagement for service in the following form, and in the presence of the Superintendent, or of some officer deputed by him:

"I, \_\_\_\_\_, of the State (or Territory) of \_\_\_\_\_, aged \_\_\_\_\_ years \_\_\_\_\_ months, do hereby engage (with the consent of my parent or guardian) that, from the date of my admission as a cadet of the United States Military Academy, I will serve in the Army of the United States for eight years, unless sooner discharged by competent authority.

"In the presence of \_\_\_\_\_."

"The candidate is then required to take and subscribe an oath or affirmation in the following form:

"I, \_\_\_\_\_, do solemnly swear that I will support the Constitution of the United States, and bear true allegiance to the national Government; that I will maintain and defend the sovereignty of the United States, paramount to any and all allegiance, sovereignty, or fealty I may owe to any State or country whatsoever; and that I will at all times obey the legal orders of my superior officers, and the rules and articles governing the armies of the United States.

"Sworn and subscribed, at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, nineteen hundred and \_\_\_\_\_, before me.

"\_\_\_\_\_, "

## QUALIFICATIONS.

No candidate shall be admitted who is under seventeen or over twenty-two years of age, or less than five feet four inches in height at the age of seventeen, or five feet five inches in height at the age of eighteen and upward, or who is deformed, or afflicted with any disease or infirmity which would render him unfit for the military service, or who has, at the time of presenting himself, any disorder of an infectious or immoral character. Candidates must be unmarried.

Each candidate must, on reporting at West Point, present a certificate showing successful vaccination within one year, or a certificate of two vaccinations, made at least a month apart, within three months.

NOTE.—Candidates are eligible for admission from the day they are seventeen until the day they become twenty-two years of age, on which latter day they are not eligible.

It is suggested to all candidates for admission to the Military Academy that, before leaving their places of residence for the place of examination, they should cause themselves to be thoroughly examined by a competent physician, and by a teacher or instructor in good standing. By such examinations any *serious* physical disqualification or deficiency in mental preparation would be revealed.

It should be understood that the informal examination herein recommended is solely for the convenience and benefit of the candidate himself, and can in no manner affect the decision of the Academic and Medical Examining Boards.

## CHARACTER OF EXAMINATIONS.

## THE PHYSICAL EXAMINATION.

Upon the completion of the mental examination, all candidates will be thoroughly examined physically by the medical officers of

the board, under the following instructions prepared by the Surgeon-General of the Army:

Hearing must be normal in both ears.

Vision, as determined by the official test types, must not fall below 20—40 in either eye and not below 20—20, unless the defect is a simple refractive error (not hyperopia), is not due to ocular disease, and entirely corrected by proper glasses.

In the record of all examinations, the acuity of vision without glasses, and also with glasses when the acuity is less than 20—20, will be given for each eye separately; in the latter case the correction will also be noted.

Hyperopia requiring any spherical correction, anisometropia, squint, or muscular insufficiency, if marked, are causes for rejection.

Color-blindness, red, green, or violet, is cause for rejection.

The following are causes of disqualification if found to exist to such a degree as would immediately or at no very distant period impair the efficiency of the candidate:

1. Feeble constitution; unsound health from whatever cause; indications of former disease, glandular swellings, or other symptoms of scrofula.
2. Chronic cutaneous affections, especially of the scalp.
3. Severe injuries of the bones of the head; convulsions.
4. Impaired vision, from whatever cause; inflammatory affections of the eyelids; immobility or irregularity of the iris; fistula lachrymalis, etc., etc.
5. Deafness; copious discharge from the ears.
6. Loss of many teeth, or the teeth generally unsound.
7. Impediment of speech.
8. Want of due capacity of the chest, and any other indication of a liability to a pulmonic disease.
9. Impaired or inadequate efficiency of one or both of the superior extremities on account of fractures, especially of the clavicle; contraction of a joint, deformity, etc.

10. An unusual excurvature or incurvature of the spine.
11. Hernia.
12. A varicose state of the veins of the scrotum or spermatic cord (when large), hydrocele, hemorrhoids, fistulas.
13. Impaired or inadequate efficiency of one or both of the inferior extremities on account of varicose veins, fractures, malformation (flat feet, etc.), lameness, contraction, unequal length, bunions, overlying or supernumerary toes, etc., etc.
14. Ulcers, or unsound cicatrices of ulcers likely to break out afresh.

The requirements of the following tables of physical proportions are *minimum for growing youths* and for the guidance of medical officers in connection with the other data of the examination, a consideration of all of which should determine the candidate's physical eligibility. Mere fulfillment of the requirements of the standard tables does not determine eligibility, while on the other hand no departure below the standard should be allowed unless upon the unanimous recommendation of the medical examining board for excellent reasons clearly stated in each case.

The physical requirements should be those of the age at the birthday nearest the time of the examination. Fractions greater than  $\frac{1}{2}$  inch will be considered as an additional inch of height, but candidates seventeen years old must be at least 64 inches, and those eighteen years and upward at least 65 inches in height.

TABLE OF PHYSICAL PROPORTION FOR HEIGHT, WEIGHT, AND CHEST MEASUREMENT.

Age	Height, Inches.	Weight, Pounds.	Chest Measurement — Expiration, Inches.	Chest Mobility, Inches.	Age.	Height, Inches.	Weight, Pounds.	Chest Measurement — Expiration, Inches.	Chest Mobility, Inches.
17 years	64	110	29	2	18 years	65	117	30 $\frac{1}{4}$	2
	65	112	29 $\frac{1}{4}$	2		66	119	30 $\frac{1}{2}$	2
	66	114	29 $\frac{1}{2}$	2		67	121	30 $\frac{3}{4}$	2
	67	116	29 $\frac{3}{4}$	2		68	124	31	2 $\frac{1}{2}$
	68	119	30	2 $\frac{1}{2}$		69	127	31 $\frac{1}{4}$	2 $\frac{1}{2}$
	69	122	30 $\frac{1}{4}$	2 $\frac{1}{2}$		70	130	31 $\frac{1}{2}$	2 $\frac{1}{2}$
	70	125	30 $\frac{1}{2}$	2 $\frac{1}{2}$		71	133	31 $\frac{3}{4}$	2 $\frac{1}{2}$
	71	128	30 $\frac{3}{4}$	2		72	136	32	3
19 years	65	121	30 $\frac{3}{4}$	2	20 years	65	122	31	2
	66	123	31	2		66	124	31 $\frac{1}{4}$	2
	67	125	31 $\frac{1}{4}$	2		67	126	31 $\frac{1}{2}$	2
	68	129	31 $\frac{1}{2}$	2 $\frac{1}{2}$		68	130	31 $\frac{3}{4}$	2 $\frac{1}{2}$
	69	133	31 $\frac{3}{4}$	2 $\frac{1}{2}$		69	134	32	2 $\frac{1}{2}$
	70	137	32	2 $\frac{1}{2}$		70	138	32 $\frac{1}{4}$	2 $\frac{1}{2}$
	71	141	32 $\frac{1}{4}$	2 $\frac{1}{2}$		71	142	32 $\frac{1}{2}$	2 $\frac{1}{2}$
	72	145	32 $\frac{1}{2}$	3		72	146	32 $\frac{3}{4}$	3
73	149	32 $\frac{3}{4}$	3	73	150	33	3		
21 years	65	123	31 $\frac{1}{4}$	2	22 years	65	125	31 $\frac{1}{2}$	2
	66	125	31 $\frac{1}{2}$	2		66	127	31 $\frac{3}{4}$	2
	67	127	31 $\frac{3}{4}$	2		67	129	32	2
	68	132	32	2 $\frac{1}{2}$		68	134	32 $\frac{1}{4}$	2 $\frac{1}{2}$
	69	137	32 $\frac{1}{4}$	2 $\frac{1}{2}$		69	139	32 $\frac{1}{2}$	2 $\frac{1}{2}$
	70	142	32 $\frac{1}{2}$	2 $\frac{1}{2}$		70	144	32 $\frac{3}{4}$	2 $\frac{1}{2}$
	71	147	32 $\frac{3}{4}$	2 $\frac{1}{2}$		71	149	33	2 $\frac{1}{2}$
	72	152	33	3		72	154	33 $\frac{1}{4}$	3
73	157	33 $\frac{1}{4}$	3	73	159	33 $\frac{1}{2}$	3		
74	162	33 $\frac{1}{2}$	3 $\frac{1}{2}$	74	164	33 $\frac{3}{4}$	3 $\frac{1}{2}$		
75	167	33 $\frac{3}{4}$	3 $\frac{1}{2}$	75	169	34	3 $\frac{1}{2}$		
					76	174	34 $\frac{1}{4}$	4	

MENTAL EXAMINATION.

*Algebra.*

Candidates will be required to pass a satisfactory examination in that portion of algebra which includes the following range of sub-

jects: Definitions and notation; the fundamental laws; the fundamental operations, viz.: addition, subtraction, multiplication, and division; factoring; highest common factor; lowest common multiple; fractions, simple and complex; simple, or linear, equations with one unknown quantity; simultaneous simple, or linear, equations with two or more unknown quantities; involution, including the formation of the squares and cubes of polynomials; binomial theorem with positive integral exponents; evolution, including the extraction of the square and cube roots of polynomials and of numbers; theory of exponents; radicals, including reduction and fundamental operations, rationalization, equations involving radicals, operations with imaginary numbers, quadratic equations; equations of quadratic form; simultaneous quadratic equations; ratio and proportion; arithmetical and geometrical progressions. Candidates will be required to solve problems involving any of the principles or methods contained in the foregoing subjects.

The following questions were used at a recent examination:

Substitute  $y + 3$  for  $x$  in  $x^4 - x^3 + 2x^2 - 3$  and arrange the result in descending powers of  $y$ .

On the eve of a battle one army had 5 men to every 6 men in the other. The first army lost 14,000 men and the second 6,000 men. The first army then had 2 men to every 3 men in the other. How many men were there originally in each army?

$$\text{Solve } 1.2x - \frac{.18x - .05}{.5} = .4x + 8.9.$$

Find the lowest common multiple of  $1 - x$ ,  $x^2 - 1$ ,  $x - 2$ , and  $x^2 - 4$ .

$$\text{Solve } \sqrt{x+9} = 2\sqrt{x} - 3.$$

$$\text{Solve } (2x-3)^2 = 8x.$$

Expand  $(m - \frac{3}{4} - m\frac{4}{5})^4$  by the Binomial Theorem.

Find all the values of  $a$  for which the roots of  $ax^2 + 2(a+3)x + 16 = 0$  are equal.



$$\text{Solve } \frac{x+y}{2} - \frac{x-y}{3} = 8 \text{ and } \frac{x+y}{3} + \frac{x-y}{4} = 11.$$

$$\text{Solve } x^2 - 4y^2 = 9, xy + 2y^2 = 3.$$

A certain article of consumption is subject to a duty of \$1.50 per cwt. In consequence of a reduction in duty the consumption increases one-half, but the revenue falls off one-third. Find the duty per cwt. after the reduction.

A and B run a mile. First, A gives B a start of 44 yards and beats him by 51 seconds; at the second heat, A gives B a start of 1 minute and 15 seconds and is beaten by 88 yards. Find the time in which A and B can run a mile separately.

Sum to infinity the progression  $3 + 2 + \frac{4}{3} + \dots$

A servant agrees for certain wages the first month, on the understanding that they are to be raised a dollar every subsequent month until they reach \$60 a month. At the end of the first of the months for which he receives \$60 he finds that his wages during his time of service have averaged \$48 per month. How long has he served?

*Plane Geometry.*

Candidates will be required to give accurate definitions of the terms used in plane geometry, to demonstrate any proposition of plane geometry as given in the ordinary text-books, and to solve simple geometrical problems, either by a construction or by an application of algebra.

The following questions were used at a recent examination:

Define the following:

- 1°. Rhombus. 2°. A mean proportional. 3°. Similar triangles. 4°. A segment of a circle. 5°. The apothem of a regular polygon.

Theorem: The perpendicular is the shortest line between a point and a straight line.

Theorem: In the same circle or equal circles, the less of two chords is at the greater distance from the center; conversely, the chord at the greater distance from the center is the less.

Construction: Divide a given straight line internally in extreme and mean ratio.

Theorem: The areas of two triangles which have an angle of one equal to the angle of the other are to each other as the products of the sides including those angles.

Problem: Given a circle of unit diameter and the side of a regular inscribed polygon, find the side of a regular inscribed polygon of double the number of sides.

Theorem: The four bisectors of the four angles of a quadrilateral form a second quadrilateral, the opposite angles of which are supplementary.

Theorem: If on the diameter of a circle two points be taken equally distant from the center, the sum of the squares of the distances of any point of the circumference from these two points is constant.

Problem: Find the locus of the point of intersection of the three altitudes of a triangle, given a fixed base, and constant angle at the vertex.

### *English Grammar.*

Candidates must have a good knowledge of English grammar; they must be able to define the terms used therein; to define the parts of speech; to give inflections, including declension, conjugation, and comparison; to give the corresponding masculine and feminine gender nouns; to give and apply the ordinary rules of syntax.

They must be able to parse correctly any ordinary sentence; giving the subject of each verb, the governing word of each objective case, the word for which each pronoun stands or to which it refers, the words between which each preposition shows the relation, precisely what each conjunction and each relative pronoun connects, what each adjective and adverb qualifies or limits, the construction of each infinitive, and generally to show a good knowledge of the function of each word in the sentence.

They must be able to correct in sentences or extracts any ordinary grammatical errors.

It is not required that any particular text-book shall be followed; but the definitions, parsing, and corrections must be in accordance with good usage and common sense.

The examination may include questions similar to the following:

1. Define and give example of: *a.* infinitive; *b.* indirect object; *c.* simple sentence.
2. Give the principal parts of: *a.* choose; *b.* crow; *c.* freeze; *d.* fly; *e.* burst.
3. (i) Give the plurals of: *a.* motto; *b.* fairy; *c.* money; *d.* belief; *e.* axis. (ii) Indicate which of the following words are singular, which are plural, and which may be either: *a.* cherubim; *b.* mathematics; *c.* species; *d.* basis; *e.* news.
4. (i) Give the feminine of: *a.* hero; *b.* gander; *c.* duke; *d.* priest; *e.* Englishman. (ii) Indicate the gender of: *a.* songster; *b.* spinster; *c.* goose; *d.* mouse; *e.* book.
5. (i) Give the possessive case singular of: *a.* it; *b.* princes; *c.* kings of Italy; *d.* Henry the Fourth; *e.* man-of-war. (ii) Give the possessive case plural of: *a.* brother-in-law; *b.* Jones; *c.* I; *d.* who; *e.* Mussulman.
6. Give the comparison of: *a.* mournful; *b.* little; *c.* great; *d.* old; *e.* angry.
7. Parse the *italicized* words in the following sentence: *Other things being equal, it is obvious that the writer who has most words to choose from is most likely to find in his assortment just the word which he needs at a given moment.*
8. Correct all errors in the following sentences: Of words in braces { } draw a line through the incorrect word or words.
  1. Have either of you brought { your  
their  
his } umbrellas?
  2. The river had overflown its banks.
  3. John thinks he { will  
shall } be able to come and that  
James { will  
shall } come also.

4. Men are in the plural number, because they mean more than one.
5. That is neither a squirrel or rabbit's track.
6. I believe he don't know its here.
7. Him dying at this time led to the attempt being given up.

*English Composition and English Literature.*

Candidates will be required:

1. By the writing of short themes on subjects chosen by themselves within limits set by the examination paper, to prove (*a*) their ability to spell, capitalize, and punctuate, and (*b*) their mastery of the elementary principles of composition, including paragraphing and sentence-structure.

2. To give evidence of intelligent acquaintance with three plays of Shakespeare: one comedy, one history, and one tragedy,—“The Merchant of Venice,” “Henry V.,” and “Macbeth,” being especially recommended.

3. To exhibit a fair knowledge of the names of the most prominent English and American authors and of the names of their principal works.

The general character and scope of the examination are indicated by the following specimen:

- A. Write a composition of about two hundred and fifty words, on each of four subjects selected from the following list: (Of two or more subjects in brackets, choose but one.)
1. { The Story of the Three Caskets in “The Merchant of Venice.”  
A Character Sketch of Antonio.
  2. { The Influences that Caused Macbeth's Moral Downfall.  
The Story of Macduff.
  3. { The English Army at Agincourt (in “Henry V.”).  
A Brief Narrative of the Historical Events of “Henry V.” Previous to Agincourt.

4. { A Description of a Building.  
A Character-sketch of a Dog.  
A Narrative of an Interesting Journey.  
Reasons for Liking a Favorite Book.  
How to Make a Squirrel-trap (or a Kite, or an Ice-boat, etc.).
- B. 1. What author wrote: "The Ancient Mariner"? "Comus"? "The Marble Faun"? "Rasselas"? "Barbara Frietchie"?
2. Name two works of each of the following authors: Goldsmith, Emerson, Burke, Macaulay.
3. Give the names of two principal works of a great American novelist; a great English Puritan poet of the seventeenth century; an English woman novelist of the last century; a living American novelist.

*Geography.*

Candidates will be required to pass a satisfactory examination in descriptive geography and the elements of physical geography. A preponderance of weight is attached to a knowledge of the geography of the United States.

In descriptive geography of the United States, candidates should be thoroughly informed as to its general features and boundaries; adjacent oceans, seas, bays, gulfs, sounds, straits, and islands; lakes, the location and extent of mountain ranges; the sources, directions, and terminations of the important rivers, the names of their principal tributaries, and at what points, if any, these rivers break through highlands on their way to the ocean; the water routes of communication from one part of the country to another; the location and termination of important railroad lines; the boundaries of the several States and Territories and their order along the coasts, frontiers, and principal rivers; the locations and boundaries of the island possessions; and the names and locations of the capitals and other important cities of the several States, Territories, and island possessions.

In short, the knowledge should be so complete that a clear mental picture of the whole of the United States is impressed on the mind of the candidate.

In descriptive geography of other countries, candidates should be familiar with the continental areas and grand divisions of water; the earth's surface; the large bodies of water which in part or wholly surround the grand divisions of the land; the capes, from what parts they project and into what waters; the principal peninsulas, location, and by what waters embraced; the parts connected by an isthmus; the principal islands, location and surrounding waters; the seas, gulfs, and bays, the coasts they indent, and the waters to which they are subordinate; the straits, the lands they separate, and the waters they connect; the location of the principal lakes; the locations, boundaries, capitals, and principal cities of the political divisions of the world.

In physical geography, candidates should be familiar with the relief of the earth's surface; the principal mountain systems, the river systems, and water-sheds; the coastal and lake plains; and the influence of climate, soil, mineral deposits, and other physical features on the resources, industries, commercial relations, and development of a country and its people, especially of the United States.

The following questions were used at a recent examination:

1. Name the bodies of water surrounding Europe.
2. Where is: 1. Cape St. Vincent, 2. Cape Corrientes, 3. Cape Matapan, 4. Cape Lopez, 5. Cape Comorin, 6. Cape York.
3. Name in order the political divisions of South America which border on the Pacific Ocean and the capital of each.
4. Locate definitely the following islands: 1. Mauritius, 2. Tasmania, 3. Formosa, 4. New Zealand, 5. Madeira, 6. Falkland. To what country does each belong?
5. Where are the gulfs of: 1. Bothnia, 2. Guinea, 3. Paria, 4. Salonica, 5. Pechili?

6. What lands are separated and what waters connected by:  
1. Torres Strait, 2. Hudson Strait, 3. Strait of Malacca?
7. Bound Italy; name its capital, largest river, and principal mountain range.
8. Locate definitely the following cities: 1. Vienna, 2. Nankin, 3. Cork, 4. Tunis, 5. Montevideo, 6. Batavia, 7. Suez, 8. Pretoria.
9. Name in order the waters traversed in sailing from Liverpool, England, to Hongkong, China.
10. A considerable portion of the boundary-line of the United States is along what parallel?
11. Locate definitely the following: 1. Flathead Lake, 2. Sabine Pass, 3. Black Hills, 4. Sebago Lake, 5. Cape Lookout, 6. Montauk Point, 7. Wichita Mountains, 8. Lingayen Bay.
12. The meridian of Minneapolis passes through what States?
13. Name the principal rivers that drain Pennsylvania; where do they rise, at what points do they leave the State and at what points, if any, do they break through highlands?
14. Name all the waters traversed in going by the two commercial water-routes from Duluth to the Atlantic Ocean.
15. Name the principal ranges of mountains crossed in going by rail from New York to San Francisco; state the rail-route assumed to be traveled.
16. Bound precisely the following States and Territories:  
1. Montana, 2. Arizona, 3. Arkansas, 4. Wisconsin, 5. Pennsylvania, 6. Georgia. (In bounding, all contiguous States must be mentioned, as well as rivers, mountain ranges, etc.)
17. Name the States west of the Mississippi River, drained wholly or in part by it or its tributaries, and give the capital of each.
18. Locate accurately the following cities: 1. Austin, 2. Pensacola, 3. Asheville, 4. Winchester, 5. Allegheny, 6. Iloilo, 7. Oswego, 8. Pasadena, 9. Guthrie, 10. Detroit.
19. Going by water from New Orleans, La., to Pittsburg, Pa., what States would you pass on the left?

20. How many large islands are there in the Hawaiian group? Which is the largest? Which is the most important?
21. Going westward on the 35th parallel of north latitude, from near Newberne, N. C., what States and large rivers would be crossed?
22. Describe the chief mountain system of the eastern hemisphere, and state what island chains of Asia abound in volcanos.
23. What are the great river systems of South America? Where are the principal coastal plains?
24. What are the qualifications of a good harbor? Name three of the best harbors on the Atlantic Coast; one on the Pacific Coast.
25. What has made the Middle Atlantic States the principal commercial section of the United States?

#### *History.*

Candidates must be thoroughly familiar with so much of the history of the United States, and of ancient Greece and Rome, as is contained in good high school text-books on these subjects, and must have a good knowledge of the important facts in general ancient history and in the history of medieval Europe to the end of the fifteenth century.

In history of the United States, the examination will include questions concerning early discoveries and settlements; the forms of government in the Colonies; the causes, leading events, and results of wars; important events in the political and economic history of the nation since its foundation; and the elementary principles of civil government, with special reference to the Federal Congress, executive, and judiciary.

In ancient history, the examination will include questions on important persons and events in the legendary and authentic history of Greece and Rome, and on general important facts in the history of other ancient peoples, taking some account also of Greek art, of



Greek and Roman literature, and especially of Roman government.

In history of medieval Europe, the greater emphasis will be laid on the period from Charlemagne to the end of the Middle Ages, particularly on events connected with the political and social development of England.

Questions similar to the following in character and scope are likely to be asked:

1. What explorations or discoveries did each of the following-named persons make? Give the date in each case:  
*a. Narvaez, b. Coronado, c. Marquette, d. La Salle.*
2. Name three Colonies that were founded for religious reasons, and give the sect or denomination by which each was colonized.
3. Who were the Pilgrims? Explain the difference between "Pilgrim" and "Puritan."
4. When, and under what circumstances, was Delaware separated from Pennsylvania?
5. Give an account of Bacon's Rebellion.
6. When and where did each of the following events occur?  
*a. Meeting of the first Colonial Congress; b. Burgoyne's surrender; c. Arnold's treason.*
7. Name some important results of each of the following battles of the Revolutionary War: *a. Long Island, b. Trenton, c. Brandywine.*
8. Name four additions to the territory of the United States since the Revolutionary War, and give the way each has been acquired.
9. Bound the territory of the United States at the close of the Revolutionary War.
10. What was the "Massacre of Wyoming"?
11. When, where, and for what purpose, did the Constitutional Convention meet? What resulted from its deliberations?
12. What was the "Whiskey Insurrection"?
13. What were the "Alien and Sedition" laws? What was their effect?

14. When and where was the last battle of the War of 1812 fought? Name the commanders on each side.
  15. What were the two principal political parties in 1860? Their candidates for the Presidency? Their leading doctrines on the slavery question? Parties. Candidates. Principles.
  16. With what foreign nations had the United States unfriendly relations during and at the close of the Civil War? Give the cause in each case.
  17. Name, with date, three important military events of 1865.
  18. What Vice-Presidents have become President? Name the predecessor in each case.
  19. Give an account of the "Virginius" affair.
  20. In what war were the following battles fought? What were the opposing forces? Which side won? *a.* Ticonderoga; *b.* Monterey; *c.* Saratoga; *d.* Stony Point; *e.* Spottsylvania; *f.* Lundy's Lane.
  21. By what authority could Lincoln proclaim the emancipation of the slaves? What States were immediately affected by the Emancipation Proclamation? How was emancipation legally completed later?
  22. How may the Constitution of the United States be amended? Name two important Constitutional amendments.
  23. Name three offices in the Cabinet of the President of the United States, and state the chief duties that belong to each.
  24. Explain, as briefly as possible, how a minority of actual votes might defeat a majority at a Presidential election.
  25. Define Electoral College; Spoils System; Primary; Supreme Court.
1. Into what general periods is the history of Egypt divided? What did Egypt contribute to Greek civilization?
  2. Name one of the great kings of Assyria. Mention two important facts concerning the city of Nineveh.
  3. Mention the principal events of the reign of Darius I., and the most noteworthy feature of his government. Of what nation was he ruler?

4. Mention three important facts in connection with the Phœnicians as traders and colonizers in the West.
5. Who were: Agamemnon? Achilles? Hercules? Homer?
6. Mention two ways in which the physical geography of Greece influenced the national life and character.
7. What was the nature of the government of Athens after the expulsion of the Tyrants?
8. Name four great battles of the Græco-Persian War, and give the date of any two of them.
9. What States were the leaders in the great war between the States of Greece? What caused the war? What were its chief results?
10. Outline the career of conquest of Alexander the Great. About when did he die? How would his undertaking have been more difficult if he had turned west instead of east?
11. In Greek history, what is the significance of the following names and phrases: Aristides? The Olympian Games? Solon? The Confederacy of Delos? Delphi? Sophocles? Praxiteles?
12. Give the main points in the Greek colonial system. How did the Roman colonial system differ most conspicuously from the Greek?
13. Give the titles of the principal officers of the Roman Republic and describe their functions.
14. What were the Punic Wars? How many in number? Name two great generals on each side.
15. Mention four causes that led to the fall of the Roman Republic. Discuss briefly the operation of two of them toward this result.
16. Why did the emperors persecute the Christians? State the attitude of Diocletian and Constantine, respectively, toward the Christians.
17. For what is each of the following emperors most famous: Marcus Aurelius? Justinian? Nero?

18. In Roman history, what is the significance of: The Gracchi? Horace? The Comitia Curiata? Verres? The battle of Chalons? A Pyrrhian victory? Æneas? Alaric?
19. What do the following dates mean to you: 800? 1066? 1215? 1453?
20. What do you know of Joan of Arc?
21. How did the Feudal System originate? Define "suzerain," "vassal," "serf."
22. What was The Renaissance? By what inventions and discoveries was it quickened? Through what channel was ancient science transmitted to modern times?
23. Who was Simon de Montfort?
24. What changes took place in the condition of the English peasantry in the fourteenth century? Due to what causes?
25. Toward the close of the fifteenth century in England was the power of Parliament becoming greater or less than it had been previously? By what right was Henry IV. King of England? What was the earliest form of Parliamentary assembly in English history?

#### ACADEMIC DUTIES.

The academic duties of new cadets commence on the 11th day of March. The academic duties and exercises of the other cadets commence on the 1st day of September and continue until about the 5th of June. Examinations of the several classes are held in December and June. At the December examination cadets, who are found to be proficient in their studies, are arranged according to merit in each subject. At the June examination they are similarly arranged and they are also assigned general standing in the class as determined by their standing in the various subjects. When a subject of study is completed during a term, an examination concluding the work in that subject is sometimes held. Cadets deficient in studies at any examination are discharged from the Academy

unless for special reasons the Academic Board recommends otherwise. Cadets exceeding at any time the maximum number of demerits allowed for six months are immediately reported to the Academic Board as deficient in conduct and are discharged.

#### PHYSICAL EXAMINATION.

All cadets are examined physically in June of each year, and those found physically disqualified to continue with the course or, in case of the first class, for commission in the Army, are discharged.

#### VACATIONS AND LEAVES OF ABSENCE.

Academic duties are suspended from the completion of the June examinations until the end of August. During this period cadets live in camp and are engaged in military duties and exercises and in receiving practical instruction in military and other subjects. Academic duties are also suspended from the close of the semi-annual examination, about December 23d, until January 2d, and on the Friday and Saturday preceding the last Sunday in March. All duties and exercises, as far as practicable, are suspended on New Year's Day, February 22d, May 30th, July 4th, Thanksgiving Day, and Christmas Day.

Cadets of the first, second, and third classes are allowed short leaves of from four to six days at Christmas, if their conduct during the preceding six months has been satisfactory. Cadets of the first class, having satisfactory conduct records, are allowed leaves not to exceed seventy-five hours at the beginning of the summer encampment and leaves not to exceed twenty-seven hours at Thanksgiving. Excepting these short leaves for good conduct, cadets are allowed but one leave of absence during the four-years course. As a rule, this leave is granted at the end of the first two years and extends from the middle of June to the 28th of August.

## PAY OF CADETS.

The pay of a cadet is \$600 per year and one ration per day, or commutation therefor at 30 cents per day. The total is \$709.50, to commence with his admission to the Academy. The actual and necessary traveling expenses of candidates from their homes to the Military Academy are credited to their accounts *after* their admission as cadets.

No cadet is permitted to receive money, or any other supplies, from his parents, or from any person whomsoever, without the sanction of the Superintendent. A *most rigid* observance of this regulation is urged upon all parents and guardians, as its violation would make distinctions between cadets, which it is the especial desire to avoid; the pay of a cadet is sufficient, with proper economy, for his support.

Each cadet must keep himself supplied with the following-mentioned articles, viz.:

Eight white shirts, two gray shirts, \*eight summer undershirts, \*six winter undershirts, \*four night shirts, twelve white linen collars, twelve pairs of white linen cuffs, \*eight pairs of summer drawers, \*six pairs of winter drawers, \*eight pairs of socks, \*twelve pocket handkerchiefs, one black tie, \*twelve towels, two clothes-bags, made of ticking, two pairs of uniform shoes, six pairs of uniform white gloves, two sets of white belts, \*one clothes-brush, \*one hair-brush, \*one tooth-brush, \*one comb, one mattress, one pillow, four pillow-cases, six sheets, two blankets, one quilted bed cover, one chair, one tumbler, \*one trunk, one account-book, one wash basin.

Candidates are authorized to bring with them the articles marked \*.

Cadets are required to wear the prescribed uniform. All articles of their uniform are of a designated pattern and are sold to cadets at West Point at regulated prices.

#### DEPOSIT PRIOR TO ADMISSION.

Immediately after admission candidates must be provided with an outfit of uniform, etc., the cost of which is about \$160. This sum, or at least \$100 thereof, *must be deposited with the Treasurer of the Academy before the candidate is admitted.* It is best for the candidate to take with him no more money than he needs for traveling expenses and for his parents to send the required deposit by draft, payable to the Treasurer, U. S. Military Academy. The deposit is credited at once to the cadet's account. Upon graduation, a cadet who has exercised proper economy will have sufficient money to his credit with the Treasurer of the Academy to purchase his uniform and equipment as an officer.

#### PROMOTION AFTER GRADUATION.

The attention of applicants and candidates is called to the following provisions of an Act of Congress, approved May 17, 1886, to regulate the promotion of graduates of the United States Military Academy:

“That when any cadet of the United States Military Academy has gone through all its classes and received a regular diploma from the Academic Staff, he may be promoted and commissioned as a second lieutenant in any arm or corps of the Army in which there may be a vacancy and the duties of which he may have been judged competent to perform; and in case there shall not at the time be a vacancy in such arm or corps, he may, at the discretion of the President, be promoted and commissioned in it as an additional second lieutenant, with the usual pay and allowances of a second lieutenant, until a vacancy shall happen.”

## RECITATION SCHEDULE.

On the following page is shown the recitation schedule adopted by the Academic Board June 23, 1907, and approved by the War Department August 10, 1907.

This schedule was put in effect with the class entering March 1, 1908. The other classes in the Academy on that date continue the old schedule, with some modifications adopted to facilitate administration of the departments during the period of transition from the old course of studies to the new.

The preliminary term is March 11th to June 10th. New cadets are advanced to the fourth class after passing the June examinations.

The first term of the regular academic year is September 1st to December 18th, inclusive.

The second term of the regular academic year is January 2d to June 4th, inclusive.



CLASS.	TERM.	PERIODS OF RECITATION.	DEPARTMENT.	SUBJECTS AND REMARKS.
New Cadets	Preliminary	A. M. *80	Mathematics.....	Algebra.
		A. M. 80	"	Geometry.
	P. M. 60	3 to 6	English and History....	English.—(Saturdays A. M.)
	P. M. 60	3	"	History.—(Saturdays A. M.)
	A. M. 80	3 to 6	Mathematics.....	Algebra.
	A. M. 80	3 to 6	"	Trigonometry.
	A. M. 80	3 to 6	"	Conic Sections.
	P. M. 60	2 to 3	English and History....	English.
	P. M. 60	2 to 3	"	History.
	Fourth	Second	A. M. 60	Tactics.....
A. M. 80			3 to 6	Mathematics.....
A. M. 80		3 to 6	"	Solid Analytical Geometry.
A. M. 80		3 to 6	"	Descriptive Geometry.
P. M. 60		2 to 3	English and History....	English.—(January only.)
P. M. 60		2 to 3	"	History.—(January only.)
P. M. 60		5	Practical Military Eng.	Surveying.—(February only.)
P. M. 60		5	Modern Languages....	French.—(Mar. 1—June 4, inclusive.)
P. M. 60		1	Tactics.....	Security and Information.—(Febru-
Thrd..		First	A. M. 80	Mathematics.....
	P. M. 120		2 to 3	Philosophy.....
	A. M. 80	3	"	Mechanics.—(The periods of 120 min-
	A. M. 60	6	Modern Languages....	utes in Mechanics are laboratory
	A. M. 80	3	Philosophy.....	periods. September and October.)
	A. M. 60	6	"	Mechanics.—(Nov. and Dec.)
	A. M. 80	1 to 2	Chemistry.....	French.
	A. M. 70	6	Drawing.....	Freehand; Plane Geometrical.
	P. M. 120	2, 3, 5	"	Mechanics.
	A. M. 80	1 to 2	"	French.—(Jan. 2—Feb. 28, incl.)

\*Length in minutes. †Number per week. ‡Total number.

French.—(Mar. 1—June 4, inclusive.)  
 Chemistry; Heat.—(Mar. 1—June 4, inclusive.)  
 Descriptive Geometry; Topography; Field Work.—(5 per week after March 15.)

CLASS.	TERM.	PERIODS OF RECITATION,	DEPARTMENT.	SUBJECTS AND REMARKS.
Second.	First....	A. M. 80	Philosophy.....	Sound; Light. Heat; Mineralogy; Geology; Electric- Ordnance and Gunnery. [ity]. Field Sketching; Building Construc- tion; Projective Geometry. Light; Astronomy. Electricity.—(January 2—February 28, inclusive.) Ordnance and Gunnery.—(To May 4.) Spanish.—(March 1—June 4, incl.) Principles of Hygiene.—(Also 6 lect- ures, P. M.) Cavalry, Artillery, and Infantry Drill Regulations.—(March 1—June 4, inclusive.) Building Construction; Mechanical and Engineering Drawing. Civil and Military. Elementary; Constitutional.—(39 in A. M. and 2 P. M.'s per week for 6 weeks for half class.) Spanish.—(5 per week, except half class 2 P. M.'s per week for 6 weeks.) Military Engineering; Art of War. International; Military.—(58 in A. M. and 2 P. M.'s per week for 15 weeks for half class.) Spanish. Hippology.—(February.) Lectures and Tactical Map Problems.
	"	A. M. 70	Chemistry.....	
	"	A. M. 60	Ordnance and Gunnery	
	"	P. M. 120	Drawing.....	
Second.	Second..	A. M. 80	Philosophy.....	
	"	A. M. 70	Chemistry.....	
	"	A. M. 60	Ordnance and Gunnery	
	"	A. M. 60	Modern Languages.....	
Second.	"	P. M. 60	Hygiene.....	
	"	A. M. 60	Tactics.....	
	"	P. M. 120	Drawing.....	
	"	A. M. 80	Engineering.....	
First....	"	A. M. 60	Law.....	
	"	P. M. 60	Modern Languages.....	
	"	A. M. 80	Engineering.....	
	"	P. M. 120	Law.....	
Second....	"	A. M. 60	Modern Languages.....	
	"	A. M. 60	Engineering.....	
	"	P. M. 120	Law.....	
	"	A. M. 60	Modern Languages.....	
Second....	"	A. M. 60	Engineering.....	
	"	P. M. 120	Law.....	
	"	A. M. 60	Modern Languages.....	
	"	P. M. 120	Tactics.....	

\*Length in minutes.

†Number per week.

‡Total number.

DEPARTMENT OF TACTICS.

ALL CLASSES.

New cadets, upon reporting for duty, are given infantry recruit instruction, with gymnastic and calisthenic exercises, until they join the battalion.

Practical instruction is given during the summer encampment, and from September 1st to November 1st, and from March 15th to June 1st, in cavalry, artillery, and infantry drill regulations, in target practice with the rifle, revolver, mountain gun and field gun, and in military engineering.

During the summer encampment, cadets of the third and fourth classes are also taught swimming and dancing, and those of the first class the service of sea-coast artillery and submarine defense at Fort Wright, N. Y.; all classes participate in exercises of minor tactics, practice-marches, problems, and practical field-work, in which the employment of all arms is exemplified.

Practical instruction in fencing and gymnastic exercises and in boxing and wrestling is given to the fourth class from October 1st to June 1st, and to the other classes from November 1st to March 15th.

Instruction in riding is given to the first class during the encampment and from September 1st to June 1st, excepting the month of February; to the second class, from November 1st to March 31st; and to the third class from November 1st to March 15th and during the summer encampment. Instruction with English pad-saddles is given to the first class, and in polo to the first and second classes.

During the winter months map problems for the purpose of instruction in writing orders, selecting positions from the map, both offensive and defensive, making dispositions of small forces, selecting best route for advance and retreat, and for practice of map-reading in general; also lectures upon the methods pursued in company,

post, and staff administration as required by Army Regulations, upon uniforms and equipments, and upon etiquette and customs of the service, are given cadets of the first class.

## TEXT-BOOKS.

Light Artillery Drill Regulations. U. S.	A Military Primer of the Service of Security and Information.
Cavalry Drill Regulations. U. S.	Marshall and Simonds.
Infantry Drill Regulations. U. S.	Elements of Hippology. Marshall.
Coast Artillery Drill Regulations. U. S.	Coast Artillery Drill Regulations: Position-finding service.

## BOOKS OF REFERENCE.

Army Regulations. U. S.	Manual of Guard Duty. U. S.
Small-Arms Firing Regulations. U. S.	Regulations. U. S. M. A.
U. S.	Blue Book. U. S. M. A.
Manual of Instruction in Mountain Guns, etc. U. S. M. A.	Manual of Gymnastic Exercises. Koehler.
Manual of Pack Transportation. U. S. M. A.	Horses, Saddles, and Bridles. Carter.
	Field Service Regulations. U. S.

## ISSUED TO FIRST CLASS BEFORE GRADUATION.

Army Regulations. U. S.	Drill Regulations of the Hospital Corps. U. S.
Manual of the Subsistence Department. U. S.	Manual of Courts-Martial. U. S.
Manual of Quartermaster's Department. U. S.	Army Register. U. S.
Paymaster's Manual. U. S.	General Orders, No. 169, War Department, series of 1907.
Regulations for the Post Exchange.	(Uniform Order) with all amendments.
	Manual of Medical Department. U. S.

## DEPARTMENT OF CIVIL AND MILITARY ENGINEERING.

## FIRST CLASS.

The course in civil and military engineering and the art of war is confined to the first-class year.

The course in civil engineering begins September 1st and is completed during the first term, which closes with the Christmas holidays. It comprises brief treatises on the mechanics of civil engineering, framed and masonry structures, the materials of engineering, water supply, and sewerage.

The course in military engineering and the art of war begins on January 2d and closes on the 3d of June. Military engineering embraces the study of field and permanent fortifications and siege works. The art of war embraces the study of the organization of armies, employment of the different arms in combination, logistics, and strategy. To familiarize the students with its principles, lectures are delivered on military subjects, and the principal operations of about twenty selected campaigns are studied. During this course the students are taken to the battle-field of Gettysburg to familiarize them with the effects of topography on the employment of troops in the field.

TEXT-BOOKS.

Civil Engineering.	Fiebeger.	Siege Works.	Mercur.
Field Fortifications.	Fiebeger.	Organization and Tactics.	Wag-
Permanent Fortifications.	Fie-	ner.	
beger.		Campaign of Gettysburg.	Fie-
Elements of Strategy.	Fiebeger.	beger.	
	Field Service Regulations.	U. S.	

BOOKS OF REFERENCE.

Campaigns and Battles. Department.  
Story of Civil War. Ropes. Cambria Steel.

The Department has a well-selected reference library on civil engineering, military engineering, and the art of war.

DEPARTMENT OF NATURAL AND EXPERIMENTAL  
PHILOSOPHY.

THIRD AND SECOND CLASSES.

The course in natural and experimental philosophy begins with the third academic year. Mechanics is studied during this year, the class alternating daily by halves. The text used is Gordon's "Mechanics." Many of the principles are illustrated by apparatus in the lecture- and section-rooms, and the students are required to repeat and explain these experiments. The course aims to be as complete as possible with the limitation that it can be properly covered in a term of about one hundred days by students having a proficient knowledge of the calculus; the treatment is sufficiently mathematical to furnish a confident basis for advanced work in the technical staff corps after graduation.

During the second-class year about one hundred lessons are allotted to this department. The first half of this time is devoted to the subjects of sound and light. The authorized text-book is Gordon's "Sound and Light."

Astronomy is studied in the remainder of the second-class year. The texts used are Young's "General Astronomy" and Michie and Harlow's "Practical Astronomy." The principal aim of this course, in addition to its important value in educational development, is to furnish an ample basis for the establishment of stations in explorations and surveys.

The class alternates daily by halves throughout the year.

TEXT-BOOKS.

Sound and Light.	Gordon.	Practical Astronomy.	Michie
Mechanics.	Gordon.		and Harlow.
		General Astronomy.	Young.

Numerous standard works on the general subjects covered by the course are available for reference.

## DEPARTMENT OF MATHEMATICS.

## NEW CADETS, FOURTH AND THIRD CLASSES.

The course in mathematics begins with the new cadet class upon entrance in March, and extends through two years.

In the new cadet class year algebra and geometry are taken on alternate days for three months. In both these subjects the matter covered by the entrance examination is reviewed rapidly and, in the case of plane geometry, very briefly before proceeding with the regular course. An examination is held in June, upon which the class is graded according to mathematical capacity.

In the fourth-class year algebra is completed in alternation with trigonometry. Plane and solid analytical geometry and descriptive geometry follow.

In the third-class year a course in the differential and integral calculus is taken, alternating during the latter portion with the subject of mechanics in the department of philosophy. The most advanced students take also a brief course in the theory of errors and method of least squares.

The course in algebra covers the entire subject as generally taught in colleges, but the student is expected to have already mastered elementary algebra to include the progressions and the solution of the quadratic equation. The course in elementary geometry includes the books that relate to the plane and those that relate to space, but the student is expected to have mastered the former. Plane and spherical trigonometry includes the complete solution of the plane and spherical triangles. The course in analytical geometry includes the discussion of the general equation of the second degree in the plane and in space.

Descriptive geometry includes, in orthographic projections, the right line, the plane, ruled surfaces and surfaces of revolution, tangent planes, and intersections of surfaces. It also covers shades and

shadows, perspective, isometric projections, and, for the upper part of the class, spherical projections.

The course in differential and integral calculus covers the ground of the usual college text-book, including briefly the subject of ordinary differential equations.

TEXT-BOOKS.

*New Cadet Class.*

Advanced Course in Algebra. Elements of Geometry. Phillips  
Wells. and Fisher.

*Fourth Class.*

Advanced Course in Algebra. Logarithmic Tables. New-  
Wells. comb.

Quadratics and Beyond. Fisher Conic Sections. C. Smith,  
and Schwatt. Elements of Analytical Geometry

Elements of Plane and Spherical (Solid). Smith and Gale.  
Trigonometry. Crockett. Descriptive Geometry. Church.

*Third Class.*

Differential and Integral Calculus. Granville.

Integral Calculus. D. A. Murray.

Method of Least Squares. Johnson.

DEPARTMENT OF CHEMISTRY, MINERALOGY, AND  
GEOLOGY.

*Third and Second Classes.*

This department embraces two branches of physics not included in its title—namely, heat and electricity.

The course begins March 1st of the second academic year and extends to March 1st of the third academic year; exercises, recitations, laboratory work or lectures take place on all week-days.

Commencing March 1st the subjects of heat and general chemistry alternate daily until the completion of the first six chapters



of heat, about March 20th, after which the chemistry exercises are held daily until the close of the term, June 1st.

During this term all members of the class whose progress, as shown by their recitations, warrants it, are given laboratory practice in chemistry. This practice begins with chemical manipulations and proceeds in the usual general order of elementary laboratory work. The laboratory exercises are one hour and fifty minutes long. It is generally possible to give all parts of the class some laboratory experience; the amount of this work, however, varies with the aptitude of the student from a few hours to fifty-five or sixty hours.

This term closes with an examination upon the essential parts of the entire course, which all cadets who have not shown a prescribed proficiency in daily work must take.

In chemistry the course is a descriptive general one, based upon a concise statement of the more essential principles of chemistry, and includes that class of information deemed most important to non-specialists, together with an accurate and logical treatment of many useful applications of chemistry.

Beginning September 1st, the daily exercises alternate between heat and mineralogy until these subjects are completed, then the daily exercises alternate between geology and electricity, the geology being completed by the close of the term, December 23d. This term also closes with an examination, covering the essential parts of the subjects studied during the term, which all cadets who have not shown a prescribed proficiency in daily work are required to take.

Beginning January 1st, the remainder of the course in electricity is completed by the end of February. This mid-winter term involves an examination, if necessary, as prescribed for the terms ending June 1st and December 23d.

The course in heat is short, but it is a comprehensive elementary

course, intended to embrace what is most applicable to subsequent work at the Academy and what is most useful in general education.

The course in geology is a brief but scientific presentation of the essential elements of this branch of science.

The mineralogy is an eminently practical course, consisting of the descriptive study and the practical determination of the important minerals. The lithological and palæontological part of geology is accompanied in study by the continued practical examination of the objects described.

The course in electricity is a brief exposition of the leading electrical phenomena and their relations to each other. It includes a study of the general principles of the subject and of the typical machines, generators, motors, and transformers, together with the more important uses of electricity. The laboratory exercises give experience with a number of the machines and in the use of a great variety of apparatus employed in the numerous forms of electric measurements. In this term the laboratory work is a part of the electrical course, and all cadets enter the laboratory. All laboratory work is performed under the immediate supervision of an instructor.

#### TEXT-BOOKS.

Elementary Lessons in Heat.	Elements of Geology.	Le Conte.
Tillman.	Important Minerals and Rocks.	Tillman.
Descriptive General Chemistry.	Elementary Lessons in Electricity	
Tillman.	and Magnetism.	S. P. Thompson.
Practical Chemistry. (Laboratory Guide.)	Clowes.	

During all terms standard works on the respective subjects are available for reference, both to cadets and instructors.

DEPARTMENT OF DRAWING.

THIRD AND SECOND CLASSES.

The course in drawing is carried on through the third-class and second-class years.

It begins in the first-year course with elementary freehand work from blocks and objects for the training of the eye and hand, and is followed by instruction in the nature and use of drawing instruments, papers, and material, construction of practical problems in plane geometry used in constructive and mechanical drawing. This is followed by the construction of problems in descriptive geometry, covering the theoretical course in mathematics; the lower part of the class being confined to the practical problems most useful in mechanical and building construction drawing. A short course of lettering and handling of flat washes precedes the general study of topography and map-making, in which theoretical instruction is coupled with the execution of conventional signs, platting, the construction and lettering of a finished map, and practice in the field in the various elements of military topographical field-sketching. This completes the first year's course.

Text-book pamphlets:

Drawing Instruments and Papers.

The Use of Drawing Instruments, and Geometrical Problems.

Elementary Exercises in Water-color Washes.

Military Topography—Map-reading and Map-making.

Book of Letters and Lettering.

Descriptive Geometry Problems.

The work of the second year begins with freehand military landscape sketching in the field; and is followed by memory-drawing for the training of the formal memory, and freehand mechanical, and projective drawing. Practical projective geometry, including axonometric projection, is then resumed preparatory of

the plan, section, and elevation drawing of a building construction project. In this the student learns the structural elements of a house and of building construction methods and design, and the ability to read working drawings. Following this, a mechanical drawing of the plan, section, and elevation of a portion of a steam engine is constructed, in connection with instruction in the structure and function of the parts of a steam engine. Finally, the class is separated into groups corresponding to the corps in the Army, in which the standing of cadets indicates that they will graduate, and subjects of engineering, ordnance, and service-building construction drawing are assigned in accordance therewith. The course concludes with a short series of lectures on the art and architecture of the world, and a trip to the Metropolitan Museum of Art in New York city, upon which a thesis is written by each member of the class.

Text-book pamphlets:

Framing.

The Steam Engine.

Notes on Building Construction.

#### DEPARTMENT OF MODERN LANGUAGES.

##### FOURTH, THIRD, SECOND, AND FIRST CLASSES.

The course in modern languages comprises instruction in the French and Spanish languages.

##### THE FRENCH LANGUAGE.

##### FOURTH AND THIRD CLASSES.

The requirements of this course are as follows:

Construction of the language; reading and writing French; dictation; military terms; translation (written and oral) of English into French and French into English; conversation; themes.

Instruction in the French language begins March 1st of the

fourth-class year and is completed June 4th of the third-class year. Examinations thereon will be held at the June examination, fourth-class year, and at the December and June examinations of the third-class year. The course comprises about two hundred and twenty-one lessons.

THE SPANISH LANGUAGE.

SECOND AND FIRST CLASSES.

The requirements of this course are as follows:

Construction of the language; reading and writing Spanish; dictation; translation (written and oral) of English into Spanish and Spanish into English; oral recitations and conversation; themes.

Instruction in the Spanish language begins March 1st of the second-class year and is completed June 4th of the first-class year. Examinations thereon will be held at the June examination, second-class year, and at the December and June examinations of the first-class year. The course comprises about one hundred and eighty-three lessons.

The present text-books are:

*French—Fourth Class.*

French Pronunciation. De Peiffer.  
Treatise on the Conjugation of French Verbs. Castarède.  
Elementary French. Aldrich and Foster.  
La Langue Française, première partie. Bercy.  
Le Petit Parisien. Kron.

*French—Third Class.*

Martin's "French Verbs."  
Elementary French. Aldrich and Foster.  
Introductory French Composition. François.  
Guerlac's "Standard French Authors."  
Advanced French Prose Composition. François.  
Potter's "Dix Contes Modernes."  
French Verbs and Prepositions, Idioms, Letters.

Cameron's "Tales of France."  
 Marchand's "French Idioms."  
*Révue Militaire des Armées Etrangères.*  
 Labiche and Martin's "Voyage de M. Perrichon."  
*Courrier des Etats-Unis* (Sunday edition).  
*Le Petit Parisien.* Kron.

*Spanish—Second and First Classes.*

Spanish Verb and Spanish Pronunciation. Traub.  
 Spanish Grammar. Monsanto and Languellier.  
 Spanish Grammar. Garner.  
*El Castellano Actual.* Román y Salamero.  
*Las Novedades.*  
 First Spanish Book. Worman.  
 Elementary Spanish Reader. Ramsey.

BOOKS OF REFERENCE.

*French.*

French Pronouncing Dictionary. Spiers and Surene.  
 Military Technical Dictionary. Willcox.

*Spanish.*

New Spanish-English and English-Spanish Dictionary,  
 by Cuyás. (Appleton.)

DEPARTMENT OF LAW.

FIRST CLASS.

The course in Law covers the following subjects:

1. The Elements of Law.
2. Constitutional Law.
3. International Law.
4. Military Law.

To illustrate principles in the text-books, cadets are required to recite on numerous cases from the reports. Lectures are also given upon the subjects taught, so far as the limits of time allotted to this course permit.

TEXT-BOOKS.

The Elements of Law. Davis, G. B.  
Constitutional Law. Davis, E. G.  
International Law. Davis, G. B.  
Military Law. Dudley.

There is a reference library in the department of about 2,500 volumes, accessible to the cadets.

DEPARTMENT OF PRACTICAL MILITARY ENGINEERING.

FOURTH, THIRD, SECOND, AND FIRST CLASSES.

Cadets of the fourth class receive an elementary course in theoretical surveying during the month of February.

During the summer encampment, cadets of the third class receive practical instruction in the use and adjustment of surveying instruments and in surveying methods. In this course they apply in the field what has been taught them in their theoretical course of the preceding spring. The course includes tie-line surveys, made by use of the tape or chain alone, surveys made with the compass and with the transit, and running differential level circuits.

Cadets of the second class receive, during the fall drill season, instruction in visual signaling, using the flag and the heliograph for sending and receiving messages. They are also taught to set up and adjust the heliograph and the acetylene lantern. During the spring period this class is instructed in the field methods of electrical communication, and is given practice in establishing and using buzzer-lines under (as nearly as possible) service conditions. The course also comprises setting up and operating field wireless telegraph outfits.

During the summer encampment cadets of the first class are instructed in building pile, trestle, and pontoon bridges, in improvising methods of crossing streams, in making road-sketches, both mounted and dismounted, and in combined position-sketching.

During the fall course this class is given instruction in the construction and operation of appliances used in field engineering, in the erection of spar and trestle bridges, and in the use of explosives in military demolitions. The spring course is devoted to field fortification work, including the construction of trenches, revetments, obstacles, bomb-proofs, and gun-pits; posting and distribution of working parties in the construction of saps, trenches, parallels, and approaches; and tracing and profiling siege-works.

TEXT-BOOK.

Theory and Practice of Surveying. Johnson.

BOOKS OF REFERENCE.

The Engineer Field Manual.

Survey Manual. Pence and Ketchum.

DEPARTMENT OF ORDNANCE AND GUNNERY.

FIRST CLASS.

The subject of Ordnance and Gunnery is studied by the cadets of the first class throughout the academic year.

The course of instruction covers the principles involved in the construction and use of war material. It is broadly divided into three parts: The theoretical, the descriptive, and the practical. The theoretical part includes the study of the action of explosives, the study of interior and exterior ballistics, the theories of gun and carriage construction, and the principles of gunnery. The theoretical part of the course is not the same for all cadets; those showing the necessary proficiency taking a special course of twenty-one lessons in the time devoted by the remainder of the class to review work.

The descriptive part of the course covers the processes of manufacture of powders, guns, projectiles, and armor, and describes the small arms, cannon, machine, and rapid-fire guns in use in the United States Service, with the carriages, ammunition, and accessory



appliances required for their service. The department is well supplied with models, which are used in conjunction with the text.

The practical part of the course covers work with ballistic instruments, and the operation of machines and appliances used in the fabrication of modern ordnance, the latter work being in effect a short but valuable course in manual training.

In connection with the course, visits are made to Watervliet Arsenal, where the processes of gun-construction are observed, and to the Ordnance Proving-ground at Sandy Hook, where actual firings from the several classes of guns are observed, including usually one or more shots against armor, and where the latest developments in war material are seen.

TEXT-BOOKS.

Ordnance and Gunnery. Lissak.  
Exterior Ballistics. O'Hern.  
Stresses in Wire-wrapped Guns and in  
Gun Carriages. Ruggles.

BOOKS OF REFERENCE.

Ballistic Tables. Ingalls.  
Mathematical Tables. Newcomb.  
Publications of Ordnance Department.  
U. S. Army.

DEPARTMENT OF MILITARY HYGIENE.

SECOND CLASS.

The course in military hygiene for the second class begins on or about the 15th of April and continues into June. It consists of six lectures and thirteen recitations for each half of the class, given on alternate days and ending by a written examination on the subjects treated.

The course covers the essential points in military hygiene, particular attention being paid to the following:

Personal hygiene, with special reference to the soldier and his environment; the hygiene and sanitation of military commands in garrison and in the field; and the causes and prevention of infectious diseases and control of epidemics; also the nature of alcoholic drinks and narcotics, and special instruction as to their effects upon the human system.

During the summer camp five lectures with exercises are given to the first class on the use of the first aid packet and the treatment of medical and surgical emergencies. While on the practice march, at the end of each day, the medical officer on duty with the Corps discusses the advantages and disadvantages of the camp-site from the viewpoint of the military sanitarium, and also camp cooking, the water supply, and various other matters pertaining to camp hygiene and sanitation.

#### TEXT-BOOK.

The Elements of Military Hygiene. Ashburn.  
Anatomy, Physiology, and Hygiene. Tracy.

#### REFERENCE BOOKS.

Military Hygiene. Harvard.  
Theory and Practice of Military Hygiene. Munson.  
Notes on Military Hygiene. Woodhull.  
Practical Hygiene. Harrington.

#### DEPARTMENT OF ENGLISH AND HISTORY.

##### NEW CADETS AND FOURTH CLASS.

##### *English.*

Essential principles of rhetoric; frequent practice in various forms of written and oral composition, including personal and official correspondence and official forms; study of selected literary masterpieces, and of essentials in the history of English literature and language.

*History.*

Political, social, and economic history from the end of the Middle Ages to the present day; study of typical forms of modern national and municipal governments; fundamental principles of civil government, historically considered, with special reference to the United States.

TEXT-BOOKS.

*English.*

English Composition. Henry S. Canby, and others.  
Golden Treasury, Everyman's Library edition. Palgrave.  
Shakespeare's Works. Tennyson's "Idylls of the King."  
Selections from Addison, selections from Macaulay, selections from Stevenson, and Carlyle's "Heroes and Hero-Worship."

TEXT-BOOKS.

*History.*

A Political History of Modern Europe. F. Schwill.  
The Development of Modern Europe. J. H. Robinson and C. A. Beard.  
Readings in Modern European History, Vol. II. Robinson and Beard.  
The Development of the State. Dealey.

THE LIBRARY.

Cadets and officers have free access to the library, which comprises some eighty thousand books, maps, and manuscripts. The collection contains substantially all standard books on the subjects taught in the Academy and is especially complete in military subjects. Its card catalogues (about 272,000 cards) are arranged with the special object of saving the time of cadets. The library is open on week-days from 8 A. M. to 9:30 P. M.; on Sundays and holidays, from 2 to 6 P. M.

## CORPS ORGANIZATION.

For instruction in Infantry Drill Regulations and in military police and discipline, the Corps of Cadets is organized into two battalions, under the Commandant of Cadets, assisted by two battalion commanders (Army officers), each company being commanded by an officer of the Army. The cadet officers and non-commissioned officers are selected from those cadets who have been most studious, soldierlike in the performance of their duties, and most exemplary in their general deportment. In general, the cadet captains and lieutenants are taken from the first class, the sergeants from the second class, and the corporals from the third class.

## CLASSIFICATION OF CADETS.

The cadets are arranged in four distinct classes, corresponding with the four years of study. There is also a preliminary course extending from about March 11th to June 10th, for the class of new cadets admitted March 1st. The cadets employed on the preliminary course constitute the class of new cadets; those employed on the first year's course constitute the fourth class; those on the second year's course, the third class; those on the third year's course, the second class; and those on the fourth year's course, the first class.

The academic year commences on the 1st of July; on or before that date the result of the examination held in the preceding month is announced, and cadets are advanced from one class to another. At no other time is a cadet advanced from one class to another, unless prevented by sickness, or authorized absence, from attending the aforesaid examination; in such a case a special examination is granted; but in no case is a cadet advanced from one class to another without having satisfied the Academic Board of his proficiency in each branch of study pursued by his class.

The count for conduct, based upon the number of demerits received by a cadet each year, is:

First-class year.....	125
Second-class year.....	100
Third-class year.....	75
Fourth-class year.....	50
Class of new cadets.....	40

The final count in conduct for the graduating merit-roll is 125. It is obtained by adding together the respective proportional parts for each of the four years and the preliminary course for new cadets, and then reducing the sums thus found to equivalent values with a maximum of 125.

## CHAPTER III.

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### PROMOTION OF ENLISTED MEN.

APPOINTMENTS IN THE CAVALRY, FIELD ARTILLERY, AND INFANTRY.—QUALIFICATIONS OF APPLICANTS.—APPLICATION FOR EXAMINATION.—PRELIMINARY PHYSICAL EXAMINATION.—PRELIMINARY MORAL CHARACTER AND MENTAL EXAMINATION.—FINAL EXAMINATION.—FINAL PHYSICAL EXAMINATION.—FINAL MORAL CHARACTER AND MENTAL EXAMINATION.—EXAMINATION AS TO FITNESS FOR MOUNTED SERVICE.—REPORT OF EXAMINING BOARD, AND ASSIGNMENTS.

### APPOINTMENTS IN THE COAST ARTILLERY.

EXAMINATION FOR APPOINTMENT IN THE COAST ARTILLERY.—QUALIFICATIONS OF APPLICANTS.—APPLICATION FOR EXAMINATION.—PRELIMINARY PHYSICAL EXAMINATION.—FINAL EXAMINATION.—FINAL PHYSICAL EXAMINATION.—FINAL EXAMINATION.—MORAL CHARACTER AND MENTAL EXAMINATION.—REPORT OF EXAMINING BOARD, AND ASSIGNMENTS.—FORM FOR INDIVIDUAL RECORD OF CANDIDATE.—SPECIMEN QUESTIONS ASKED AT AN EXAMINATION.

Vacancies in the grade of second lieutenant in the cavalry, artillery, and infantry remaining on the 1st of July each year that are not needed for the graduates of that year of the United States Military Academy may be filled by appointment, in the following order:

- (a) Of enlisted men of the Army (non-commissioned officers or privates), whose fitness for promotion shall have been determined by a competitive examination.
- (b) From civil life,

All vacancies occurring after the 1st of July and not needed for the graduates that year of the Military Academy will be held for the next graduating class of the Academy.

Only vacancies that are left after the assignment of the June graduating class of the Military Academy are open for candidates from the Army or civil life.

No applicant will be ordered before the final Board who has not successfully passed the departmental examination for that year.

If in any year no final examination be held, the departmental examination for that year will be void.

An applicant who twice fails to pass the departmental examination in years in which final examinations are held, or who twice fails in his final examination, cannot again compete for appointment to the grade of second lieutenant in the Army.

All rights and privileges arising from having successfully passed the final examination may be vacated by sentence of a court-martial, but no soldier holding such privileges shall be brought before a garrison or regimental court-martial or summary court. Should he be guilty of misconduct, he will be promptly reported to the War Department through regimental and department headquarters, the report to contain a full statement of the alleged misconduct, with names of witnesses.

Enlisted men of the Coast Artillery Corps are eligible for appointment in that branch of the Service only, and enlisted men who do not belong to this service cannot compete for a commission in it. The other arms of the Service open for them are the cavalry, field artillery, and infantry.

Enlisted men are not appointed to the engineers.

Appointments to the different departments of the Army, such as the General Staff, Adjutant General's Department, Inspector General's Department, etc., are usually made from the line of the Army, of officers who are especially equipped for the duties to which appointed.

The rules and regulations governing the appointment of enlisted men as second lieutenants in the Army have changed several times within the past ten years, but the general principles have remained.

Civilians who are contemplating enlisting with the view of obtaining a commission by that road are asked to read the chapter on *The Enlisted Men* of the Army, also Chapter X., *Enlisting for a Commission*.

The latest rules and regulations governing the appointment of enlisted men are as follows:

#### QUALIFICATIONS OF APPLICANTS.

A soldier to be eligible to compete for appointment to the grade of second lieutenant must be a citizen of the United States, unmarried, and under thirty years of age on the first day of the final competitive examination, and must have served honorably not less than two years in the Regular or Volunteer Army, continuously or at different periods, as an enlisted man on or before that date; he must also be physically sound and of good moral character before and after enlistment.

Enlisted men of the Coast Artillery Corps may compete for appointments in the Coast Artillery Corps only, and no enlisted men other than those of the Coast Artillery Corps may compete for appointments in the Coast Artillery Corps.

#### APPLICATION FOR EXAMINATION.

An enlisted man who desires to appear for examination will submit through military channels an application so that it will reach his department commander on or before February 1st of the year in which he desires to take the examination. Any application received after that date will not be considered unless it be shown that the delay was through no fault of the applicant. The appli-



cation will be accompanied by the "Form for Individual Record of Candidate," filled out and sworn to as indicated. (See Form, end of chapter.)

The company commander in forwarding such application will verify the statement of service as given, and will state specifically whether, in his opinion, the soldier fulfills each of the conditions hereinbefore required, and will add his remarks as to the aptitude of the applicant for the position sought.

The post commander will, upon the receipt of such application, cause the applicant to be examined by a medical officer as to his physical qualifications and will forward the report of such examination with the application, adding his remarks as to the aptitude of the applicant for the position sought.

## EXAMINATIONS FOR APPOINTMENT IN THE CAVALRY, FIELD ARTILLERY, AND INFANTRY.

### PRELIMINARY EXAMINATION.

With a view to the proper selection of enlisted men for promotion to the grade of second lieutenant in the cavalry, field artillery, and infantry, each department commander will each year convene a board of five officers, two of whom shall be medical officers whose duties will be confined to inquiring into and reporting upon the physical qualifications of the applicants, to meet as soon as practicable after March 1st, to conduct the preliminary examination. He will order before this board such applicants in his command as appear to fulfill all the requirements herein indicated as necessary for appointment in the cavalry, field artillery, and infantry, and will refer to the board the applications of the candidates with all papers received bearing on their service and character. The board will institute a rigid inquiry into the physical qualifications, character, capacity, and military record and aptitude of the candidates, and will recommend none for the final examination who

are not able to establish their physical, moral, and mental fitness for promotion to the entire satisfaction of the board. To that end the procedure of the departmental boards will be based upon that of retiring boards. Evidence will be obtained from the certificates of officers, from witnesses under oath, and by means of written interrogatories. The military record of each candidate will be closely examined, and his character before entering the Service will be made the subject of special inquiry.

#### PRELIMINARY PHYSICAL EXAMINATION.

Each applicant will first be subjected to a rigid physical examination, and if any cause of disqualification is found to exist, it will be specified in the report and the applicant will be rejected and his examination will cease unless, in the opinion of the medical officers of the board, the physical defects are temporary in nature and such as may be overcome by the time the applicant is to appear for final examination, in which case the physical defects and the reasons which influenced the board to continue the examination notwithstanding such defects will be fully set forth in the report. Examination as to physical qualifications will be made complete in each case and will conform to the standard required of recruits, except that any applicant whose degree of vision is less than 20—40 in either eye, or who is color-blind for red, green, or violet, will be rejected.

A certificate of physical examination by the medical officers of the board will accompany the proceedings of the board in each case.

#### PRELIMINARY MORAL CHARACTER AND MENTAL EXAMINATION.

The moral character of each applicant who has been found physically qualified will then be inquired into, and any applicant who has not borne a good moral character before and after enlistment will be rejected and his examination will cease.

Each applicant who has been found qualified physically and morally will then be examined mentally in the following subjects:

1. English grammar, including orthography, reading, and writing from oral dictation.
2. In his knowledge of arithmetic and his ability to apply its rules to all practical questions; in his knowledge of the use of logarithms and ability to apply them to questions of practice; in his knowledge of algebra, through quadratic equations, and in his knowledge of plane and solid geometry, plane and spherical trigonometry, and the elements of surveying.
3. Geography, particularly in reference to the United States and North America.
4. The outlines of general history, and particularly the history of the United States.
5. The Constitution of the United States and the organization of the Government under it, and the elements of international law.
6. Army Regulations, and the drill regulations of the arm in which the candidate is serving. If not serving in the line of the Army, he will be examined in the drill regulations of cavalry, field artillery, or infantry, as he may elect.

The examination in drill regulations shall consist of a practical demonstration of the ability of the candidate to instruct and command troops in the exercises and maneuvers of the drill regulations of his arm of the Service, to include the platoon, and shall take place in the presence of all the line officers of the board.

7. The military record and aptitude of the candidate as certified to by his company, post, and regimental or other commanders, and as judged by the examining board.

In awarding marks, the board will give to each subject in the examination the relative weight given in the following example. The weight to be given to each question will be determined by its importance and will be set opposite the question in the papers furnished the candidates.

*Example.*

No.	Subjects.	Relative Weights.
1	English grammar, orthography, etc.....	100
2	Mathematics.....	200
3	Geography.....	100
4	History.....	100
5	Constitution and international law.....	100
6	Army and Drill Regulations.....	200
7	Military record and aptitude.....	100
		900

The duty of making the preliminary examination of applicants is one involving in a high degree the welfare and character of the Service, and all officers of departmental boards are enjoined to exercise the utmost circumspection and care that no unworthy applicant be recommended. All statements and certificates as to moral character, general aptitude, and fitness should be carefully verified by disinterested evidence.

Separate records will be submitted in each case to the department commander, who will forward them, with all papers presented in relation to the applicant, to the Adjutant General of the Army.

## FINAL EXAMINATION.

Each year in which there remain vacancies in the grade of second lieutenant in the cavalry, field artillery, and infantry for appointment to which enlisted men are eligible, the War Department will, on September 1st, or on such other date or dates as may be decided upon, convene a board of five officers, two of whom shall be medical officers whose duties will be confined to inquiring into and reporting upon the physical qualifications of the applicants, before which those who have successfully passed the departmental boards will be ordered to appear to compete in the final examination for appointment to such vacancies.

No applicant will be ordered before the final board who has not successfully passed the departmental board for that year. If in any year no final examination be held, the preliminary examination for that year will be void. An applicant who twice fails to pass a preliminary examination in years in which final examinations are held, or who twice fails to pass a final examination, cannot again compete for appointment to the grade of second lieutenant in any branch of the Army.

The records of the preliminary examinations and the papers pertaining thereto of applicants ordered to take the final examination, together with such official records in the War Department as relate to the character and qualifications of such candidates for commission, will be submitted to the board. The examination will be conducted in conformity with the following rules:

#### FINAL PHYSICAL EXAMINATION.

Each applicant will first be subjected to a rigid physical examination, and any applicant who fails to pass it will be rejected by the board; but, should he so desire, he will be permitted to undergo the mental examination with the distinct understanding that such examination will not confer upon him any right to appointment should his physical disability finally be regarded as disqualifying. Examination as to physical qualifications will conform to the standard required of recruits, except that any applicant whose degree of vision is less than 20—40 in either eye, or who is color-blind for red, green, or violet, will be rejected. The physical examination will be made complete in each case, even though a deficiency be discovered, so as to ascertain whether any other defects exist. It is highly desirable that where a candidate is rejected for any physical cause, the cause of rejection should be so clearly established as to be conclusive of the reasonableness and propriety of the rejection; and in cases where the physical fitness appears doubtful, the board should

require the production of such testimony as to the medical history of the candidate and of his family as may be obtainable. A certificate of physical examination by the medical officers of the board will accompany the proceedings of the board in each case.

#### FINAL MORAL CHARACTER AND MENTAL EXAMINATION.

The moral character of each applicant found physically qualified, or who desires to undergo the mental examination notwithstanding his physical defects, will then be inquired into, as hereinbefore set forth for the preliminary examination, and any applicant who has not borne a good moral character before and after enlistment will be rejected and his examination will cease.

Each applicant who has been found qualified morally and is physically qualified, or desires to undergo the mental examination notwithstanding his physical defects, will then be examined mentally in the following subjects, the scope of the examination in each subject being as set forth under the head, "Preliminary Examination."

In awarding marks, the board will give to each subject in the examination the relative weight given in the following form. The general average of the candidate will be computed as follows: Mark each question according to its relative weight and reduce the aggregate of marks thus obtained in each subject to a scale of 100. The result will give the mark in the subject. Multiply the mark in each subject by the number indicating the relative weight of the subject and divide the sum of the products by the sum of the relative weights; the quotient will be the general average. No candidate will be passed by the board who shall not have attained an average of at least 65 per cent in each subject of examination and a general average of at least 75 per cent.

Example.

No.	Subjects.	Mark.	Relative Weights.	Products of Multiplication by Relative Weights.
1	English grammar, etc.....	82	3	246
2	Mathematics.....	76	4	304
3	Geography.....	80	2	160
4	History.....	73	3	219
5	Constitution and international law	67	2	134
6	Army and Drill Regulations .....	75	3	225
7	Military record and aptitude.....	80	2	160
			19	1,448
	General average.....	.....	.....	76.21

EXAMINATION AS TO FITNESS FOR MOUNTED SERVICE.

All applicants will be examined carefully as to their fitness for mounted service, taking into consideration *only the degree of proficiency shown by them in riding and horsemanship and their size when so great as to indicate present or future unsuitability for mounted service*, and the board will report them by name in three groups, as determined by the result of the examination, viz.:

- 1st. Those considered specially qualified for mounted service.
- 2d. Those considered qualified.
- 3d. Those considered not qualified.

REPORT OF EXAMINING BOARD, AND ASSIGNMENTS.

When the board shall have examined and passed upon all the applicants, it will prepare separate proceedings in each case and also a tabulated statement showing the order of their relative merit as developed by the examination, and forward the proceedings with all papers pertaining thereto to the Adjutant General of the Army.

The final examination is competitive and for the number of vacancies in the grade of second lieutenant in the cavalry, field ar-

tillery, and infantry remaining each year after the assignment of the graduates of that year of the United States Military Academy.

The board will recommend for appointment in the cavalry, field artillery, or infantry, only such number, in the order of merit established by the examination, as will equal the number of vacancies remaining after the assignment of the graduates of the Military Academy, as hereinbefore stated, and no greater number will be reported as having passed. No competitor will be recommended by the board who is not physically, morally, and mentally qualified for the position of second lieutenant in the arm for which recommended. Upon the approval by the War Department of the report of the board, each competitor recommended in accordance with this paragraph will be regarded as eligible for appointment.

#### EXAMINATION FOR APPOINTMENT IN THE COAST ARTILLERY.

##### QUALIFICATIONS OF APPLICANTS.

A soldier to be eligible to compete for appointment to the grade of second lieutenant must be a citizen of the United States, unmarried, and under thirty years of age on the first day of the final competitive examination, and must have served honorably not less than two years in the Regular or Volunteer Army, continuously or at different periods, as an enlisted man on or before that date; he must also be physically sound, and of good moral character before and after enlistment.

Enlisted men of the Coast Artillery Corps may compete for appointments in the Coast Artillery Corps only, and no enlisted men other than those of the Coast Artillery Corps may compete for appointments in the Coast Artillery Corps.

##### APPLICATION FOR EXAMINATION.

An enlisted man who desires to appear for examination will submit through military channels an application so that it will



reach his department commander on or before February 1st of the year in which he desires to take the examination. Any application received after that date will not be considered unless it be shown that the delay was through no fault of the applicant. The application will be accompanied by the "Form for Individual Record of Candidate," filled out and sworn to as indicated. (See Form at end of this chapter.)

The company commander in forwarding such application will verify the statement of service as given, and will state specifically whether, in his opinion, the soldier fulfills each of the conditions hereinbefore required, and will add his remarks as to the aptitude of the applicant for the position sought.

The post commander will, upon the receipt of such application, cause the applicant to be examined by a medical officer as to his physical qualifications, and will forward the report of such examination with the application, adding his remarks as to the aptitude of the applicant for the position sought.

#### PRELIMINARY EXAMINATION.

With a view to the proper selection of enlisted men for promotion to the grade of second lieutenant in the Coast Artillery Corps, the commanding general of each department in which coast artillery is serving will each year convene such number of boards as he may deem advisable, to meet as soon as practicable after March 1st, to conduct the preliminary examination. Each board will consist of one or more line officers and two medical officers. The duties of the medical officers shall be confined to inquiring into and reporting upon the physical qualifications of the applicants, and the duty of the line officers shall be to supervise the mental examination, which will be written, the questions therefor being furnished by the department commander to the senior line officer of the board. The department commander will, at the proper time

submit application to the Adjutant General of the Army for such number of sets of questions as may be required for his department. The physical examination will be conducted first, and this will be followed by the mental examination, which will take place in the presence of the line officers of the board, at least one of whom must be present at all times during the mental examination. Each examination paper will contain a certificate from one of the line officers of the board that the applicant has undergone the examination in his presence and without assistance from any one. Examination papers when completed will be forwarded with the certificate of the medical officers to the department commander, who will forward them to the Adjutant General of the Army. Marks upon the examination papers will be awarded by the War Department.

All applicants shall submit to the officer conducting the mental examination testimonials or certificates as to their moral character and fitness for the position of a commissioned officer, and these testimonials and certificates will be forwarded with the examination papers.

#### PRELIMINARY PHYSICAL EXAMINATION.

Each applicant will first be subjected to a rigid physical examination, and if any cause of disqualification is found to exist, it will be specified in the report and the applicant will be rejected and his examination will cease unless, in the opinion of the medical officers of the board, the physical defects are temporary in nature and such as may be overcome by the time the applicant is to appear for final examination, in which case the physical defects and the reasons which influenced the board to continue the examination notwithstanding such defects will be fully set forth in the report. Examination as to physical qualification will conform to the standard required of recruits, except that any applicant whose degree of vision is less than 20—40 in either eye, or who is color-blind for red, green, or violet, will be rejected.

The physical examination will be made complete in each case, even though a deficiency be discovered, so as to ascertain whether any other defects exist. It is highly desirable that where a candidate is rejected for any physical cause, the cause of rejection should be so clearly established as to be conclusive of the reasonableness and propriety of the rejection, and in cases where physical fitness appears doubtful the board should require the production of such testimony as to the medical history of the candidate and of his family as may be obtainable.

PRELIMINARY MENTAL EXAMINATION.

Each applicant who has been found qualified under the preceding portion of this paragraph, except those exempted below, will be examined in the following subjects:

- (a) English grammar and orthography, the latter to be judged by all the papers submitted by the candidate.
- (b) Mathematics, to include algebra, plane and solid geometry, trigonometry, and the elements of the calculus.
- (c) Geography and history, particularly of the United States.

The scope of the mathematical subjects will be that usually considered necessary as a general foundation or preparation for undertaking a scientific course of study, such as is given to officers at the Coast Artillery School, Fort Monroe, Va., and is covered by the following, or any other recognized text-books on the same subjects of an equivalent standard:

New School Algebra. Wentworth.  
Plane and Solid Geometry (revised). Wentworth.  
New Plane and Spherical Trigonometry. Wentworth.  
Differential Calculus (to include Differentiation of Algebraic, Logarithmic, Exponential, and Trigonometric Functions).  
McMahon and Snyder.

Integral Calculus (first four chapters). D. A. Murray.

In marking the examination papers, the following relative weights will be given to the subjects enumerated in this paragraph: grammar, 2; mathematics, 9; geography and history, 3.

Candidates who attain a general average of 70 per cent in all of the above specified subjects will be considered as having passed a satisfactory preliminary examination.

Applicants who are graduates of recognized colleges or universities in either the classical or scientific courses thereof will, if they desire, be exempt from the preliminary mental examination, and to this end they should submit to the department commander diplomas, certificates, or other evidence of such graduation when applying for authority to appear before the departmental board. Department commanders will forward these to the War Department for decision as to exemption.

#### FINAL EXAMINATION.

Each year in which there remain vacancies in the grade of second lieutenant in the Coast Artillery Corps for appointment to which enlisted men are eligible the War Department will, on September 1st, or on such other date or dates as may be decided upon, convene a board at Fort Monroe, Va., consisting of a sub-committee of the Coast Artillery School Board and two medical officers, before which those who have successfully passed the departmental boards will be ordered to appear to compete in the final examination for appointment to such vacancies.

The duties of the medical officers shall be confined to inquiring into and reporting upon the physical qualifications of applicants.

No applicant will be ordered before the final board who has not successfully passed the departmental board for that year. If in any year no final examination be held, the preliminary examination for that year will be void. An applicant who twice fails to pass

a preliminary examination in years in which final examinations are held, or who twice fails to pass a final examination, cannot again compete for appointment to the grade of second lieutenant in any branch of the Army.

The records of the preliminary examinations and the papers pertaining thereto of applicants ordered to take the final examination, together with such official records in the War Department as relate to the character and qualifications of such candidates for commission, will be submitted to the board. The examination will be conducted in conformity with the following rules:

#### FINAL PHYSICAL EXAMINATION.

Each applicant will first be subjected to a rigid physical examination, and any applicant who fails to pass it will be rejected by the board; but, should he so desire, he will be permitted to undergo the mental examination with the distinct understanding that such examination will not confer upon him any right to appointment should his physical disability finally be regarded as disqualifying. Examination as to physical qualifications will conform to the standard required of recruits, except that any applicant whose degree of vision is less than 20—40 in either eye, or who is color-blind for red, green, or violet, will be rejected. The physical examination will be made complete in each case, even though a deficiency be discovered, so as to ascertain whether any other defects exist. It is highly desirable that where a candidate is rejected for any physical cause, the cause of rejection should be so clearly established as to be conclusive of the reasonableness and propriety of the rejection; and in cases where the physical fitness appears doubtful, the board should require the production of such testimony as to the medical history of the candidate and of his family as may be obtainable. A certificate of physical examination by the medical officers of the board will accompany the proceedings of the board in each case.

## FINAL EXAMINATION—MORAL CHARACTER AND MENTAL.

The moral character of each applicant found physically qualified, or who desires to undergo the mental examination notwithstanding his physical defects, will then be inquired into, and any applicant who has not borne a good moral character before and after enlistment will be rejected and his examination will cease.

Each applicant who has been found qualified morally and is physically qualified, or desires to undergo the mental examination notwithstanding his physical defects, will then be examined mentally in the following subjects:

1. Elementary electricity.
2. Elementary mechanics.
3. Elementary chemistry.
4. Advanced mathematics, electricity or mechanics, as the applicant may elect.
5. The Constitution of the United States and the organization of the Government under it, and the elements of international law.
6. Army Regulations and Coast Artillery Drill Regulations. The examination in drill regulations will be oral and practical and will include only those matters with which the soldier has had practical experience.
7. Military record and aptitude of the candidate as certified to by his company, post, and district or other commanders, and as judged by the examining board.

The scope of the examination in elementary electricity, mechanics, and chemistry will be that of a high school or preparatory school examination in these subjects, and will cover only so much of the subjects as is usually considered necessary as a general foundation or preparation for beginning one of the scientific courses at recognized colleges or technical schools. The scope of the subjects is that covered by the following or any other recognized text-books of an equivalent standard:

Lessons in Practical Electricity (Lessons 1 to 23). Swoope.  
A Text-Book of Physics. Wentworth and Hill.  
Elementary Chemistry. Clark and Dennis.

The scope of the examination in advanced mathematics, electricity, or mechanics will be that of a final examination in these subjects given by certain correspondence schools, and by recognized colleges and technical schools at the end of sophomore or junior years in the scientific courses, and the scope of the subjects is that covered by the following or any other recognized text-books of an equivalent standard:

For advanced mathematics—

Differential Calculus. McMahon and Snyder.  
Integral Calculus. D. A. Murray.  
Analytical Geometry. Tanner and Allen.

For advanced electricity—

Elements of Electrical Engineering (Vol. I.). Franklin and Estey.

For advanced mechanics—

International Library of Technology, covering the subjects of steam engines, steam boilers, gas engine management, carburetters, electric ignition, and gas-producers.

It is assumed that the applicant has specialized upon one and not all of the advanced subjects, and immediately upon reporting to the board for examination he will indicate in writing which one of the advanced subjects he desires to be examined upon. After having once indicated the subject, no change to another subject will be allowed.

In awarding marks, the board will give to each subject in the examination the relative weight given in the following form. The general average of the candidate will be computed as follows: Mark each question according to its relative weight and reduce the aggregate of marks thus obtained in each subject to a scale of 100. The result will give the mark in the subject. Multiply the mark in

each subject by the number indicating the relative weight of the subject and divide the sum of the products by the sum of the relative weights; the quotient will be the general average. No candidate will be passed by the board who shall not have attained a general average of at least 70 per cent.

*Example.*

No.	Subjects.	Mark.	Relative Weights.	Products of Multiplication by Relative Weights.
1	Elementary electricity.....	82	2	164
2	Elementary mechanics.....	76	2	152
3	Elementary chemistry.....	80	2	160
4	Advanced electricity, mechanics or mathematics .....	73	10	730
5	Constitution and international law	67	3	201
6	Army and Drill Regulations .....	75	2	150
7	Military record and aptitude.....	81	4	324
			25	1,881
	General average.....	.....	.....	75.24

## REPORT OF EXAMINING BOARD, AND ASSIGNMENTS.

When the board shall have examined and passed upon all the applicants, it will prepare separate proceedings in each case and also a tabulated statement showing the order of their relative merit as developed by the examination, and forward the proceedings with all papers pertaining thereto to the Adjutant General of the Army.

The final examination is competitive and for the number of vacancies in the grade of second lieutenant in the Coast Artillery Corps remaining each year after the assignment of the graduates of that year of the United States Military Academy.

The board will recommend for appointment only such number,



in the order of merit established by the examination, as will equal the number of vacancies remaining after the assignment of the graduates of the Military Academy, as hereinbefore stated, and no greater number will be reported as having passed. No competitor will be recommended by the board who is not physically, morally, and mentally qualified for the position of second lieutenant in the Coast Artillery Corps. Upon the approval by the War Department of the report of the board, each competitor recommended in accordance with this paragraph will be regarded as eligible for appointment.

#### FORM FOR INDIVIDUAL RECORD OF CANDIDATE.

1. Give the exact date and place of your birth.
2. Are you married or single?
3. Are you a citizen of the United States? If so, state whether native-born or naturalized.
4. What schools have you attended and for what periods? Answer explicitly, giving dates and designations of schools, as public schools, academies, district schools, colleges, manual-training schools, night schools, etc. Give also names and present addresses of presidents, superintendents, commandants, principals, professors, or teachers under the supervision of whom you were while attending schools, academies, colleges, etc.
5. In what profession or occupation have you been employed? Answer explicitly, giving time, character of employment, etc.
6. During what time have you supported yourself, totally or partially, by your own labor?
7. Have you ever served in the volunteers or organized militia, or as a cadet at the United States Military Academy? Answer explicitly, giving State, arm of Service, rank, etc.
8. State concisely your service in the Regular Army, giving organizations in which you have served and names of officers under whom you have served, with periods of such service (as near as possible) in each case.

*Aspirants for Commissions in the*

9. State the places of your residence since your twelfth birthday, giving dates between which you resided at each place.
10. State the name and present address of each person by whom you were employed since your twelfth birthday, giving in each instance the nature of the employment and dates of its beginning and ending.

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[Signature, with full name, rank, etc.]

Sworn to and subscribed before me, the .....day of.....,  
A. D. 19.....

## CHAPTER IV.

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### APPOINTMENTS FROM CIVIL LIFE.

APPOINTMENTS TO THE CAVALRY, FIELD ARTILLERY, AND INFANTRY.—EXAMINING BOARDS, HOW CONSTITUTED.—THOSE ELIGIBLE FOR APPOINTMENT.—PHYSICAL EXAMINATION.—MORAL CHARACTER AND MENTAL EXAMINATION.—EXAMINATION AS TO FITNESS FOR MOUNTED SERVICE.—REPORT OF THE EXAMINING BOARD.—APPOINTMENTS TO THE COAST ARTILLERY.—APPLICATIONS, HOW MADE.—EXAMINING BOARD, HOW CONSTITUTED.—QUALIFICATIONS OF CANDIDATES.

Candidates for commissions in the Army from civil life come third in the order of precedence. The vacancies existing after the appointment of the graduating class at West Point, and of such of the enlisted men of the Army as have satisfactorily passed all the examinations, have been usually sufficient to take up practically all of the vacancies occurring in the grade of second lieutenant. There are usually a few vacancies left, and the practice has now almost become a rule of giving these vacancies to honor-graduates of institutions of learning having an Army officer detailed as professor of military science and tactics. There are ten schools known as "Class A" schools, which are designated as "distinguished;" and graduates from this class, no doubt, have a better chance of obtaining a commission than the graduates of non-distinguished schools, even of Class A.

The Class A schools are those "whose organization is essentially military, whose students are habitually in uniform, in which

military discipline is constantly maintained, and one of whose objects is the development of the student by means of military drill and by regulating his daily conduct according to the principles of military discipline."

For list of military schools and the classifications, see Chapter XIV.

The following rules and regulations govern the examination and appointment of candidates from civil life for appointment to the grade of second lieutenant in the Army:

#### APPOINTMENTS TO THE CAVALRY, FIELD ARTILLERY, AND INFANTRY.

##### EXAMINING BOARDS—HOW CONSTITUTED.

Boards for the examination of applicants from civil life for appointment to the position of second lieutenant in the cavalry, field artillery, and infantry will be appointed by the Secretary of War, and will consist of five commissioned officers, including two medical officers. The duties of the medical officers will be confined to examining into and reporting upon the physical qualifications of the candidates.

##### THOSE ELIGIBLE FOR APPOINTMENT.

Such vacancies in the grade of second lieutenant in the cavalry, field artillery, and infantry as exist after the assignment of the graduates of the United States Military Academy each year, and as are not required for qualified enlisted candidates, are available for the appointment of civilians. In any year when such vacancies are available they may be filled—

First. By the appointment of honor-graduates of institutions of learning at which officers of the Army are detailed as professors of military science and tactics, whose students have exhibited the

greatest application and proficiency in military training and knowledge, not to exceed ten for any one year for all arms of the Service.

Such graduates will not be required to undergo any mental examination, but each must be recommended by the Army officer serving at the time of graduation as professor of military science and tactics at the institution at which the applicant was graduated. The applicants of this class who may be appointed second lieutenants will be so appointed in advance of other appointees from civil life; and their places in the lineal and relative lists of second lieutenants of the Army will be determined at the War Department by lot.

Second. By the appointment of such civilian applicants as may be designated by the President and may pass the prescribed competitive examination.

No person shall be examined unless he has a letter from the War Department authorizing his examination.

If the candidate has been graduated at an institution where he received military instruction, he must present a diploma or a recommendation from the faculty of the institution.

If a member of the National Guard, he must present recommendations from the proper National Guard authorities.

No candidate will be examined who is married, or under twenty-one or over twenty-seven years of age, or who is not a citizen of the United States.

#### PHYSICAL EXAMINATION.

Each applicant will first be subjected to a rigid physical examination, and any applicant who fails to pass it will be rejected by the board; but, should he so desire, he will be permitted to undergo the mental examination with the distinct understanding that such examination will not confer upon him any right to appointment should his physical disability finally be regarded as disquali-

fyng. Examination as to physical qualifications will conform to the standard required of recruits, except that any applicant whose degree of vision is less than 20—40 in either eye, or who is color-blind for red, green, or violet, will be rejected.

The physical examination will be made complete in each case, even though a deficiency be discovered, so as to ascertain whether any other defects exist. It is highly desirable that where a candidate is rejected for any physical cause, the cause of rejection should be so clearly established as to be conclusive of the reasonableness and propriety of the rejection, and in cases where physical fitness appears doubtful the board should require the production of such testimony as to the medical history of the candidate and of his family as may be obtainable. A certificate of physical examination by the medical officers of the board will accompany the proceedings of the board in each case.

#### MORAL CHARACTER AND MENTAL EXAMINATION.

The moral character of each applicant found physically qualified, or who desires to undergo the mental examination, notwithstanding his physical defects, will then be inquired into, and any applicant who has not borne a good moral character will be rejected and his examination will cease.

Each applicant who has been found qualified morally and is physically qualified, or desires to undergo the mental examination notwithstanding his physical defects, will then be examined mentally in the following subjects:

1. English grammar, including orthography, reading, and writing from oral dictation.
2. In his knowledge of arithmetic and his ability to apply its rules to practical questions; in his knowledge of the use of logarithms and ability to apply them to questions of practice; in his knowledge of algebra, through quadratic equations, and in his

knowledge of plane and solid geometry, plane and spherical trigonometry, and elements of surveying.

3. Geography, particularly in reference to the United States and North America.

4. The outlines of general history, and particularly the history of the United States.

5. The Constitution of the United States and the organization of the Government under it, and the elements of international law.

6. Army Regulations, and the drill regulations of cavalry, field artillery, or infantry, as the candidate may elect.

The examination in drill regulations shall consist of a practical demonstration of the ability of the candidate to instruct and command troops in the exercises and maneuvers of the drill regulations to include the platoon, and shall take place in the presence of all the line officers of the board.

7. The probable efficiency and aptitude of the candidate as judged by the examining board and as shown by his knowledge of Army and drill regulations acquired by personal study and application, or by experience in a military school, or in the National Guard.

In awarding marks, the board will give to each subject in the examination the relative weight given in the following form: The general average of the candidates will be computed as follows: Mark each question according to its relative weight and reduce the aggregate of marks thus obtained in each subject to a scale of 100. The result will give the mark in the subject. Multiply the mark in each subject by the number indicating the relative weight of the subject and divide the sum of the products by the sum of the relative weights; the quotient will be the general average.

## Example.

No.	Subjects.	Mark.	Relative Weights.	Products of Multiplication by Relative Weights.
1	English grammar, etc.....	82	3	246
2	Mathematics.....	76	4	304
3	Geography.....	80	2	160
4	History.....	73	3	219
5	Constitution and international law	67	2	134
6	Army and Drill Regulations.....	75	3	225
7	Probable efficiency and aptitude..	80	2	160
			19	1,448
	General average.....			75.21

## EXAMINATION AS TO FITNESS FOR MOUNTED SERVICE.

All applicants will be examined carefully as to their fitness for mounted service, taking into consideration *only the degree of proficiency shown by them in riding and horsemanship and their size when so great as to indicate present or future unsuitability for mounted service*, and the board will report by name in three groups as determined by the result of the examination, viz.:

- 1st. Those considered specially qualified for mounted service.
- 2d. Those considered qualified.
- 3d. Those considered not qualified.

## REPORT OF THE EXAMINING BOARD.

No candidate will be passed by the board who shall not have attained a general average of 75 per cent in all subjects examined upon, and not less than 65 per cent in any one subject.

When the board shall have examined and passed upon all applicants, it will prepare separate proceedings in each case and also a tabulated statement showing the order of their relative merit as determined by the general examination, and forward the proceed-



ings with all papers pertaining thereto to the Adjutant General of the Army. In establishing the order of relative merit, the general average of each applicant will be made up from the average of the marks in all subjects in which he was examined.

The following rules and regulations govern the appointment to the Coast Artillery of candidates from civil life:

## APPOINTMENTS TO THE COAST ARTILLERY.

### APPLICATIONS—HOW MADE.

Such vacancies in the grade of second lieutenant in the Coast Artillery Corps as exist after the assignment of the graduates of the United States Military Academy each year, and as are not required for qualified enlisted candidates, are available for the appointment of civilians who will be selected by competitive examination from those designated by the War Department. Applications for designations should be addressed to the Adjutant General of the Army, and must include a signed statement showing the date of birth of the applicant, whether he is married or single, and whether or not he is a citizen of the United States by birth or naturalization.

### EXAMINING BOARD—HOW CONSTITUTED.

Candidates will be authorized to report for examination at such military posts in the vicinity of their homes as may be designated in each case, and the examination will be conducted by a board to consist of two medical officers and one or more line officers, appointed by the post commander. The duties of the medical officers shall be confined to inquiring into and reporting upon the physical qualifications of the applicants, and the duty of the line officers shall be to supervise the mental examination, which will be written, the questions therefor being furnished by the Adjutant General of the Army to the senior line officer of the board. The

physical examination will be conducted first, and this will be followed by the mental examination, which will take place in the presence of the line officers of the board, at least one of whom must be present at all times during the mental examination. Each examination paper will contain a certificate from one of the line officers of the board that the applicant has undergone the examination in his presence and without assistance from anyone. Examination papers, when completed, will be forwarded with the certificate of the medical officers to the Adjutant General of the Army. Marks upon both the preliminary and the competitive examination papers will be awarded by the War Department.

#### QUALIFICATIONS OF CANDIDATES.

No candidate will be examined who is married, or under twenty-one or over twenty-seven years of age, or who is not a citizen of the United States.

#### MORAL CHARACTER.

All candidates shall submit to the officer conducting the mental examination testimonials or certificates as to their moral character and fitness for the position of a commissioned officer, and these testimonials and certificates will be forwarded with the examination papers.

#### PHYSICAL EXAMINATION.

Any applicant who fails to pass this examination will be rejected, but, should he so desire, he will be permitted to undergo the mental examination with the distinct understanding that such examination will not confer upon him any right to appointment should his physical disability finally be regarded as disqualifying. Examination as to physical qualifications will conform to the standard required of recruits, except that any applicant whose de-

gree of vision is less than 20—40 in either eye, or who is color-blind for red, green, or violet, will be rejected. The physical examination will be made complete in each case, even though a deficiency be discovered, so as to ascertain whether any other defects exist. It is highly desirable that where a candidate is rejected for any physical cause, the cause of rejection should be so clearly established as to be conclusive of the reasonableness and propriety of the rejection, and in cases where physical fitness appears doubtful the board should require the production of such testimony as to the medical history of the candidate and of his family as may be obtainable.

#### PRELIMINARY MENTAL EXAMINATION.

Each applicant who is physically qualified or desires to undergo the mental examination notwithstanding his physical defects, except those exempted under the provisions of paragraph 8, will then be examined mentally in the following subjects:

1. English grammar and orthography, the latter to be judged by all the papers submitted by the candidate.
2. Mathematics, to include algebra, plane and solid geometry, trigonometry, and the elements of the calculus.
3. Geography and history, particularly of the United States.

The scope of the mathematical subjects will be that usually considered necessary as a general foundation or preparation for undertaking a scientific course of study, such as is given to officers at the Coast Artillery School, Fort Monroe, Va., and is covered by the following or any other recognized text-books on the same subjects of an equivalent standard, viz.:

New School Algebra. Wentworth.  
Plane and Solid Geometry (revised). Wentworth.  
New Plane and Spherical Trigonometry. Wentworth.

Differential Calculus (to include Differentiation of Algebraic, Logarithmic, Exponential, and Trigonometric Functions).  
McMahon and Snyder.

Integral Calculus (first four chapters). D. A. Murray.

In marking the examination papers, the following relative weights will be given to the subjects enumerated in this paragraph: grammar, 2; mathematics, 9; geography and history, 3.

Candidates who attain a general average of 70 per cent in all of the above specified subjects will be considered as having passed a satisfactory preliminary examination.

Applicants who are graduates of recognized colleges or universities in either the classical or scientific courses thereof will, if they desire, be exempt from the preliminary examination described, and to this end they should submit to the War Department diplomas, certificates, or other evidence of such graduation when applying for the letter of designation, referred to. If exempted, candidates will be so informed in their letters of designation.

Honor graduates of institutions of learning at which officers of the Army are detailed as professors of military science and tactics, and whose students have exhibited the greatest application and proficiency in military training and knowledge, who have been selected for commissions in the Army among the ten of that class authorized for all arms, will, if they desire it, be appointed to vacancies in the Coast Artillery Corps under the provisions of this order and will be exempt from the preliminary examination prescribed. Those so appointed will take rank over all other appointees from civil life who compete at the same time.

#### COMPETITIVE MENTAL EXAMINATION.

On the completion of the preliminary examination, each applicant who has been found physically qualified or desires to undergo the mental examination notwithstanding his physical defects, will then be examined mentally in the following subjects:

1. Elementary electricity.
2. Elementary mechanics.
3. Elementary chemistry.
4. Advanced mathematics, electricity, or mechanics, as the applicant may elect.
5. The Constitution of the United States and the organization of the Government under it, and the elements of international law.

The scope of the examination in elementary electricity, mechanics, and chemistry will be that of a high school or preparatory school examination in these subjects, and will cover only so much of the subjects as is usually considered necessary as a general foundation or preparation for beginning one of the scientific courses at recognized colleges or technical schools. The scope of the subjects is that covered by the following or any other recognized text-books of an equivalent standard, viz.:

Lessons in Practical Electricity (Lessons 1 to 23). Swoope.  
A Text-Book of Physics. Wentworth and Hill.  
Elementary Chemistry. Clark and Dennis.

The scope of the examination in advanced mathematics, electricity, or mechanics will be that of a final examination in these subjects given by certain correspondence schools and by recognized colleges and technical schools at the end of the sophomore or junior years in the scientific courses, and the scope of the subjects is that covered by the following or any other recognized text-books of an equivalent standard, viz.:

For advanced mathematics—

Differential Calculus. McMahon and Snyder.  
Integral Calculus. D. A. Murray.  
Analytical Geometry." Tanner and Allen.

For advanced electricity—

Elements of Electrical Engineering (Vol. I.). Franklin and Estey.

For advanced mechanics—

International Library of Technology, covering the subjects of steam engines, steam boilers, gas engine management, carburetters, electric ignition, and gas-producers.

It is assumed that the applicant has specialized upon one and not all of the advanced subjects, and immediately upon reporting to the board for examination he will indicate in writing which one of the advanced subjects he desires to be examined upon. After having once indicated the subject, no change to another subject will be allowed.

In marking the examination papers, the following relative weights will be given to the subjects enumerated in this paragraph: elementary electricity, 2; elementary mechanics, 2; elementary chemistry, 2; advanced mathematics, electricity, or mechanics, 10; the Constitution of the United States and international law, 3.

Candidates who pass satisfactorily the preliminary examination described, and those who are exempted from this preliminary examination, will be graded in order of merit upon the results of the competitive mental examination described. From those so graded who pass satisfactorily the competitive mental examination, a sufficient number of candidates to fill the available vacancies will be selected.

## CHAPTER V.

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### APPOINTMENTS TO THE PORTO RICO REGIMENT OF INFANTRY.

BOARDS FOR THE EXAMINATION OF APPLICANTS.—QUALIFICATIONS FOR APPOINTMENT.—APPLICATIONS FOR EXAMINATION.—PHYSICAL EXAMINATION.—MORAL AND MENTAL EXAMINATION.—EXAMINATION FOR PROMOTION IN THE PORTO RICO REGIMENT.—FORM FOR INDIVIDUAL RECORD OF CANDIDATE.

The Porto Rico Regiment of Infantry forms a part of the Regular Army. It consists of two battalions of four companies each. The field officers consist of one lieutenant-colonel and two majors, who are detailed from officers of the Army not below the rank of captain. The detail is for four years.

The officers of the Porto Rico Regiment have the same rank, pay, and allowances as officers of the same grade in the Regular Army, except with regard to promotion, which is made by seniority within the regiment.

The strength of the regiment is as follows:

#### *Enlisted Men.*

Eight companies (organized as provided for infantry) of 65 men each.....	520
Regimental and battalion non-commissioned staff.....	7
Regimental band (organized as provided for infantry).....	28
Total enlisted.....	555

*Commissioned Officers.*

Captains .....	11
First lieutenants .....	10
Second lieutenants.....	10
Chaplains .....	1
	<hr/>
Total commissioned.....	32
Aggregate .....	587

The following regulations governing the examination of candidates for appointment as second lieutenants, and of lieutenants for promotion in the Porto Rico Regiment of Infantry, having been approved by the President, is published by the War Department for the information and guidance of all concerned. The Act of Congress, approved May 27, 1908, provides that vacancies in the grade of second lieutenant may be filled by the President in his discretion by the appointment of citizens of Porto Rico, whose qualifications for commissions shall be established by examination:

## BOARDS FOR THE EXAMINATION OF APPLICANTS.

Boards for the examination of applicants for appointment to the position of second lieutenant in the Porto Rico Regiment of Infantry will be appointed by the Secretary of War and will consist of five commissioned officers, including two medical officers. The duties of the medical officers will be confined to examining into and reporting upon the physical qualifications of the candidates.

## QUALIFICATIONS FOR APPOINTMENT.

Citizens of Porto Rico, including enlisted men of the Porto Rico Regiment of Infantry, who on the first day of the examination are not less than twenty-one nor more than twenty-seven years of age and who are physically sound and of good moral character, are eligible for examination, but no person will be examined by the board unless he has a letter from the War Department authorizing the same.



## APPLICATIONS FOR EXAMINATION.

Application for authority to appear before the examining board should be made in writing to the commanding officer, Porto Rico Regiment of Infantry, who will forward the same to the Adjutant General of the Army, indorsing thereon his opinion as to whether or not the applicant fulfills each of the conditions required in the preceding paragraph, and will add his remarks as to the aptitude of the applicant for the position sought. Each application will be accompanied by the "Form for Individual Record of Candidate," filled out and sworn to as indicated, and by evidence from reputable persons as to the age, citizenship, and moral character of the applicant. These papers will be referred to the board before which the applicant is authorized to appear.

## PHYSICAL EXAMINATION.

Each applicant will first be subjected to a rigid physical examination, and any applicant who fails to pass it will be rejected by the board; but, should he so desire, he will be permitted to undergo the mental examination with the distinct understanding that such examination will not confer upon him any right to appointment should his physical disability finally be regarded as disqualifying.

Examination as to physical qualification will conform to the standard required of recruits, except that any applicant who is under 5 feet 3 inches in height, or whose degree of vision is less than 20—40 in either eye, or who is color-blind for red, green, or violet, will be rejected.

The physical examination will be made complete in each case, even though a deficiency be discovered, so as to ascertain whether any other defects exist. It is highly desirable that when a candidate is rejected for any physical cause the cause of rejection should be so clearly established as to be conclusive of the reasonableness

and propriety of the rejection, and in cases where physical fitness appears doubtful the board should require the production of such testimony as to the medical history of the candidate and of his family as may be obtainable.

A certificate of physical examination by the medical officers of the board will accompany the proceedings of the board in each case.

#### MORAL AND MENTAL EXAMINATION.

The moral character of each applicant found physically qualified, or who desires to undergo the mental examination notwithstanding his physical defects, will then be inquired into, and any applicant who has not borne a good moral character will be rejected and his examination will cease.

Each applicant who has been found qualified morally and is physically, qualified or desires to undergo the mental examination notwithstanding his physical defects, will then be examined mentally in the following subjects, questions being prepared by the board, and answers submitted in writing:

- a. English grammar, including orthography, reading, and writing from oral dictation.
- b. Arithmetic, and ability to apply its rules to all practical questions.
- c. Geography, particularly that of North America.
- d. The outlines of history of the United States.
- e. Constitution of the United States and the organization of the Government under it.
- f. Army Regulations.
- g. Infantry Drill Regulations. Practical only and extending through the Schools of the Soldier, Squad, and Platoon, held in presence of the board.

*h.* Probable efficiency and aptitude as judged by the board from the applicant's knowledge of Army and drill regulations; his record, if any, in the military or civil service of the United States or of Porto Rico, and his conduct and appearance while undergoing examination.

In awarding marks, the board will give to each subject in the examination the relative weight given in the following form. The general average of the candidate will be computed as follows: Mark each question according to its relative weight and reduce the aggregate of marks thus obtained in each subject to a scale of 100. The result will be the percentage of proficiency in the subject. Multiply the percentage in each subject by the number indicating the relative weight of the subject and divide the sum of the products by the sum of the relative weights; the quotient will be the general percentage. No candidate will be passed by the board who shall not have attained at least 65 per cent in each subject of the examination and a general percentage of at least 70.

*Example.*

Subjects.	Percent- age.	Relative Weights.	Products of Multipli- cation by Relative Weights.
<i>a.</i> English grammar.....	70	2	140
<i>b.</i> Arithmetic.....	68	2	136
<i>c.</i> Geography.....	72	2	144
<i>d.</i> United States history.....	65	2	130
<i>e.</i> United States Constitution.....	66	2	132
<i>f.</i> Army Regulations.....	75	3	225
<i>g.</i> Infantry Drill Regulations (prac- tical).....	80	3	240
<i>h.</i> Probable efficiency and aptitude	80	3	240
		19	1,387
General percentage.....	.....	.....	73.00

When the board shall have examined and passed upon all the applicants, it will prepare separate proceedings in each case, and also a tabulated statement showing the order of their relative merit as developed by the examination, and forward the proceedings with all papers pertaining thereto to the Adjutant General of the Army.

#### EXAMINATION FOR PROMOTION IN THE PORTO RICO REGIMENT.

The examination of first and second lieutenants of the Porto Rico Regiment of Infantry for promotion in the regiment will be conducted in the manner prescribed by General Orders, No. 128, War Department, July 12, 1906, as amended by paragraph 3, General Orders, No. 147, War Department, July 8, 1907, for the examination for promotion of first and second lieutenants of infantry, respectively.

#### FORM FOR INDIVIDUAL RECORD OF CANDIDATE.

1. Give the exact date and place of your birth.
2. Are you married or single?
3. Are you a citizen of Porto Rico?
4. What schools have you attended?
5. In what profession or occupation have you been employed?
6. Have you ever served in any military capacity under the United States Government? State organizations and periods of service.
7. Have you ever served in the civil government of Porto Rico or any municipality thereof? State positions held and cause of relinquishing each.

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[Signature, with full name, rank, etc.]

Sworn to and subscribed before me the ..... day of .....,  
A. D. 190.....

## CHAPTER VI.

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### APPOINTMENTS TO THE PHILIPPINE SCOUTS.

EXAMINATION FOR APPOINTMENT.—EXAMINATION FOR PROMOTION OR REAPPOINTMENT.—PROFESSIONAL EXAMINATION OF OFFICERS OF THE PHILIPPINE SCOUTS.—FORM OF INDIVIDUAL RECORD OF CANDIDATE FOR ORIGINAL APPOINTMENT.

The Philippine Scouts form a part of the Army of the United States, but not the Regular Army. The majors are appointed from captains of the line of the Regular Army, and the captains from the first lieutenants of Scouts. The officers are detailed for a period of four years. The lieutenants are selected from enlisted men of the Regular Army, from officers and enlisted men of the Volunteers who served since the beginning of the war with Spain, from civil life, or from natives of the Philippine Islands.

Candidates for appointment to the Scouts are referred to the chapter on the Philippine Constabulary for information about the Philippine Islands.

The commissioned organization consists of 11 majors, 51 captains, 55 first lieutenants, and 63 second lieutenants (1910). The enlisted strength is about 5,500. It is limited by law to 12,000.

The enlisted men are natives and enter for a term of three years. At present, sergeants receive \$15.00, corporals \$9.00, and privates \$7.80 per month.

The Secretary of War is authorized to permit not exceeding four Filipinos, to be designated, one for each class, by the Philippine Commission, to receive instruction at the United States Mili-

tary Academy at West Point. They receive the same pay, allowances, and emoluments as other cadets, and on graduation are eligible to commissions in the Philippine Scouts only. They are required to serve for eight years in the Scouts unless earlier discharged.

#### EXAMINATION FOR APPOINTMENT TO THE SCOUTS.

The rules and regulations for the examinations are issued from the War Department. There have been changes from time to time, but the following, taken from the latest War Department order, is likely to remain the regulations for some time to come:

1. For the purpose of securing a list of persons specially qualified for appointment as second lieutenants of Philippine Scouts, the War Department will convene boards of officers at suitable and convenient Army posts on the 1st day of November of each year for the purpose of examining applicants. These boards will consist of five commissioned officers, including two medical officers whose duties will be confined to examining into and reporting upon the physical qualifications of the candidates.

2. Applicants for appointment must be citizens of the United States or of the Philippine Islands, unmarried, not under twenty-one nor over thirty years of age on the first day of the examination, physically sound, and of good moral character. Enlisted men of the Regular Army, to be eligible for appointment, must have had not less than two years' service.

3. An enlisted man who desires to appear for examination will submit through military channels an application so that it will reach his department commander on or before July 1st of the year in which he desires to take the examination. The application will be accompanied by the "Form for Individual Record of Candidate," filled out and sworn to as indicated. (See Form, end of chapter.)

The company commander, in forwarding such application,

will verify the statement of service as given, and will state specifically whether, in his opinion, the soldier fulfills each of the conditions required by the preceding paragraph, and will add his remarks as to the aptitude of the applicant for the position sought.

The post commander will cause the applicant to be examined by a medical officer as to his physical qualifications, and will forward the report of such examination with the application, adding his remarks as to the aptitude of the applicant for the position sought.

4. An applicant from civil life will submit his application in his own handwriting on or before July 1st of the year in which he wishes to take the examination to the Adjutant General of the Army. The application must set forth that the applicant possesses the qualifications prescribed in paragraph 2 of this chapter, and be accompanied by evidence of reputable persons as to character and fitness, and by a certificate of some reputable physician that he is physically sound.

5. The applications and all papers pertaining thereto, together with such official records of the War Department as relate to the character and qualifications of applicants, will be submitted to the boards before which the respective applicants may be directed or authorized to appear. No person shall be examined unless he has a letter or order from the War Department authorizing his examination.

6. Each candidate will first be subjected to a rigid physical examination, and any candidate who fails to pass it will be rejected by the board; but, should he so desire, he will be permitted to undergo the mental examination. Examinations as to physical qualifications will conform to the standard required of recruits. The physical examination will be made complete in each case, even though a deficiency be discovered, so as to ascertain whether any other defects exist. It is highly desirable that when a candidate is rejected for any physical cause, the cause of rejection should be so

clearly established as to be conclusive of the reasonableness and propriety of rejection. A certificate of physical examination by the medical officers of the board will accompany the proceedings of the board in each case.

The moral character of each candidate found physically qualified, or who desires to undergo the mental examination notwithstanding his physical defects, will then be inquired into, and any candidate who has not borne a good moral character will be rejected and his examination will cease.

Each candidate who has been found qualified physically and morally, or who desires to undergo the mental examination notwithstanding his physical defects, will then be examined mentally in the following subjects, questions being prepared by the board and answers submitted in writing. In the examination of a native of the Philippine Islands the questions will be of such a character as a Filipino of fair education would be expected to know, and if he prefers, the examination may be oral except "writing from dictation."

- a. English grammar, including orthography, reading, and writing from dictation.
- b. In his knowledge of the elementary principles of arithmetic, and ability to solve such problems only as are likely to be useful in the discharge of his duties as a company officer.
- c. Geography of North America and the Philippine Islands.
- d. The outlines of the history of the United States.
- e. Army Regulations.
- f. Infantry Drill Regulations. The examination in drill regulations will be practical, extending through the Schools of the Soldier, Squad, and Platoon, and shall take place in the presence of the board.



- g. Probable efficiency and aptitude as judged by the board from his knowledge of Army and drill regulations; his record, if any, in the military or civil service, and his conduct and appearance while undergoing examination. In determining his aptitude, credit will also be given to him for knowledge of the Spanish language or of any of the dialects spoken in the Philippine Islands, as demonstrated to the board.

7. In awarding marks, the board will give to each subject in the examination the relative weight given in the following form. The general average of the candidate will be computed as follows: Mark each question according to its relative weight and reduce the aggregate of marks thus obtained in each subject to a scale of 100. The result will be the percentage of proficiency in the subject. Multiply the percentage in each subject by the number indicating the relative weight of the subject and divide the sum of the products by the sum of the relative weights; the quotient will be the general average. No candidate will be passed by the board who shall not have attained at least 65 per cent in each subject of the examination and a general average of at least 70 per cent.

*Example.*

Subjects.	Percent- age.	Relative Weights.	Products of Multipli- cation by Relative Weights.
a. English grammar, etc.....	74	2	148
b. Arithmetic.....	68	2	136
c. Geography.....	70	2	140
d. United States history.....	65	2	130
e. Army Regulations.....	80	3	240
f. Infantry Drill Regulations (prac- tical).....	78	3	234
g. Probable efficiency and aptitude	85	4	340
		18	1,368
General average.....			76

8. When the board shall have examined and passed upon all the applicants, it will prepare separate proceedings in each case and forward these with all papers pertaining thereto to the Adjutant General of the Army.

#### EXAMINATION FOR PROMOTION OR REAPPOINTMENT.

9. Once each year, preferably about January 1st, the commanding general, Philippines Division, will, under authority of the War Department, appoint a board of five officers, two of whom shall be medical officers, whose duties will be confined to inquiring into and reporting upon the physical qualifications of the officers to be examined. The three other members will be officers then serving with or who have had service with the Philippine Scouts.

This board will be directed to visit the station of each officer of the Philippine Scouts whose position on the lineal list of his grade renders his promotion probable within the calendar year, or whose provisional appointment will expire within the calendar year. The names and stations of such officers will be communicated to the board by the adjutant general, Philippines Division, and each officer will be directed to report to the president of the board upon its arrival at his station. Commanding officers will furnish the board with facilities for conducting the examination prescribed below.

Each officer indicated above will be examined in the manner prescribed by General Orders, No. 128, War Department, 1906, for the examination of officers of the Regular Army for promotion, with the following exceptions:

Witnesses need not be summoned from a distance, but will be heard if they voluntarily come to the station or live near the station where the board is conducting an examination.

If the number of members is reduced by challenge or otherwise, the board will continue its examination of an officer as long as two members other than the medical officers remain.

The papers referred to in paragraph 15 of General Orders, No. 128, War Department, 1906, will be forwarded to the board by the adjutant general, Philippines Division.

In addition to consideration of written testimony as to an officer's general efficiency, the board will visit the command with which the officer being examined is on duty, and examine into the administration, instruction, and discipline of any troops lately under his command, or investigate the method of discharge of any duty lately rendered as a staff officer, if he have no command.

The quantity of field service had and manner in which such duty has been rendered, and any recommendations by his superiors for distinguished service, will be considered.

The professional examination will be oral and practical, no written examination being conducted. No lists of questions will be furnished the board from the War Department. In reporting the examination of an officer for reappointment, the board will report whether or not in its opinion the officer should be reappointed at the expiration of his provisional appointment or should be discharged, either then or as of an earlier date, in the interest of the Service; and in reporting the examination of an officer whose promotion is not recommended, the board will report whether or not in its opinion the officer should be discharged on the date when the vacancy to which he would otherwise be entitled to be promoted occurs or as of an earlier date. One copy of the proceedings in the case of each officer examined will, after action thereon by the commanding general, Philippines Division, be forwarded to the Adjutant General of the Army.

#### PROFESSIONAL EXAMINATION FOR OFFICERS OF PHILIPPINE SCOUTS.

10. For promotion from second lieutenant to first lieutenant, or for reappointment as second lieutenant:

- a. Administration.
  - (1) Army Regulations and general orders of the War Department and of the Philippines Division, as far as knowledge thereof is essential to the correct discharge of the duties of an officer of Philippine Scouts.
  - (2) Explanation of the methods of conducting company administration and preparation of the necessary reports, returns, and requisitions.
- b. Infantry Drill Regulations.
 

Practical demonstration of the ability of the officer to instruct and command a company of infantry.
- c. Manual of Guard Duty.
 

Duties of the commanding officer, officer of the day, officer of the guard, and various enlisted members of the guard.
- d. Small-Arms Firing Regulations.
 

Sufficiently extended to determine whether the officer is able to instruct a company and to render the necessary reports and make the appropriate entries on muster-rolls and pay-rolls.
- e. Spanish or any dialect spoken in the Philippine Islands.
  - (1) A test of the officer's ability to translate at sight, to and from English, a brief letter or newspaper article.
  - (2) His ability to converse and make himself understood in Spanish or the dialect selected by him in lieu thereof.

11. For promotion from first lieutenant to captain, or for re-appointment as captain or first lieutenant.

- a. Administration.
- b. Infantry Drill Regulations.
- c. Manual of Guard Duty.
- d. Small Arms-Firing Regulations.
- e. Field Service Regulations.
 

Sufficiently extended to ascertain if the officer is familiar with the duties of security and information, preparation of field orders, combat action of a company of infantry, reconnaissance, marches, and transfer of troops by rail or water.
- f. Military Law.
  - (1) Manual of courts-martial from beginning to include the chapter on "Inferior Courts-Martial."

} Same as for second lieutenants.

(2) Preparation of charges and specifications and reports of cases tried by summary courts-martial.

g. Spanish, or any dialect spoken in the Philippine Islands. (Same as for second lieutenants.)

12. An officer who is ordered to report for examination for promotion, and who in the preceding year has successfully passed the examination for reappointment herein prescribed, shall be excused from the prescribed mental examination.

13. The examination of officers of Philippine Scouts not being governed by the act of Congress approved October 1, 1890, a failure by any such officer to pass the physical examination prescribed above does not confer a right to retirement, nor does failure to pass the professional examination prescribed above confer a right to re-examination at any future time.

FORM FOR INDIVIDUAL RECORD OF CANDIDATE.

1. Give the exact date and place of your birth.
2. Are you married or single?
3. Are you a citizen of the United States or of the Philippine Islands? If so, state whether native-born or naturalized.
4. What schools have you attended and for what periods? Answer explicitly, giving dates and designations of schools, as public schools, academies, district schools, colleges, manual training schools, night schools, etc. Give also names and present addresses of presidents, superintendents, commanders, principals, professors, or teachers under the supervision of whom you were while attending schools, academies, colleges, etc.
5. In what profession or occupation have you been employed? Answer explicitly, giving time, character of employment, etc.
6. During what time have you supported yourself, totally or partially, by your own labor?
7. Have you ever served in the Volunteers or organized Militia, or as a cadet at the United States Military Academy? Answer explicitly, giving State, arm of Service, rank, etc.

8. State concisely your service in the Regular Army, or in the Philippine Scouts, giving organizations in which you have served and names of officers under whom you have served, with periods of such service (as near as possible) in each case.
9. State the places of your residence since your twelfth birthday, giving dates between which you resided at each place.
10. State the name and present address of each person by whom you were employed since your twelfth birthday, giving in each instance the nature of the employment and dates of its beginning and ending.

-----  
[Signature, with full name, rank, etc.]

Sworn to and subscribed before me the ..... day of.....  
A. D. 190... .

## CHAPTER VII.

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### APPOINTMENT TO THE GRADE OF THIRD LIEUTENANT IN THE PHILIPPINE CONSTABULARY.

#### DUTIES OF CONSTABULARY OFFICERS.

The Constabulary is the armed civil police force of the Government of the Philippine Islands, established and administered under the general supervision of the Governor-General for the purpose of maintaining order, preventing and detecting crime, and enforcing the laws.

It consists of about 325 commissioned officers and 5,000 men. The companies are scattered at different points where needed throughout the entire archipelago. The work required of the officers is of a high character and demands much energy, tact, and ability to be successfully performed.

In addition to the training and instruction of their men, the officers have a great deal of civil and political work of an important character. They must also be prepared to take the field, and their duties in suppressing brigandage involve at times field-work of the greatest difficulty and danger.

The work of Constabulary officers brings them into close contact with the people, and cannot fail to be interesting and instructive.

Upon appointment, officers are assigned for three months to the Constabulary School, which is situated at Baguio, Benguet Province, at an elevation of about 5,000 feet above sea-level, where the climate is at all times cool.

## PAY OF CONSTABULARY OFFICERS.

Salaries paid Constabulary officers, in United States currency, are as follows:

Colonel and Assistant Director.....	\$3,500
Lieutenant-Colonel and Assistant Director.....	2,750
Major, staff duty.....	2,500
Major.....	2,000
Captain.....	\$1,600 and 1,800
First Lieutenant.....	1,400
Second Lieutenant.....	1,200
Third Lieutenant.....	1,100

Officers are, in addition, furnished quarters or given an allowance for same.

Officers who qualify in speaking and reading one of the native Filipino dialects, or in speaking the Moro dialect and reading it from Arabic characters, are allowed \$50 per year extra compensation. Officers are also allowed 10 per cent additional to their salary for each five years' service, provided that the increase under this head does not exceed 40 per cent.

## COST OF LIVING.

In Manila the cost is determined largely by the manner of living. Living in families or in messes costs from \$30.00 to \$40.00 per month. The cost of living in the provinces is generally less than in Manila. The uniforms for Constabulary officers are made of light khaki cloth for service and white duck or drill for dress wear, the same materials that are used by the Regular Army in the tropics. Such clothing is very cheap in Manila and is made to order for about \$6.00 per suit. Arms, except swords, are supplied by the Government. A full outfit of uniforms, hats, caps, leggings, puttees, etc., may be obtained in Manila for about \$85.00. A considerable quantity of very light-weight underclothing should be brought by those coming from America.



## APPOINTMENTS, LEAVES OF ABSENCE, ETC.

Appointments are made to the grade of third lieutenant as vacancies occur. All appointees must agree to serve at least three years. Examinations of applicants are held at present in the Philippine Islands only, and appointments in the United States are made only from among young men who are graduates of colleges and universities, who are admitted without examination upon recommendation of the faculty, and on application to the Chief of the Bureau of Insular Affairs, War Department, Washington, D. C.

The manner in which promotions are made in the Constabulary renders it possible for successful men to go up otherwise than by seniority.

All promotions to the grade of captain and the grades above are made by selecting officers of the grade next below the one to which appointment is made, who, by the character of their work, have demonstrated their superior fitness for the responsibilities and duties of the Constabulary. Promotions in the lower grades are made usually, two by seniority and one by selection.

The laws of the Philippine Government allow a vacation leave with full pay of twenty-eight days annually. In addition to the vacation leave, an employee of the Philippine Government who has served at least two years is allowed leave from thirty to thirty-five days a year, depending upon the salary he receives, to visit the United States. This leave may be allowed to accrue for five years so as to obtain a longer leave to visit the United States. In such case, full pay is allowed and an additional two months on half-pay given as travel-time for going and returning. A person in the United States appointed for service in the Philippines may pay his traveling expenses to Manila, or they may be paid by the Chief of the Bureau of Insular Affairs, War Department, Washington, D. C. Half-salary is allowed from the time of embarkation and full pay from the day following the date of arrival in the Islands. This half-

salary during transit is retained and paid after the expiration of two years' satisfactory service in the Islands. The actual and necessary traveling expenses are refunded at the expiration of two years if the employee comes by the route and steamer directed, and pays his own expenses out, being careful to keep receipts therefor.

#### CLIMATE.

There is continuous warm weather in the Philippine Islands, but the heat is not intense, and the general health of Americans who take reasonable care of themselves is good. During the greater part of the year Americans suffer less from the heat than during the summer months in many parts of the United States. From April to July is the hottest period; from July to October there are frequent rains which cool the atmosphere, and from November to April the weather is, as a rule, clear and pleasant. The nights during this period are cool—in fact, the nights are generally pleasant during the entire year, with the exception, possibly, of two or three months.

#### EXAMINATIONS AND APPOINTMENTS IN THE CONSTABULARY.

##### TIME AND PLACE.

The dates and places for holding examinations will be announced from time to time by the Director of Constabulary.

##### QUALIFICATIONS.

1. No person will be appointed who is under 21 or over 33 years of age; who is not a citizen of the United States, or who is not a native of the Philippine Islands, or a person who has, under and by virtue of the Treaty of Paris, acquired the rights of a native of the Philippine Islands; who is not physically qualified to discharge all the duties of an officer in active service; who has any

deformity of the body, or mental infirmity; or whose moral habits are not good.

2. A candidate who has been graduated at a regularly incorporated college or university may be appointed without mental examination on presentation of a diploma, together with a recommendation of the faculty of the institution, and with full and satisfactory evidence as to mental capacity, moral character, personal habits, and occupation since graduation.

3. Every candidate appearing will be subjected to a rigid physical examination, which will conform to the standard required for officers of the United States Army; applicants for appointment from the United States must include in their papers a certificate of physical examination by a physician, which will embrace the information required by the form for the examination of recruits.

4. All applicants except those specified in paragraph 2 above will be examined as outlined herein. No candidate will be examined unless he has the authority of the Director of Constabulary to appear for examination; and in the case of a soldier in the United States Army, the authority of the Division Commander.

5. The examination of candidates will include the following subjects and will be written under the first five sub-heads:

- (1) Grammar, including spelling and writing from oral dictation.
- (2) Arithmetic, including the application of its rules to all practical questions.
- (3) Geography, with reference to the general geography of the world—the principal physical and political divisions of the earth's surface.
- (4) History, including the elements and outlines of general history, and particularly the history of the United States.

- (5) Constitutional law, including the elements of the Constitution of the United States and the main principles upon which the Government under it is organized.
- (6) Examination will be made also as to the general qualifications of each applicant, including aptitude and probable efficiency as an officer of the Constabulary. The military record of an applicant who is or has been a soldier, as certified to by his company and post commanders, will be considered under this sub-head. In the case of an applicant who is or has been recently a soldier in the Army, a portion of the examination under this sub-head will be a practical test in the drill regulations of the arm in which he has served and oral questions in the main principles of the Army administration and discipline.
- (7) Physical aptitude, as determined by medical examination or other evidence submitted.
- (8) Careful inquiry will be made concerning the antecedents, personal habits, and moral character of each applicant, who must submit evidence from reputable persons. Candidates will not be graded under this head, but those whose habits or associations are not up to the standard, or who are addicted to the use of intoxicants, will be reported as not suitable for appointment.

6. In awarding marks, the relative weights will be given to each subject as in the form below. The general average of a candidate will be computed as follows: Each question will be marked according to its relative weight, and the aggregate marks thus obtained in each subject reduced to a scale of 100; the result will give the average proficiency in the subject. The average in each subject will be multiplied by the number indicating the relative weight of the subject and the sum of the products divided by the sum of the relative weights; the quotient will be the general average. No candidate will be passed who shall not have obtained an average of 65 per cent in each subject and a general average of at least 70 per cent.

Example.

No.	Subjects.	Aver- ages.	Relative Weights.	Products of Multipli- cation by Relative Weights.
1	English grammer.....	82	3	246
2	Mathematics.....	76	4	304
3	Geography.....	80	2	160
4	History.....	73	3	219
5	Constitutional law.....	65	2	130
6	Aptitude and probable efficiency.....	80	5	400
7	Physique.....	87	3	261
	Total.....		22	1,720
	General average.....			75.17

7. Where several candidates are examined, the order of relative merit of all will be reported. Candidates who pass the examination and are recommended for appointment will be placed upon an eligible list, and will be appointed as vacancies occur should there not be sufficient vacancies at the time.

RULES FOR EXAMINATION.

1. Many competitors fail to pass an examination not through lack of knowledge, but owing to haste and carelessness in reading and interpreting questions and in writing answers. The time allowed for each examination is amply sufficient for competitors to complete it by using a reasonable degree of intelligence and application to work, and it cannot be extended in individual cases, as, for instance, where a competitor devotes so much time to the work of one subject that he cannot complete the remaining subjects within the prescribed time.

2. Unless otherwise stated, competitors are not limited in time on any sheet, but should gauge their work on each sheet so as to complete all work within the limit prescribed for the entire examination.

3. Competitors are not permitted to leave the room, if possible to avoid it, with a sheet unfinished, and such sheets are taken up and not returned.

4. An examination sheet spoiled cannot be exchanged for another of the same kind.

5. All work on examination sheets is required to be done in ink.

6. Pencil and scratch-paper may be used in preliminary work.

7. The use of blank paper, other than that furnished by the examiner in charge, is not permitted; on completion of an examination sheet, the blank paper pertaining thereto is handed in with it. All work, however, must be on the examination sheet, as the blank paper is collected, not for consideration in the rating, but for destruction.

8. No helps of any kind are allowed. Before the examination is commenced, any written or printed matter that any candidate may have which might, if used, aid in his work must be turned over to the examiner. Making copies of questions or of any portion of the examination for the purpose of taking the same from the room is prohibited.

9. All conversation or communication between competitors during the examination is strictly prohibited.

10. All necessary explanations will be made to the whole class.

11. Copies of examination papers or examination questions must be handed in with the answers and must not be taken from the room.

N. B.—A violation of the instructions may be deemed sufficient cause for canceling papers and for refusal to admit competitors to any other examination. Competitors are requested to report to the examiner any irregularity that may come under their notice during the examination.

## DESCRIPTION OF EXAMINATIONS.

Following are descriptions of some of the examinations which are held. As an aid to applicants in arriving at a proper understanding of the scope of the different examinations, specimen questions and exercises are given. These particular questions and exercises will not, of course, be used in the examination of applicants, but are intended simply to show the degree of difficulty of the subjects in the different examinations.

## GRAMMAR, INCLUDING SPELLING.

[Time allowed, three hours.]

The following are specimen questions and tests in this examination. The words in spelling are dictated by the examiner and required to be written by the competitor in the blank spaces indicated on the first sheet of the examination. The examiner pronounces each word and gives its definition. The competitor is required to write only the words, and not the definition. The words should begin with capital letters.

1. ASYLUM—A charitable institution; as, an asylum' for the deaf.
2. PHILIPPINES—The name of a group of islands.
3. QUALIFY—To become fit; as, to qualify for office.
4. CHANGING—Causing a change; as, changing a schedule.
5. COMPETITION—The act of competing; competition in an examination.
6. PHYSICAL—Relative to physique or nature; as, physical geography.
7. CONCEDE—To give up or surrender; as, to concede a point.
8. COLLECTIBLE—That which may be collected; as, a collectible bill.
9. MINIMUM—The least quantity.
10. REFERENCE—The act of referring; a reference in a letter.

11. COMPARATIVE—Estimated by comparison.
12. ERASE—To rub out.
13. FORFEIT—To surrender; to give up.
14. CIRCUMFERENCE—The line which bounds a circle.
15. IMPERATIVE—That which is urgent; expressing command.
16. PREFERENCE—Having a choice; being preferred.
17. DEFENDANT—A defender; as, the defendant in the action.
18. CITATION—The act of citing or quoting.
19. VILLAIN—A vile person; a knave; a scoundrel.
20. CIVILIZATION—The state of being civilized.

#### DICTATION.

The examiner will read slowly and clearly about fifteen lines of very simple standard prose, which the competitors will be required to write down directly, in ink, on the examination sheet which they are to turn in. This will give a test as to their qualifications in handwriting, punctuation, and the use of capitals

Write the plurals of the following words: (1) Motto; (2) money; (3) belief; (4) axis; (5) man-of-war.

Write the feminine forms of the following: (1) Hero; (2) murderer; (3) emperor.

Write the possessive case of the following: (1) Men; (2) it; (3) boys.

Give the principal parts (present tense, past tense, and past participle) of the following verbs: (1) Chose; (2) fly; (3) sit; (4) freeze.

Correct errors in the following sentences:

1. It was not her that did it.
2. Who do you take him to be?
3. He surely don't expect us to do it.
4. Neither by you nor he was it considered necessary.
5. How do you know when its coming?
6. Two fatal errors underlaid his theory.



7. Except you go with us, I shall stay at home.

8. Are either of those places marked on the map?

Define the following: (1) Personal pronoun; (2) conjunction.

Parse the italicized words in the following sentence:

Other things being equal, it is obvious that the *writer* who has the *most* words *to chose from* is most likely to find in *his* assortment just the word *which* he needs at a given moment.

ARITHMETIC.

[Time allowed, three hours.]

1. This test is one of adding columns of numbers crosswise and lengthwise.

2. Divide 478.82 by 25  $\frac{3}{5}$ , multiply the quotient by  $1,416\frac{3}{4}$ , and from the product subtract  $\frac{3}{4}$  of 1,789.305.

3. A man who inherited a fortune spent one-fourth of it in three months, three-sevenths of the remainder in ten months, when he had only \$7,572 left. How much did he inherit.

4. A farmer sent to his commission merchant 96 tons of hemp and instructed him to sell it and invest the proceeds in farm supplies, deducting his commission for selling the hemp and buying the supplies. He sold the hemp for \$77.00 a ton and deducted 4 per cent as his commission for selling. He then bought farm supplies, deducting 5 per cent of the cost of the supplies for his commission. What was the value of the supplies purchased?

5. On April 7th a merchant desires to obtain \$1,440. For how much must he give his note due September 14th, without interest or days of grace, to obtain the required sum when discounted at a bank at the rate of 9 per cent per annum?

6. Find the greatest common divisor of  $26\frac{1}{4}$ ,  $28\frac{7}{8}$ ,  $29\frac{1}{8}$ .

7. How many men would be required to cultivate a field of  $2\frac{5}{8}$  acres in  $5\frac{1}{2}$  days of 10 hours each if each man completed 77 square yards in 9 hours?

8. Divide \$7.75 among 5 boys and 4 girls, giving each boy three-fourths as much as each girl.

9. If 8 men spend \$32.00 in 15 weeks, how much will 56 men, at the same rate, spend in a year?

10. Simplify:

$$\frac{2\frac{1}{2} - 1\frac{2}{3}}{\frac{2}{5} \times (\frac{3}{4} - \frac{1}{4})} - \frac{2}{3} \times \frac{5}{23}$$

#### GEOGRAPHY.

[Time allowed, two hours.]

1. Name, in order, the political divisions of South America that border on the Pacific Ocean.

2. Name the bodies of water surrounding Europe.

3. Locate the following cities: (a) Vienna; (b) Nanking; (c) Bombay; (d) Sydney.

4. Name the principal mountain ranges crossed in going by rail from New York to San Francisco; state the rail route assumed and States through which it passes.

5. What are the qualifications for a good harbor? Name three good harbors on the Atlantic Coast and one on the Pacific Coast.

6. Where is Thibet?

7. Bound Italy.

8. What waters are traversed in going by steamer from Manila to New York *via* Suez Canal?

9. Bound the State of Iowa.

10. Locate the following islands: (a) Formosa; (b) New Zealand; (c) Borneo; (d) Java.

#### HISTORY.

[Time allowed, two hours.]

1. What were the differential characteristics between the people of the Virginia and Massachusetts Colonies at the beginning of the Revolution?

2. What political parties were formed soon after the election of Washington as President?

3. Tell the story of the annexation of Texas.
4. Give the territorial boundaries of the United States as set forth in the treaty of 1873.
5. Explain the struggle in Congress which led to the passage of the bill called the "Missouri Compromise."
6. Discuss the battle of Gettysburg and its result.
7. Who were the Pilgrims?
8. Where did each of the following events occur?
  - (a) Meeting of the first Colonial Congress.
  - (b) Burgoyne's surrender.
  - (c) Arnold's treason.
9. What was the character of the Spartan people and the nature of their government?
10. What was the nature of the early government of Rome?
11. Who was Augustus Cæsar? What were the principal events in his career?
12. Who was Oliver Cromwell, and what did he establish?
13. When and under what circumstances was the new German Empire founded?

CONSTITUTIONAL LAW.

[Time allowed, two hours.]

1. Into what branches is the Government of the United States divided?
2. Give an outline of the judicial system of the United States.
3. What are the constitutional requirements as to the election of President and Vice-President?
4. Explain what is meant by the veto power of the President.
5. How is the power of the President to appoint Federal, civil, or military officers limited and regulated?
6. What is the term of office of a United States senator? Of a member of Congress?
7. How are United senators chosen? How are members of Congress chosen?

8. How often does Congress meet?
9. Explain what is meant by freedom of speech and of the press.
10. What is meant by religious liberty?
11. What does the Constitution say about impairing the obligation of contracts?
12. What is meant by "due process of law"?

## FORM OF THE PHYSICAL EXAMINATION OF AN APPLICANT.

Name.	To piles?
Age.	To rheumatism?
Birthday.	Do you believe you are sound and well now?
Birthplace.	Is your sense of hearing good?
Occupation.	Have you been ruptured?
Residence.	Do you drink intoxicating liquors? If so, to what extent?
What sickness have you had, and at what age?	Have you had—
Nationality of father.	Sore eyes or any defect of vision?
Residence.	Running from either ear?
Occupation.	Fits? If so, how frequently?
If either parent has died, state cause.	Gonorrhœa, and when?
If brother or sister has died, state cause.	A sore of any kind upon your penis, and when?
Have you found your health or habits to interfere with your success in civil life?	Any swelling about or of your testicles?
Are you subject—	A boil near the anus (fistula)?
To dizziness?	A sprain?
To severe headache?	A stiff joint?
To pain in the breast?	A bone or joint out of place?
To fluttering of the heart?	A bone broken?
To shortness of breath?	Have you been hurt upon the head? (Answer fully.)
To cold in the head?	Are you subject to painful corns or sore feet?
To coughs?	
To diarrhea?	

Mention, carefully, injuries or surgical operations you may have had upon any part of your body, especially burns, cuts, severe bruises, etc.

Give the names and addresses of persons dependent upon you for support.

\_\_\_\_\_,  
*Applicant.*

PHYSICAL EXAMINATION (APPLICANT BEING STRIPPED) TO BE MADE BY  
A MEDICAL EXAMINER.

- |                                |                               |
|--------------------------------|-------------------------------|
| Figure and general appearance. | Mobility.                     |
| Weight.                        | Abdomen and contained organs. |
| Height.                        | Genito-urinary apparatus.     |
| Hearing.                       | Upper extremities.            |
| Chest and contained organs.    | Lower extremities.            |
| Expiration.                    | Skin.                         |
| Inspiration.                   | Remarks.                      |

I certify that I have carefully examined the above-named person and that he has no mental or physical defect disqualifying him for service in the Philippines Constabulary.

Place, \_\_\_\_\_. Date, \_\_\_\_\_.

When stripped, examine carefully the head, ears, eyes (particularly for color-blindness and visual defects due to errors of refraction), nose, mouth (especially teeth, hard palate, and tonsils), neck (especially for enlarged glands). *Chest:* Shape (flat or pigeon-breasted), resonance, character of respiration. *Heart:* Sounds, impulse (position and force), action (as to regularity). Spine, abdomen (especially for hernia and enlarged glands in the groin), genito-urinary apparatus, anus (especially for fistula), upper extremities (especially for enlarged glands at the elbows), lower extremities, and skin.

## CHAPTER VIII.

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### COMMISSIONS IN VOLUNTEER FORCES WHICH MAY HEREAFTER BE ORGANIZED.

ACT OF CONGRESS MAKING PROVISION FOR "ELIGIBLE" LIST.—BOARDS FOR THE EXAMINATION OF APPLICANTS.—QUALIFICATIONS OF APPLICANTS. — APPLICATIONS FOR EXAMINATION. — ORGANIZATION OF EXAMINING BOARDS.—THE EXAMINATION; INFANTRY; CAVALRY; FIELD ARTILLERY; COAST ARTILLERY; ENGINEERS; SIGNAL CORPS; ADJUTANT GENERAL'S DEPARTMENT; INSPECTOR GENERAL'S DEPARTMENT; QUARTERMASTER'S DEPARTMENT; SUBSISTENCE DEPARTMENT; ORDNANCE DEPARTMENT; MEDICAL DEPARTMENT; PAY DEPARTMENT; JUDGE ADVOCATE GENERAL'S DEPARTMENT.

The trying experiences of the authorities during the organization of the Volunteer Army for the Spanish-American War, and for the insurrection in the Philippines, are well known to every person who makes any pretense of knowledge of military matters. A great many appointments to volunteer commissions of officers possessing little, if any, qualifications for the positions sought and secured were, with slight question, forced by irresistible political influences. The system was alike annoying to the authorities possessing the appointive power as well as to those whose endorsements were so eagerly sought, and in many cases, because of political obligations, were difficult to refuse, even though the applicant had few qualifications for the office.

This does not mean to say that no meritorious appointments were made, for there were—in fact, in spite of the system, the se-

lections in by far more than a majority of cases were excellent, and the subsequent events on the field of battle and in the mobilization camps and garrisons developed many excellent soldiers from these selections.

There really was no law on the statute-books that effectually provided for a contingency such as was confronted, and the very best was made of conditions then existing. The law-making branch of the Government learned its lesson from the war, as well as that branch of the executive part of the Government which does the fighting—the Army. Our peace policy and eternal trust in the Guardian Angel had for many years drawn the attention of Congress to matters of commercial welfare of the country from the probabilities of war and the necessary preparation for such an emergency.

The lessons of the war were well taught, and the scholars were very apt, and no sooner had the peace protocol been signed than drafts of bills looking to the reorganization of our military forces, and systems and methods for future organization of armies, were presented for enactment to our national Congress.

The result was, and is, a better Army, a better Navy, a better National Guard (organized Militia), and a tangible system for the organization of future volunteer armies. An act of Congress, approved January 21, 1903, entitled "An Act to Promote the Efficiency of the Militia, and for Other Purposes," contains the following section, which forms the basis of securing an eligible list for the officering of any volunteer force or forces which may hereafter be called into the service of the United States:

ACT OF CONGRESS MAKING PROVISIONS  
FOR ELIGIBLE LIST.

“SECTION 23. That, for the purpose of securing a list of persons specially qualified to hold commissions in any volunteer force which may hereafter be called for and organized under the authority of Congress, other than a force composed of organized Militia, the Secretary of War is authorized, from time to time, to convene boards of officers at suitable and convenient Army posts in different parts of the United States, who shall examine as to their qualifications for the command of troops or for the performance of staff duties all applicants who shall have served in the Regular Army of the United States, in any of the volunteer forces of the United States, or in the organized Militia of any State or Territory or District of Columbia, or who, being a citizen of the United States, shall have attended or pursued a regular course of instruction in any military school or college of the United States Army, or shall have graduated from any educational institution to which an officer of the Army or Navy has been detailed as superintendent or professor pursuant to law after having creditably pursued the course of military instruction therein provided. Such examinations shall be under rules and regulations prescribed by the Secretary of War, and shall be especially directed to ascertain the practical capacity of the applicant. The record of previous service of the applicant shall be considered as a part of the examination. Upon the conclusion of each examination, the board shall certify to the War Department its judgment as to the fitness of the applicant, stating the office, if any, which it deems him qualified to fill, and, upon approval by the President, the names of the persons certified to be qualified shall be inscribed in a register to be kept in the War Department for that purpose. The persons so certified and registered shall, subject to a physical examination at the time, constitute an eligible class for commissions pursuant to such certificates in any volunteer force hereafter called for and organized under the authority of Congress, other than a force composed of organized Militia, and the President may authorize persons from this class, to attend and pursue a regular course of study at any military school or college of the United States other than the Military Academy at West Point and to receive from the annual appropriation for the support of the Army the same allowances and commutations as provided in this act for officers of



the organized Militia: *Provided*, That no person shall be entitled to receive a commission as a second lieutenant after he shall have passed the age of thirty; as first lieutenant after he shall have passed the age of thirty-five; as captain after he shall have passed the age of forty; as major after he shall have passed the age of forty-five; as lieutenant-colonel after he shall have passed the age of fifty; or as colonel after he shall have passed the age of fifty-five: *And provided further*, That such appointments shall be distributed proportionately, as near as may be, among the various States contributing such volunteer force: *And provided*, That the appointments in this section provided for shall not be deemed to include appointments to any office in any company, troop, battery, battalion, or regiment of the organized Militia which volunteers as a body or the officers of which are appointed by the governor of a State or Territory."

#### BOARDS FOR THE EXAMINATION OF APPLICANTS.

Boards for the examination of applicants for commissions in volunteer forces will be appointed by the Secretary of War, and will consist of five commissioned officers of the Regular Army of the United States, including two medical officers and a recorder. The duties of the medical officers will be confined to inquiry into and report upon the physical condition of the applicants.

In the case of applications for examination as to fitness for commission as *medical officers* of Volunteers, the board shall consist of three medical officers of the Regular Army, the junior acting as recorder.

The proceedings of the boards will be forwarded to the Adjutant General of the Army.

#### QUALIFICATIONS OF APPLICANTS.

No applicant will be examined who is not a citizen of the United States or has not declared his intention to become such; who, in the judgment of the board, is not physically qualified to discharge all the duties of an officer in active service; who has any

mental infirmity or deformity of body, or whose moral fitness has not been clearly established; who shall be less than twenty-one years of age, or who, being an applicant for commission as second lieutenant, shall be more than thirty, as first lieutenant more than thirty-five, as captain more than forty, as major more than forty-five, as lieutenant-colonel more than fifty, or as colonel more than fifty-five years of age.

#### APPLICATIONS FOR EXAMINATION.

No person shall be examined unless he has a letter from the War Department authorizing his examination.

If an applicant has served in the Regular Army of the United States, or in any of the volunt er forces of the United States, or in the organized Militia of any State or Territory or the District of Columbia, he shall submit his discharge papers for each term of service; if still in service in any of the organizations mentioned, he shall submit recommendations of his immediate and higher commanders.

If an applicant has attended or pursued a regular course of instruction in any military school or college of the United States Army, or has graduated from any educational institution to which an officer of the Army or Navy has been detailed as superintendent or professor pursuant to law, he shall be required to present the diploma or certificate of graduation from such military school, college, or educational institution.

Applications for examination, accompanied by recommendations and other documents of a commendatory character as above indicated, should be made to the adjutant general of the State, Territory, or District of Columbia, according to the legal residence of the applicant, in the month of May or November, to the end that the governor of the State or Territory, or the commanding general of the National Guard of the District of Columbia, may forward the

accumulated applications, with his recommendations in each case indorsed thereon, to the Adjutant General of the Army about January 1st and July 1st of each year: *Provided*, That persons who have served in the Regular Army or Navy of the United States, or in the United States Volunteers, shall be authorized to send their applications and the papers therewith direct to the Adjutant General of the Army.

#### ORGANIZATION OF EXAMINING BOARDS.

The organization of the boards shall conform to that of retiring boards, the recorder swearing the several members, including the medical officers, faithfully and impartially to examine and report upon the applicant about to be examined, and the president of the board then swearing the recorder to the faithful performance of his duty. Separate proceedings shall be made for each case.

Medical officers shall not take part in the professional examination except on boards composed exclusively of medical officers. They shall make the necessary physical examination of all applicants and shall submit to the president of the board their opinions in writing. All questions relating to the physical condition of applicants shall be determined by the full board.

All public proceedings shall be in the presence of the applicant under examination; the conclusions reached and the recommendations entered will be regarded as confidential.

#### THE EXAMINATION.

Every applicant will be subjected to a rigid physical examination, which shall include the ordinary analysis of the urine, and if there be found to exist any cause of disqualification which might in the future impair his efficiency as an officer of Volunteers, he will be rejected. Defects of vision resulting from errors of refraction

which are not excessive, and which may be entirely corrected by glasses, do not disqualify unless they are due to or are accompanied by organic disease. The board will be required to report concerning each applicant whether he is of good moral character and not addicted to the use of intoxicating liquors or drugs. Examination as to physical qualifications will conform to the standard required of recruits for the United States Army, and will include a certificate, to accompany the proceedings of the board, of physical examination by two medical officers, which certificate will embrace all the information required in the form for the examination of recruits.

Before proceeding with the physical examination, the applicant about to be examined shall be required to submit, for the information of the board, a certificate as to his physical condition. In case no cause for disqualification exists, the certificate shall take the following form:

"I certify that, to the best of my knowledge and belief, I am not affected with any form of disease or disability which would interfere with the performance of the duties under the commission for which I am undergoing examination."

When the board finds an applicant physically incapacitated for service, it shall conclude the examination by finding and reporting the cause which, in its judgment, has produced the disability.

Whenever, for any cause, the board finds an applicant disqualified for commission, the record shall contain a full statement of the case.

When the board finds an applicant qualified for commission, the fact shall be stated in the following form:

"The board is of the opinion that ..... has the physical, moral, and professional qualifications to perform efficiently all the duties of \* ....., and recommends that he be commissioned as such in the Volunteers."

\*Here insert the grade and arm of the Service, or staff corps, or department, for a commission in which the applicant is recommended.

Examinations in all subjects shall be oral or practical, or both, with the exceptions hereinafter mentioned.

If, at the conclusion of the oral examination in any subject, the board arrives at the definite opinion that the answers do not indicate a degree of proficiency up to the required standard, the applicant shall, as soon as practicable, be informed of the decision of the board and of his privilege to undergo a written examination in that subject; and in case the applicant then signifies his desire to be examined in writing, the board shall prepare a set of questions and proceed with a written examination of the applicant in that subject in the manner hereinafter specified.

The examinations shall be sufficiently comprehensive in scope to test properly the applicant's knowledge of the whole subject; in case of written examinations, the questions and answers shall be attached to the proceedings.

*The examination shall be especially directed to ascertain the practical capacity of the applicant, and the record of previous service of the applicant shall be considered as a part of the examination.*

During oral and practical examinations all the members excepting the medical officers shall be present.

Written examinations may be conducted in the presence of one member of the board, for which purpose the board may be divided into committees, before whom the examination shall be conducted from day to day until completed; after which the board shall reassemble to consider its finding.

Papers should be given out so that everything in the hands of the applicant may be answered before a recess or adjournment. A statement showing that such was the procedure during the written examinations shall be embodied in the record. In the oral and practical examinations, the examining board shall give a numerical value to each head under which questions are asked or exercises given. In written examinations the board shall give a numerical

weight (to be previously entered on the margin) to each question, and in like manner shall subsequently enter the estimated weight of each answer. In all cases, for convenience in calculating percentages, the weights of the questions must be such as to aggregate 100 or some simple multiple thereof in each oral, written, or practical examination in each subject.

Boards are authorized to ask any questions selected from the publications recommended for study. Where blackboard or other illustrations will facilitate the examinations, their use is authorized. Examinations will be conducted in a sufficiently exhaustive manner to determine not only that the subject is thoroughly comprehended, but also to determine the degree of proficiency of the applicant being examined, and until the board is positively satisfied as to his ability to impart instruction in the various subjects.

In case of unpropitious weather, practical examinations will be postponed from day to day, but never omitted or materially curtailed.

In case of failure in the practical examination in any subject, the board will at once proceed with a second practical examination of sufficient scope to test properly the applicant's efficiency. If successful upon this second examination, the record shall show that he had two practical examinations. In case of failure, an outline of the exercises given and the percentages attained in both practical examinations will be attached to the record.

Commanding officers of posts at or in the vicinity of which boards may be appointed to meet shall, without further instructions, furnish, upon request, such available troops and material as may be required by boards in the execution of this order.

At the conclusion of a written examination, the applicant shall be called upon to sign and submit a certificate in his own handwriting to the effect that he has not received assistance from any unauthorized sources.

The board shall report in each subject the percentage attained in all the examinations, whether oral, written, or practical, and will also report the general average of all the subjects. The procedure will be as follows: In each subject, mark each question on the basis of its weight. Add up the marks and reduce the total to a basis of 100. Then, to determine the general average, assign to each subject the relative weight stated below:

Grammar, etc.....	3
Arithmetic.....	3
Geography.....	2
History.....	2
Administration.....	3
Drill Regulations.....	4
Small-Arms Firing Regulations.....	1
Field Service Regulations.....	2
Manual of Guard Duty.....	3
Revised Statutes, etc.....	3
Military law.....	3
International law.....	3
Hippology.....	2
Topography.....	1
Explosives.....	2
Electricity (for Coast Artillery).....	4
Mechanical and electrical engineering.....	3
Field fortifications, mines, demolitions, and explosives.....	3
Military bridges.....	2
Practical electricity (for engineer officers).....	2
Surveying.....	2
Field artillery material.....	3
Reconnaissance.....	3
Roads.....	2
Railroads.....	2
Animal transportation.....	2
Practice of medicine.....	4
Surgery.....	4
Military sanitation.....	4
Construction, including foundations, building materials, and plant.....	2
Duties of engineer officers and troops in war.....	3

Duties of ordnance officers.....	3
Mechanics of engineering.....	2
Transportation (Quartermaster's Department).....	2
Office administration (Subsistence Department).....	2
Bookkeeping (Pay Department).....	1
Signaling.....	2
Telegraphy and telephony.....	3
Construction and installation, engines, etc. (for field officers of Signal Corps).....	2
Minor tactics.....	2
Practical efficiency.....	6

No weights will be assigned to moral character or physical condition; they will be reported simply as "satisfactory" or "unsatisfactory."

Multiply the percentage in each subject by the relative weight as above given; then divide the sum of the products by the sum of the weights. This will give the general average. The method is elucidated in the following:

*Example.*

No.	Subjects.	Percent- ages.	Relative Weights.	Products.
ELEMENTARY EXAMINATION.				
1	Grammar, etc.....	80	3	240
2	Arithmetic.....	77	3	231
3	Geography.....	76	2	152
4	History.....	81	2	162
PROFESSIONAL EXAMINATION.				
5	Administration.....	70	3	210
6	Drill Regulations.....	72	4	288
7	Field Service Regulations.....	71	2	142
8	Small-Arms Firing Regulations..	68	1	68
9	Manual of Guard Duty.....	83	3	249
10	Military law.....	90	3	270
11	Topography.....	75	1	75
		.....	27	2,087
	General average.....	.....	.....	77.32



No applicant shall be passed who fails to receive a general average of 70 per cent or more, or who receives less than 65 per cent in any subject, be the examination oral, written, or practical.

The numerous questions which may be formulated by the board admit of considerable variation, and make it possible to arrange examinations radically different as regards particular questions, but essentially the same in respect to scope and character. It is desirable that the questions be selected indiscriminately in each case, to the end that each applicant undergoing examination may have a different arrangement of questions, even when simultaneous examinations of a similar character are being conducted.

Such of the following publications as are applicable are recommended for study by persons preparing for examination:

- Army Regulations.
- Drill Regulations.
- Small-Arms Firing Regulations.
- Manual of Guard Duty.
- Manual for Courts-Martial.
- Field Service Regulations.
- Artillery Circulars.
- General Orders and Circulars.
- Manuals of the Staff Departments.
- Horses, Saddles, and Bridles. Carter.
- Professional Papers No. 29, Corps of Engineers, Engineer Field Manual. Leach.
- Organization and Tactics. Wagner.
- A Treatise on the Military Law of the United States. Davis.
- General Orders, No. 100, Adjutant General's Office, 1863.
- Circular, No. 65, War Department, 1907.
- Topographical Surveying and Sketching. Rees.
- Instruction pamphlets issued by the Ordnance Department bearing on coast artillery material.
- Ordnance and Gunnery. Lissak.
- Artillery Notes.
- Military Explosives. Weaver.
- Manual of Field Engineering. Beach.

- Elements of Electrical Engineering (D. C.). Franklin and Estey.  
 Internal Combustion Engines. Carpenter and Deidrichs.  
 Power and Power-Transmission. Kerr.  
 Armor and Ships. *Journal United States Artillery*.  
 Theory and Practice of Surveying. Johnson.  
 The Storage Battery. Treadwell.  
 Lessons in Practical Electricity. Swoope.  
 United States Signal Corps publications.  
 United States Torpedo Manual.  
 Article on Coast Defense. *Journal of the United States Artillery*, November and December, 1904.  
 International Law. Davis.  
 General Orders, Nos. 4 and 52, Adjutant General's Office, 1902.  
 The Service of Security and Information. Wagner.  
 Instruction pamphlets issued by the Ordnance Department bearing on field artillery material.  
 Revised Statutes of the United States and Acts of Congress.

An applicant presenting a diploma from any of the military schools of the United States Army or from the United States Naval Academy shall be excused, if he so desire, from examination in the subjects covered by said diploma, his mark in said subjects being rated at 75 per cent of the maximum.

All applicants, except for positions as company officers of infantry or coast artillery, will be required to undergo a practical and oral examination in *equitation* and in equipment of saddle-horses, the scope of which will be sufficient to decide upon their ability to accompany a mounted command on ordinary marches, to perform the duties of mounted staff officers, to carry dispatches in the field, and to saddle, unsaddle, and care for a horse in emergencies. This examination will ordinarily be held in connection with the practical examination in drill regulations.

The board, being satisfied as to the moral and physical qualifications of the applicant, will proceed with the mental examination, which will consist of two parts, (1) the elementary examination,

and (2) the professional examination. In the elementary examination the board will examine the applicant—

1. In his knowledge of English grammar and his ability to read, write, and spell with facility and correctness.
2. In his knowledge of arithmetic and his ability to apply its rules to practical questions.
3. In his knowledge of geography, particularly in reference to North America.
4. In his knowledge of the history of the United States.

*This elementary examination may be waived by the board in case the applicant produces a diploma or certificate of graduation from some educational institution of good repute, or when the board is satisfied from the record of the applicant or other circumstances that he has been sufficiently educated in the subjects mentioned; these modifications in regard to the elementary examination are of special importance in the cases of applicants over forty years of age.*

When the applicant desires that the elementary examination be waived, and the board after deliberation decides to omit it, the mark assigned to each of the four subjects thereof shall be 70 per cent of the maximum.

In the professional examination the subjects will vary with the nature of the position sought by the applicant, as follows:

## INFANTRY.

FOR CAPTAINS, FIRST LIEUTENANTS, AND SECOND LIEUTENANTS. °

*Administration* (oral).—Army Regulations and important general orders, in the discretion of the board, special attention being paid to Articles I.—XXIII., inclusive; XXIX.—XXXIII., inclusive; and Articles XL., XLI., LIV., LVI., and LXI.

*Drill Regulations* (practical).—School of the Soldier; School of the Squad; and School of the Company.

*Field Service Regulations* (oral).—Service of Information; Service of Security; marches; shelter.

*Small-Arms Firing Regulations* (oral).—Theoretical principles; estimating distances.

*Manual of Guard Duty* (oral).—Entire book.

*Military Law* (oral).—Manual of Courts-Martial (official.)

*Topography* (practical).—Making of a topographical map; map-reading.

#### FOR FIELD OFFICERS.

The examination of applicants for positions as field officers of infantry will be the same as that prescribed for company officers, adding thereto:

*Drill Regulations* (practical and oral).—School of the Battalion; evolutions of the regiment; and ceremonies.

*Field Service Regulations* (oral).—Entire text.

*Military Law* (oral).—The law of war; civil functions and relations of the military; instructions for the government of armies of the United States in the field (General Orders, No. 100, A. G. O., 1863; General Orders, Nos. 4 and 52, A. G. O., 1902, and Circular No. 65, W. D., 1907.

#### CAVALRY.

##### FOR CAPTAINS, FIRST LIEUTENANTS, AND SECOND LIEUTENANTS.

*Administration* (oral).—Same as for infantry.

*Drill Regulations* (practical).—School of the Soldier, School of of the Trooper; the troop.

\* *Field Service Regulations, Small-Arms Firing Regulations, Manual of Guard Duty, Military Law, and Topography*.—Same as for infantry.

*Hippology* (oral).—The cavalry horse: nomenclature; conformation; examination for soundness; age of horses; endurance of horses. Bits, biting, and training; saddles; seats; transportation of horses; the horse's foot; stable management; forage.

FOR FIELD OFFICERS.

The examination will be the same as for troop officers, adding thereto:

*Drill Regulations* (practical and oral).—The squadron, including extended order; the regiment, including extended order; employment of cavalry.

*Field Service Regulations and Military Law* (oral).—Same as for field officers of infantry.

FIELD ARTILLERY.

FOR CAPTAINS, FIRST LIEUTENANTS, AND SECOND LIEUTENANTS.

*Administration* (oral).—Same as for infantry.

*Field Artillery Drill Regulations* (practical and oral).—The soldier, dismounted; the battery, dismounted; the cannoneer; the gun squad; the firing battery; preparation and conduct of fire; the soldier, mounted; the gun squad, mounted; the driver; the battery, mounted; service of information and communication; reconnaissance and selection of positions.

*Field Service Regulations, Small-Arms Firing Regulations, Manual of Guard Duty, Military Law, and Topography*.—Same as for infantry.

*Hippology* (oral).—The cavalry horse: nomenclature; conformation; examination for soundness; age of horses; endurance of horses. Bits, biting, and training; saddles; seats; transportation of horses; the horse's foot; stable management; forage.

*Field Artillery Material* (oral and practical).—General description and knowledge of the use of field artillery material and accessories.

FOR FIELD OFFICERS.

The examination will be the same as for battery officers, adding thereto:

*Field Service Regulations and Military Law* (oral).—Same as for field officers of infantry.

*Field Artillery Drill Regulations* (oral and practical).—Entire text.

### COAST ARTILLERY CORPS.

#### FOR FIRST LIEUTENANTS AND SECOND LIEUTENANTS.

1. *Administration* (oral).—Same as for infantry.
2. *Drill Regulations* (oral and practical):
  - (a) Coast Artillery Drill Regulations so far as relates to the formation of the company and marching maneuvers and the drill for one piece, to be selected by the candidate; the current instruction order for the Coast Artillery Corps.
  - (b) Infantry Drill Regulations, to include the School of the Company.
3. *Field Service Regulations, Manual of Guard Duty, Military Law, and Topography*.—Same as for infantry.
4. *Explosives* (oral), including primers and fuses.
5. *Electricity* (oral), to include theoretical electricity, basis of electrical measurements, including units; Ohm's law, including its application to shunts; electro-magnetism and induced currents; methods of measurement of voltage; current, electrical energy and resistance, of apparatus therefor; primary cells; general principles of storage batteries, generators, and motors.

#### CAPTAINS.

The subjects for captains are the same as for lieutenants and in addition thereto:

1. *Elementary Mechanical and Electrical Engineering* (oral and practical), to include elementary and applied mechanics; care and operation of steam boilers, steam engines, and internal combustion engines; theory, care, and operation of dynamos, motors, storage batteries, telephones, and searchlights.
2. *Coast Artillery Drill Regulations* (oral and practical).—Fire and mine command.
3. *Ceremonies of Infantry Drill Regulations*.

FIELD OFFICERS.

For Field Officers, Coast Artillery Corps, the subjects are the same as for captains, and in addition thereto:

1. *Coast Artillery Drill Regulations* (oral and practical).—Entire text.
2. *Infantry Drill Regulations* (oral and practical).—School of the Battalion.
3. *Military Law and Field Service Regulations*.—Same as for field officers of infantry.

ENGINEERS.

Applicants for positions as volunteer engineer officers must produce a *diploma* from a reputable technical institution in which engineering and surveying formed part of the course of the graduate. The examination will be in the discretion of the board. Much importance will be attached to the professional experience of the applicant, especially in the grades above first lieutenant.

FOR CAPTAINS, FIRST LIEUTENANTS, AND SECOND LIEUTENANTS.

*Administration, Drill Regulations, Field Service Regulations, Small-Arms Firing Regulations, Manual of Guard Duty, Military Law*.—Same as for company officers of infantry.

They will also be required to undergo an oral examination sufficient to indicate good elementary knowledge of the following subjects:

1. Reconnaissance.
2. Military bridges.
3. Roads.
4. Railroads.
5. Field fortifications, including mines, demolitions, and explosives.
6. Animal transportation.

7. Practical electricity.
8. Surveying.
9. Construction, including foundations, building materials, and plant.

Subjects 1 to 6, inclusive, are covered in Engineer Field Manual (Leach), being Professional Papers No. 29, Corps of Engineers.

#### FOR FIELD OFFICERS.

Same as for field officers of infantry, adding thereto the professional examination above stated for company officers of engineers. The applicant will also be examined orally in the following subjects:

1. Duties of engineer officers and troops in war.
2. Mechanics of engineering.

#### SIGNAL CORPS.

##### FOR CAPTAINS AND LIEUTENANTS.

*Administration* (oral).—Army Regulations: Same as for company officers of infantry. Also regulations pertaining specially to the Signal Corps; laws relating to Signal Corps.

*Signaling* (oral and practical).—Theoretical and practical knowledge of modern methods of visual signaling, including ability to transmit and receive messages by flag, lantern, and heliograph.

*Telegraphy and Telephony* (oral and practical).—Theoretical and applied knowledge of electricity and telephony, covering (a) installation and repair of telephones, testing for faults, etc.; (b) construction, maintenance, and operation of permanent telegraph and telephone lines; (c) installation, maintenance, and operation of field lines; (d) skill in transmission and receipt of messages on telegraph lines; (e) dynamos, motors, and batteries (oral and practical).

*Military Law* (oral).—Manual of Courts—Martial (official). Instructions for the government of armies of the United States in the field (General Orders, Nos. 100 of 1863, 4 and 52 of 1902, A. G. O., and Cir., No. 65, W. D., 1907.)

*Topography* (practical).—Map-reading and field-sketching.



FOR FIELD OFFICERS.

The examination will be the same as the foregoing, adding thereto:

Scheme as to material, cost, time, etc., and method of constructing a permanent telegraph line in such portion of the United States as may be designated; scheme for assembling, organizing, and transporting a mobile telegraph train for building light semi-permanent lines for telegraph or telephone communication under conditions to be designated by the examining board.

Engines, boilers, internal combustion engines, automobile traction.

ADJUTANT GENERAL'S DEPARTMENT.

FOR CAPTAINS.

*Administration* (oral).—Army Regulations, in the discretion of the board, special importance being attached to the portion relating to the usual duties of officers of the Adjutant General's Department, including the subjects of "Orders," "Military Correspondence," "Muster Rolls," "Returns of Troops," "Records and Reports."

*Drill Regulations* (oral).—General notions as to organization, armament, equipment, and evolutions of the three arms, especially of ceremonies and functions in which troops of various arms may be combined.

*Manual of Guard Duty* (oral).—Entire text.

*Military Law* (oral).—Manual of Courts-Martial (official). Instructions for the government of armies of the United States in the field (General Orders, Nos. 100 of 1863, 4 and 52 of 1902, A. G. O., and Cir., No. 65, W. D., 1907).

*Topography* (practical).—Making of a topographical map; map-reading.

FOR FIELD OFFICERS.

The examination will be the same as for captains, adding thereto:

*Field Service Regulations* (oral).—Entire text.

*Minor Tactics* (oral).—Characteristics of the three arms; the three arms in attack and defense; the three arms combined; convoys.

### INSPECTOR GENERAL'S DEPARTMENT.

FOR ALL OFFICERS.

*Administration* (oral).—Army Regulations, in the discretion of the board, special attention being devoted to the articles, "Inspector General's Department," "Money Accountability," and "Public Property."

*Drill Regulations of the Three Arms* (oral).—Same as for company, troop, battery, and field officers.

*Manual of Guard Duty* (oral).—Entire text.

*Field Service Regulations* (oral).—Entire text.

*Military Law* (oral).—Manual of Courts-Martial (official). Instructions for the government of armies of the United States in the field (General Orders, Nos. 100 of 1863, 4 and 52 of 1902, A. G. O., and Cir., No. 65, W. D., 1907.)

### QUARTERMASTER'S DEPARTMENT.

FOR ALL OFFICERS.

*Administration* (oral and practical).—Army Regulations: Article L., advertising and printing; Article LI., purchase of supplies and engagement of services; Article LII., bonds of disbursing officers, bidders, and contractors; Article LIII., money accountability; Article LIV., public property accountability and responsibility; Article LV., lands, buildings, and improvements; Article LVI., surveys on property; Article LVII., civilian employees, general provisions; Article LXXIV., Quartermaster's Department, office administration. Quartermaster's Manual, 1904; U. S. Army Transport Service Regulations, 1908; and Circulars of the Quartermaster General's Office relating to supplies and services.

(Blanks should be furnished and the applicant required to exemplify their use in the preparation of contracts, bonds, returns, accounts current, etc.)

*Military Law* (oral).—Manual of Courts-Martial (official). The law of war; civil functions and relations of the military; instructions for the government of armies of the United States in the field (General Orders, Nos. 100 of 1863, 4 and 52 of 1902, A. G. O., and Cir., No. 65, W. D., 1907).

*Hippology* (oral).—The cavalry horse: draft horses and mules; inspection and purchase; care of; feeding, watering. Stables: construction; lighting; ventilation. Forage: kinds and relative value; inspection of; causes of deterioration; proper care of.

*Transportation* (oral).—By land (rail, wagon, and pack) and water; care of animals on cars and transports; construction and repairs of roads, railroads, bridges, etc.

## SUBSISTENCE DEPARTMENT.

### FOR ALL OFFICERS.

*Administration* (oral).—Army Regulations: Articles on military discipline; rank and precedence; command; appointment and promotion of commissioned officers; transfer or exchange of officers; leaves of absence of officers; sick leaves; officers traveling on duty; working parties; extra and special duty men; interior economy of companies; messing and cooking; bakery fund; company and mess fund; post bakeries; post gardens; honors and courtesies; advertising and printing; purchase of supplies and engagement of services; bonds of disbursing officers, bidders, and contractors; money accountability; property accountability and responsibility; survey on property; civilian employees; staff administration; military correspondence; the Subsistence Department; Manual for the Subsistence Department.

*Office Administration* (oral).—Blanks should be furnished and the applicant be required to exemplify their use in the preparation of returns, accounts current, etc.

*Military Law* (oral).—Manual of Courts-Martial (official). Instructions for the government of armies of the United States in the field (General Orders, Nos. 100 of 1863, 4 and 52 of 1902, A. G. O., and Cir., No. 65, W. D., 1907).

## ORDNANCE DEPARTMENT.

## FOR CAPTAINS AND FIRST LIEUTENANTS.

*Administration* (oral).—Army Regulations and important general orders, in the discretion of the board, special attention being devoted to Articles I.-V., IX.-XIII., and XXIX-XXXII., all inclusive, and Articles XL., XLI., LI.-LVII., LXI., LXII., LXXIX; also Ordnance Regulations, 1907.

*Small-Arms Firing Regulations* (oral).—Theoretical principles.

*Military Law* (oral).—Same as for company officers of infantry.

*Duties of Ordnance Officers* (oral):

- (a) At headquarters of brigades, divisions, departments, or districts; practical duties of ordnance officers in the field, including minor repairs of arms and implements.
- (b) Knowledge of boilers, engines, tools, including practical handling of tools.
- (c) Practical electricity and electrical machines.
- (d) Practical knowledge of the arms and equipments of the infantry, cavalry, and field artillery.
- (e) Experience in the manufacture of articles composed of steel, of wood, of leather.

## FOR FIELD OFFICERS.

The examination will be the same as the foregoing, but the board will, in addition, inquire into the business capacity of the applicant, his experience with mechanics and machinists, and his ability in the management of manufacturing establishments.

## MEDICAL DEPARTMENT.

[Examinations will be conducted under special instructions from the Surgeon General.]

## FOR CAPTAINS AND FIRST LIEUTENANTS.

1. *Administration*.—Army Regulations, so far as they relate to the Medical Department or to the medical officer as an officer of the Army.

Manual for the Medical Department.

(Blanks should be furnished and the applicants required to exemplify their use in the preparation of reports and returns.)

2. *Drill Regulations for the Hospital Corps.*
3. *Practice of Medicine.*
4. *Surgery.*
5. *Military Sanitation.*
6. *Military Law.*—Manual of Courts-Martial (official). Instructions for the government of armies of the United States in the field (General Orders, Nos. 100 of 1863, 4 and 52 of 1902, A. G. O., and Cir., No. 65, W. D., 1907).

FOR FIELD OFFICERS.

1. *Administration.*—Army Regulations, so far as they relate to the Medical Department or to the medical officer as an officer of the Army.

Field Service Regulations, in so far as they relate to the Medical Department.

Manual for the Medical Department.

(Blanks should be furnished and the applicants required to exemplify their use in the preparation of reports and returns.)

2. *Practice of Medicine.*
3. *Surgery.*
4. *Military Sanitation and Epidemiology.*
5. *Military Law.*—Manual of Courts-Martial (official). Instructions for the government of armies of the United States in the field (General Orders, Nos. 100 of 1863, 4 and 52 of 1902, A. G. O., and Cir., No. 65, War Department, 1907).

PAY DEPARTMENT.

FOR ALL OFFICERS.

*Administration* (oral).—Army Regulations, and Manual of the Pay Department, in the discretion of the board, special attention being devoted to:

- (a) Method of keeping cash-book and abstract of payments book.  
 Receipt and care of public funds.  
 Payments to officers.  
 Payments to enlisted men.  
 Vouchers on which payments are made.  
 Allotments.  
 Soldiers' deposits and interest on.  
 Settlement of deserters' accounts.  
 Purchase of discharge.  
 Mileage.  
 Civilian witnesses, pay and travel of.  
 Final statements, how transferred, etc.  
 Commutation of quarters, etc.

(b) The applicant will be furnished with a complete set of blanks used in the Pay Department, and be required to make out the vouchers, abstracts, and accounts current, illustrating each of the above cases.

*Bookkeeping* (oral).—A good knowledge of bookkeeping and computation of interest; writing a clear, legible hand (written).

*Military Law* (oral).—Same as for company officers of infantry.

#### JUDGE-ADVOCATE GENERAL'S DEPARTMENT.

The applicant shall produce a diploma from a regularly established law school of good reputation, and shall submit evidence that he has been a practicing attorney in good standing for a period of at least two years.

#### FOR ALL OFFICERS.

*Administration* (oral).—Army Regulations, in the discretion of the board, special importance being attached to Article XLVIII. (employment of troops in the enforcement of the laws); Article LXIX. (Judge-Advocate General's Department); Article LXX. (arrest and confinement); Article LXXI. (courts-martial); Article LXXII. (civilian witnesses); Article LXXIII. (employment of civil counsel—habeas corpus). The Articles of War.

*Military Law* (oral).—Manual of Courts-Martial (official).

*International Law and the Law of War* (oral):

1. States and their essential attributes.
2. Perfect and imperfect rights.
3. National character.
4. The conflict of international rights.
5. War.
6. Neutrality; the rights and duties of neutrals.
7. Law of military occupation.
8. Instructions for the government of armies of the United States in the field (General Orders, No. 100, Adjutant General's Office, 1863).
9. The Geneva Convention, 1906 (Cir., No. 65, War Department, 1907).
10. The Hague Conference (General Orders, Nos. 4 and 52, Adjutant General's Office, 1902).

*Revised Statutes and Acts of Congress Relating to the Organization, etc., of the Military Establishment of the United States* (oral).—In the discretion of the board, the scope of the examination to be sufficient to test the applicant's knowledge of the fundamental principles and more important details of the laws relating to the Army of the United States and the Militia.

## LETTER OF APPLICATION FOR EXAMINATION FOR COMMISSION IN VOLUNTEER FORCE.

(Under Section 23, Act of January 21, 1903.)

The Adjutant General, \_\_\_\_\_, 19 \_\_\_\_

SIR,—I have the honor to apply for examination for a commission as \*\_\_\_\_\_ of †\_\_\_\_\_, ‡\_\_\_\_\_, in any Volunteer force which may hereafter be called for and organized under the authority of Congress, other than a force composed of organized Militia.

I have served \_\_\_\_\_ years in ||\_\_\_\_\_.

I have pursued a regular course of instruction for \_\_\_\_\_ years in ¶\_\_\_\_\_.

I graduated in the year \_\_\_\_\_ from \*\*\_\_\_\_\_, after having creditably pursued the course of military instruction therein provided.

I was born \_\_\_\_\_, †\_\_\_\_\_, and am ††\_\_\_\_\_ a citizen of the United States.

Respectfully, \_\_\_\_\_,

The correctness of the statements above made was sworn to and subscribed before me, \_\_\_\_\_, 19\_\_\_\_.

‡‡\_\_\_\_\_.

\*Insert grade.

†Insert branch of Service, as cavalry, field artillery, coast artillery, or infantry.

‡Name staff position, and in this case rule out (\*) and (†).

||Insert service in Regular Army of the United States, or Volunteer forces of the United States, or organized Militia of any State, Territory, or District of Columbia; also state in what capacity.

¶Insert the name and location of the military school or college of the United States Army.

\*\*Insert the name and location of the educational institution to which an officer of the Army or Navy has been detailed as superintendent or professor pursuant to law.

††Insert "not" if in accordance with fact.

‡‡Oath to be taken before, and signature to be made by, officer authorized by law to administer oaths.

NOTE.—The foregoing is the form to be followed in applying for examination, and is to be addressed to the adjutant general of a State or Territory, or to the Adjutant General of the Army, according as the applicant comes within the classes indicated in the fourth paragraph of Section III., and must embody all the information indicated in the blanks. *Blank forms are not supplied by the War Department.*



## CHAPTER IX.

### A SHORT TALK WITH NEWLY APPOINTED OFFICERS.

OATH OF OFFICE.—REPORTS.—UNIFORMS, ARMS, AND EQUIPMENTS.—  
SOCIAL CUSTOMS.—LIBRARY.—PERFORMANCE OF DUTY.—INCOME  
AND EXPENDITURES.—HABITS.

#### OATH OF OFFICE.

Your appointment will come from the Adjutant General's office. The order making the appointment is usually accompanied by a blank Oath of Office, in the following form:

I, \_\_\_\_\_, having been appointed a \_\_\_\_\_ in the military service of the United States, do solemnly swear (or affirm) that I will support and defend the Constitution of the United States against all enemies, foreign and domestic; that I will bear true faith and allegiance to the same; that I take this obligation freely, without any mental reservation or purpose of evasion; and that I will well and faithfully discharge the duties of the office on which I am about to enter. *So help me God.*

Sworn to and subscribed before me, at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 19....

This oath may be taken before some officer who is authorized by the law of the United States or by the local municipal law to administer oaths, or it may be taken before the judge-advocate of a department, or of a court-martial, or before the trial officer of a summary court. Officers of the Army other than those specified are not authorized to administer oaths.

This matter should be promptly attended to. As soon as the oath has been taken, the completed form will be mailed to the Adjutant General, Washington, D. C.

## REPORTS.

Immediately on receipt of order assigning you to a regiment you should write a letter to the adjutant of the regiment to which assigned, to your company commander, and should your station be other than that of the regimental headquarters, to the post adjutant of your station. There is no prescribed form of letter, but the following is a good form:

BOSTON, MASS., July 1, 1910.

*The Adjutant, Sixteenth Infantry,  
Fort Leavenworth, Kas.:*

SIR,—Having been assigned to the Sixteenth Infantry by General Orders, No. 131, War Department, 1910, I have the honor to report myself on leave of absence since June 14, 1910, per Special Orders, No. 50, Headquarters U. S. Military Academy, 1910. My leave will expire October 1, 1910.

My address, until further notice, will be Boston, Mass., care J. Smith & Son, P. O. Box 163.

Very respectfully,

JOHN Q. SMITH,  
*Second Lieutenant, Sixteenth Infantry.*

Should you change your address, letters should at once be addressed same as above and also to the Adjutant General, giving the new address.

Letter to your company commander should be addressed to "Commanding Officer, Company B, Sixteenth Infantry," and not to the officer by name.

On expiration of your leave, you should be at your new station and report for duty. Ask the advice of some experienced officer as to what reports you should then make, and in what form.

## UNIFORMS, ARMS, AND EQUIPMENT.

On first appointment, buy as little as you are sure will answer immediate needs. In the matter of uniform you should be extremely careful. Buy nothing but the best. It will prove the

cheapest in the long run. You can get the best only from military tailors of established reputation. The quality of cloth alone does not determine whether the best has been secured. Uniforms are much harder to "fit" than civilian clothes, and it takes a military tailor of experience to make the "smart-looking" uniform you want.

If you haven't the cash to pay for your uniforms, you will find that the responsible firms will extend you any reasonable time in which to meet the cost. The cash-payment plan is better, since there is always a cash discount; but, in the absence of the necessary money, it is better to let the uniform-man carry you than to borrow elsewhere to pay him. There have been numerous changes in the uniform in the past few years. The matters of patterns and cloth have probably been settled for some time to come; whether they have or not, you will be required to procure what is necessary in order to appear in the uniforms which may be prescribed from time to time by your post commander. Should your station be in the Philippines, you will want khaki and white duck. The uniform wardrobe for domestic service is much more elaborate, and before purchasing it would be advisable to get a copy of the most recent uniform order.

Arms and equipment can be secured from the Ordnance Department. You can get a price list of ordnance by addressing the Chief of Ordnance, Washington, D. C., or by writing to the commandant of the nearest ordnance depot or arsenal.

Remember that you can purchase anything that you may want in the line of uniforms, equipment, household furniture, etc., in the Philippines, and you may save yourself considerable worry and annoyance by postponing many purchases until your arrival there. Your pay will be going on in the meantime and you may have more money with which to pay, and save yourself the embarrassment of debt.

## SOCIAL CUSTOMS.

Start in right. Make yourself agreeable without getting "fresh." Seek the advice of some experienced officer as to the social customs of the regiment, and be guided by his advice. While the customs throughout the Army are in a way uniform, yet there are some differences which make it especially advisable for a new officer first joining to feel his way and allow himself to be directed in those matters by someone he knows is familiar with them and in whom he has confidence.

## LIBRARY.

In addition to the Army Regulations and the Service manuals, supply yourself with as many military books as you can reasonably afford. Select books dealing especially with recent wars and with modern appliances, arms, and equipment. The war game is undergoing rapid changes. What was new ten years ago is becoming obsolete. Recent inventions promise to consign the methods of to-day to an early disappearance. The successful soldier is the one who keeps up to date and abreast of the most modern in methods and means. A good list of military books can be secured from the Service Association publications and from the Franklin Hudson Publishing Company, of Kansas City, the latter firm making a specialty of military books for the United States Service. The Superintendent of Documents, Washington, D. C., on request, will furnish a list of the publications bearing on military subjects, published under the direction of the War Department, and which are for sale.

Subscribe for at least one of the Service magazines; all of them if you can afford it.

## PERFORMANCE OF DUTY.

Never neglect to perform any duty assigned you in exact accordance with the terms of the order and in the most thorough manner possible.

Strive to make yourself useful. There are many ways in which you can prove your ability and worth; and bear in mind future assignments that are desirable and possible promotions may be based on the performance of a duty that a careless officer might think insignificant and of doubtful expediency.

When you are assigned to the performance of a duty that calls for knowledge which you do not possess, proceed to inform yourself at once of all its details. It will usually be possible to anticipate the assignments of this character, and preparation for them can be made in advance, but not always so.

If you are made signal officer, proceed to learn to signal and learn it well. If appointed ordnance officer, inform yourself at once as to all the details and the manner of performing the duty correctly. Show your company commander that you can be trusted to carry out his directions in the precise and exact manner he prescribes.

Respect the rank and length of service of your superiors. Just because Captain Jones calls you "Smith" it does not license you to call him "Jones." When off duty you are not, of course, expected to present the stiff and formal attitude toward your superiors that is so often depicted on the stage, but at the same time there should be a deference and respect shown your superiors at all times that would not fail to commend your conception of military discipline and the principles underlying it.

#### INCOME AND EXPENDITURES.

A second lieutenant, not mounted, gets \$1,700 per year—that is, \$141.67 per month; if mounted, and you provide yourself with one suitable mount, you will get \$150 per year more; if you have two suitable mounts, you will get \$200 per year more. This constitutes the income from the Government. If you have no outside income, your expenditures must be arranged to come within this limit, or else, sooner or later, you will come to grief. In addition to this al-

lowance, you get quarters; the allowance for a second lieutenant being two rooms.

Graduates of the United States Military Academy, on first appointment, get mileage from West Point to their first stations.

Enlisted men appointed get mileage from the place of their discharge (as enlisted men) to their new stations.

Officers appointed from civil life must defray their own expenses to their first stations.

Mileage allowance is at the rate of 7 cents per mile by the shortest practicable route. This covers all expenses—railroad fare, sleeper, dining-car, etc., there being no other expense account allowance.

Before buying a ticket, ascertain from the Paymaster General, or the Quartermaster General, U. S. Army, whether the travel is all or in part over any land-grant railroads; should any part of it be land-grant, it usually pays to get transportation from the Quartermaster's Department over that part of the road, as mileage is not allowed over land-grant roads.

#### HABITS.

Cultivate temperate habits from the first. A better way to put it would be, keep your temperate habits, for it is not likely a person would be appointed with habits needing cultivating. Temptations will be many and sometimes difficult to withstand. Drinking is sure to lead to trouble in time, if immediate difficulties are not encountered. Possibly as much as 95 per cent of the officers dismissed from the Service can lay their misfortune at the door of intemperance. The beginning of trouble usually presents itself in the most innocent appearance and guise. Look out for it.

## CHAPTER X.

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### ENLISTING FOR A COMMISSION.

THE DISCIPLINARY GULF.—FOOD AND CLOTHING.—THE ENLISTED MEN AS A TYPE.—THE SOLDIER'S ROUTINE.—THE ARMS OF THE SERVICE.—ASSISTANCE OF OFFICERS.—SOME POINTERS.

The young man contemplating entering the Service as an enlisted man for the purpose of obtaining a commission from the ranks should give the matter very serious thought before taking the step. While it is the surest way of accomplishing this purpose left open after the appointment of the West Point class, it will also be found to have its drawbacks in more ways than one.

### THE DISCIPLINARY GULF.

There is a wide gulf between the commissioned officers and the enlisted men of the Service, the existence of which is based on the proven rules of discipline; but to the average American, who has given no thought as to the reasons, it has the suggestions of the prevalence of caste, or an aristocracy. This social chasm, or gulf, until it is thoroughly understood, is probably the thing which will prove the most trying to the educated man who enlists in the Service. Especially will this be true if he has seen considerable of social life. A little reasoning and a little experience will soon convince him of the necessity for this condition, and once it is understood there should be no more mental worries from this source.

### FOOD AND CLOTHING.

In the matter of food and clothing, he will be amply taken

care of, even in the trying times of active campaigns. Tales of starvation and of short rations, so frequently finding space in the daily press, especially during campaigns, seldom have any basis of fact, and are what are known among the enlisted men as "hero stories," told most frequently by those who have seen little, if any, real fighting, and must find a substitute subject for reminiscence. It is unquestionably true that there are times when an active army does not receive its full ration, and it even may for a time experience privation, but it is because of the exigencies of the service, and not because of the failure of the Government to provide a sufficient supply. A good soldier will understand this, and perform his duty uncomplainingly. The United States soldier is the best fed, best clothed, and best paid soldier in the world.

#### THE ENLISTED MEN AS A TYPE.

The enlisted men represent a hardy type of manhood. They are jovial, ready-witted, and world-wise. They are of a sociable disposition, and a new man among them will soon find the particular spirits who are congenial to him.

The habits of the enlisted men of the Army will compare very favorably with those of any equally large body of men of any trade representing the same walks of life.

#### THE SOLDIER'S ROUTINE.

No menial service is required other than the police of their own quarters and grounds, and the preparation and serving of meals. The regulations do not allow officers to demand personal service of enlisted men, and when such services are performed it is done voluntarily and for which the soldier gets extra compensation from the officer.

The soldier's life is one of most systematic routine. His duties are regulated to the minute by the clock and the bugle. The trai -



ing cannot do other than instill habits of regularity, punctiliousness, politeness, and alertness.

### THE ARMS OF THE SERVICE.

It is usually allowable for the man enlisting to select his own arm, or branch, of the Service. It will make but little, if any, difference to which arm of the Service the candidate belongs when he comes up for his examination. About the only matter to be decided would be the question of his adaptability to the arm selected and the opportunities for study in his preparation for the examinations. The recruiting officer can help in deciding the first question, and the latter can only be found out by investigation as to the stations of regiments, the particular kind of duty in which they may be engaged, etc. Ordinarily, a regiment stationed in the United States would afford the best opportunity for study. The appointments from the Coast Artillery Corps are made in that arm only; so, unless the applicant is seeking a commission in the Coast Artillery, he would not want to enlist in it, for he would not be privileged to take the examination for any of the other arms.

### ASSISTANCE OF OFFICERS.

Officers usually allow "every tub to stand on its own bottom"; but a deserving man will have no difficulty in enlisting the active assistance of his company officers in his preparation for his examinations. There will be found exceptions, no doubt, but they will be rare. It will be necessary for the candidate to show beyond any question his fitness for the position sought; but, once he has done this, he will meet with few obstacles that are not of his own creation. Company officers are always looking for material for non-commissioned officers, and a meritorious man is not likely to remain long a private soldier.

## SOME POINTERS.

Always keep yourself cleanly shaved, your shoes shined, your linen clean, your clothes pressed and clean, your "bunk" neatly made-up, your locker in order, your arms and equipment in order, and your whole appearance soldierly and tidy. Rest assured that all of these will be closely observed, and the failure to come up to the standard will be particularly noticeable in your case.

The fact that you are enlisting with the purpose of obtaining a commission from the ranks need not be heralded on the first day of joining to the entire command; that is, for the present, strictly your own affair. After you have graduated from the "rookie" class and have taken your place in the ranks and are performing all of a soldier's duties in a soldierly way, there could be no reason why you should not ask permission to have a talk with your company commander and discuss the matter with him, asking his advice on many matters which by this time will have presented themselves to you for solution.

Remember that thoughts not spoken need no explanations. Say little; see and heed much. You will find the old soldiers reserve to themselves the privilege of "growling." They know how to do this without meaning what they say; a new man attempting it would be misunderstood. If there is any "growling" to do, turn it over to the old soldiers, and you will find they will do it justice without any assistance on your part.

If you have served in a military organization before enlisting in the Regular Army, it will be just as well to not mention the fact, and it will be particularly advisable not to make comparisons, even to the disadvantage of your former organization. If your prior military experience has resulted in military training of worth, use that training in the performance of your duties, and not for purposes of self-exploitation.

## CHAPTER XI.

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### THE ENLISTED MEN.

THE ENLISTED MEN OF THE REGULAR ARMY.—REQUIREMENTS TO ENTER THE SERVICE.—DECLARATION OF APPLICANT FOR ENLISTMENT.—FORM OF CONSENT IN THE CASE OF A MINOR.—OATH OF ENLISTMENT.—PAY AND ALLOWANCES OF ENLISTED MEN.—LOCATION OF GENERAL RECRUITING STATIONS FOR THE UNITED STATES ARMY.

#### THE ENLISTED MEN OF OUR REGULAR ARMY.

This little volume, in addition to its being a guide to young men in civil life who are ambitious to become officers in our Army, is also intended as a manual for the enlisted men of our Regular service who aspire to commissioned rank. To submit it, with all its imperfections, without a word on the enlisted *personnel*, would cripple it indeed.

If the young aspirant for shoulder-straps contemplates securing them by graduating from the United States Military Academy at West Point, or by taking his examinations from civil life, he, of course, will be interested to know the character of men he is to command, once his ambition has been realized.

If the aspirant intends to enlist and win his spurs by service in the ranks, he will have a deep interest in learning of the men who are to be his fellow-soldiers and comrades.

Before sounding the praises of the enlisted men of our permanent military establishment, it is well to state that, like all other professions and vocations, the Army is made up of men from all walks and conditions of life, and the description of one man, in-

tended to portray the general character of the whole body, would condemn or eulogize individuals undeservedly.

As a class, they have proven themselves to be steady, honest, conscientious, and patriotic men, whose devotion to duty during the trying and exacting campaigns in the tropics in the recent wars with Spain, the insurgents of the Philippine Islands, and the Chinese troubles, has elicited the admiration of the nations of the world. Their unflinching bravery, willingness to obey the orders of their superior officers, and their power for execution, have won them the confidence, affection, and ready praise of their commanders.

The casual and reckless observer, the professional sentimentalist, the "know-all," and the bigot have accused them of being drunkards. To such critics one man in the service of the United States Army, in uniform, seen intoxicated on the streets brings visions of whole battalions, brigades, and divisions reeling in inebriety. To them it never occurred that because a single brakeman, through human weakness, by chance over-indulges and becomes intoxicated, it does not necessarily follow that the entire railroad system with which he holds such a humble position is staggering under a load of alcoholism.

But this condemning of a class for the shortcomings of a few of that class seems to be confined to the enlisted men of the Regular Army.

To meet these unjust criticisms and the arguments of the unjust critics, a reference to the enlisted man's unstained record from Lexington to Pekin is sufficient. It is a catalogue of fortitude, bravery, devotion to duty, and of victories bought at tremendous sacrifice.

At no time since the establishment of the standing Army has the enlisted *personnel* been of a higher order of intelligence, morals, or physique than at the present time. Many young men of excellent families, who are well educated and of good prospects, are car-

rying rifles as privates and non-commissioned officers in our Army, and upholding the honor of "Old Glory" at home and in our island possessions.

A man enlisting with the view of obtaining a commission from the ranks need not isolate himself. He will find many excellent associates who will welcome him to their pleasures and pastimes should he merit it. Soldiers are anything but fools, and are not long in placing a man on his proper level—according to his intrinsic worth. If the aspirant has the right kind of stuff in him, the enlisted men, because of their close association with him, will be the first to recognize it, and the right kind of a man will soon have the respect of his comrades. There is but little jealousy among the rank and file, and those who are willing to build are in vast majority over those who would tear down.

#### REQUIREMENTS TO ENTER THE SERVICE.

In all the larger cities of the United States general recruiting offices are maintained. At any of them enlistments may be made for any arm of the Service needing recruits. Any questions regarding the pay, allowances, the life, and duties of a soldier will be cheerfully answered.

An applicant is frequently held for several days, at Government expense, pending investigation into his character, citizenship, age, etc.

The following instructions pertaining to enlistments are uniform at all the recruiting offices, and any deviation from them cannot be made without authority from the Adjutant General of the Army, through whose department the recruitment of the Army is made:

Applicants for first enlistment must be between the ages of 18 and 35 years, of good character and temperate habits, able-bodied,

free from disease, and must be able to speak, read, and write the English language.

No person under 18 years of age will be enlisted, re-enlisted, or accepted with a view to enlistment, and minors between the ages of 18 and 21 years must not be enlisted, or accepted with a view to enlistment, without the written consent of the father, only surviving parent, or legally appointed guardian, to the minor's enlistment.

Original enlistments will be confined to persons who are citizens of the United States, or of Porto Rico, or who have made legal declaration of their intention to become citizens of the United States.

Married men will be enlisted only upon the approval of a regimental commander, or other proper commanding officer, if for other than a regimental organization.

Applicants will be required to satisfy the recruiting officer regarding age and character, and should be prepared to furnish the necessary evidence.

For infantry, coast artillery, and engineers the height must be not less than five feet four inches, and weight not more than one hundred and ninety (190) pounds.

For cavalry the height must be not less than five feet four inches and not more than five feet ten inches, and weight not to exceed one hundred and sixty-five (165) pounds.

For field artillery the height must be not less than five feet four inches and not more than six feet, and weight not more than one hundred and ninety (190) pounds. For the mountain batteries the height must be not less than five feet eight inches.

A variation not exceeding a fraction of an inch above the maximum height given for cavalry and field artillery is permissible, if the applicant is in good health and is in other respects desirable as a recruit.

The minimum weight for all arms of the Service is one hundred and twenty-eight (128) pounds, subject to variations below that

standard as explained herein; but in no case will an applicant whose weight falls below one hundred and twenty (120) pounds be accepted without special authority from the Adjutant General of the Army.

TABLE OF PHYSICAL PROPORTIONS FOR HEIGHT, WEIGHT, AND CHEST MEASUREMENT.

HEIGHT.		WEIGHT.  Pounds.	CHEST MEASUREMENT.	
Feets.	Inches.		At Expiration;, Inches.	Mobility, Inches.
5 $\frac{4}{12}$	64	128	32	2
5 $\frac{5}{12}$	65	130	32	2
5 $\frac{6}{12}$	66	132	32 $\frac{1}{2}$	2
5 $\frac{7}{12}$	67	134	33	2
5 $\frac{8}{12}$	68	141	33 $\frac{1}{4}$	2 $\frac{1}{2}$
5 $\frac{9}{12}$	69	148	33 $\frac{1}{2}$	2 $\frac{1}{2}$
5 $\frac{10}{12}$	70	155	34	2 $\frac{1}{2}$
5 $\frac{11}{12}$	71	162	34 $\frac{1}{4}$	2 $\frac{1}{2}$
6	72	169	34 $\frac{3}{4}$	3
6 $\frac{1}{12}$	73	176	35 $\frac{1}{4}$	3

It is not necessary that the applicant should conform exactly to the figures indicated in the foregoing table. The following variations below the standard given in the table are permissible when the applicant is *active, has firm muscles, and is evidently vigorous and healthy*:

HEIGHT.	CHEST AT EXPIRATION.	WEIGHT.
	Inches.	Pounds.
64 and under 68.....	2	8
68 and under 69.....	2	12
69 and under 70.....	2	15
70 and upward.....	2	20

Marked disproportion of weight over height is not a cause for rejection unless the applicant be positively obese.

Applicants must defray their own expenses while traveling to the recruiting station.

The term of service is three years.

At the time of the applicant's examination for acceptance he will be required to answer the following questions and certify to the same:

Name.....  
 Residence (street and house number, if any, town or city, and State).....  
 Date and place of birth.....  
 Occupation.....  
 White or colored.....  
 Married or single.....  
 Name and address of last employer, and duration of employment.....  
 Do you know that if you secure your enlistment by means of any false statement or misrepresentation, you are liable to trial by court-martial for fraudulent enlistment?.....  
 Nationality of father.....  
 Are you a citizen of the United States?..... If not, have you made application for citizenship, and if so, when and in what court?.....  
 State previous Army, Navy, or Marine Corps service (United States or foreign).....  
 Date and place of last enlistment.....  
 Date on which and organization from which last discharged.....  
 Are you a member of the organized Militia of any State, Territory, or District of Columbia?.....



Have you applied for enlistment before? and if so, when and where?  
.....

If rejected, for what cause? .....

Are there any reasons for your parents or other relatives objecting to your enlistment? .....

Give names and addresses of persons dependent upon you for support .....

Have you ever been convicted of a felony or imprisoned under sentence of a court in a reformatory, jail, or penitentiary? .....

Have you found that your health and habits in any way interfere with your success in civil life? and if so, give details.....

Are you addicted to the use of intoxicants or narcotics? and if so, to what extent? .....

Do you consider that you are now sound and well? .....

What illnesses, diseases, or accidents have you had since childhood?  
.....

Have you ever had any of the following? if so, give approximate dates:

Convulsions .....

Epilepsy .....

Gonorrhoea.....

Sore on penis.....

Have you ever raised or spat blood? .....

When were you last treated by a physician, and for what ailment?  
.....

Have you ever been under treatment at a hospital or asylum, and if so, for what ailment?  
.....

I certify that the foregoing questions and my answers thereto have been read over to me, that I fully understand the questions, and that my answers thereto are correctly recorded and are true in all respects.

.....  
(Signature of applicant.)

#### DECLARATION OF APPLICANT FOR ENLISTMENT.

Before taking the oath of enlistment the applicant will be required to subscribe to the following "Declaration of Applicant":

I, ....., desiring to enlist in the Army of the United States for the term of three years, do declare that I have

neither wife nor child; that I am of the legal age to enlist, and believe myself to be physically qualified to perform the duties of an able-bodied soldier; and I do further declare that I am of good habits and character in all respects, and have never been discharged from the United States Service (Army or Navy), or any other service, on account of disability or through sentence of either a civil or military court, nor discharged from any service, civil or military, except with good character, and for the reasons given by me to the recruiting officer prior to this enlistment.\*

Given at ..... this ..... day of ....., 191.....

Witness: .....

Residence of applicant .....

Name and address (street and house number, if any) of person to be notified in case of emergency, giving degree of relationship; if friend, so state.

#### FORM OF CONSENT IN CASE THE APPLICANT IS A MINOR.

Should the applicant for enlistment be under twenty-one years of age, the following form must be filled out, signed by the proper person, and delivered to the recruiting officer before the enlistment can be made:

I, ....., do certify that I am the ..... of .....; that the said ..... is ..... years of age; and I do hereby freely give my consent to his enlisting as a soldier in the Army of the United States for the period of three years.

Given at ....., this ..... day of ....., 191 .....

Witness: .....

#### OATH OF ENLISTMENT.

The applicant, having satisfactorily passed the physical examination, signed the "Declaration of Applicant," and, in the case of

\*Here is added in the case of an applicant for first enlistment: "And that I am, or have made legal declaration of my intention to become, a citizen of the United States."

a minor, secured the consent of his parent or guardian, will subscribe to the following "Oath of Enlistment":

UNITED STATES OF AMERICA, .....

State of ..... }  
City, Town, or } ss.  
Military Post } .....

I, ....., born in, ....., in the State of ....., aged ..... years and ..... months, and by occupation a ....., do hereby acknowledge to have voluntarily ..... enlisted, this ..... day of ....., 191....., as a soldier in the Army of the United States of America, for the period of three years, unless sooner discharged by proper authority; and do also agree to accept from the United States such bounty, pay, rations, and clothing as are or may be established by law; and I do solemnly swear (or affirm) that I will bear true faith and allegiance to the United States of America; that I will serve them honestly and faithfully against all their enemies whomsoever; and that I will obey the orders of the President of the United States and the orders of the officers appointed over me, according to the Rules and Articles of War.

(See instruction 3) ..... [Seal.]

Subscribed and duly sworn to before me, this..... day of ....., A. D. 190.....

.....  
Recruiting Officer.

PAY AND ALLOWANCES OF ENLISTED MEN.

All soldiers receive from the Government, without cost (in addition to their pay), rations, clothing, bedding, medicines, and medical attendance.

The following are the rates of pay during first enlistment, as fixed by law:

GRADE.	Monthly Pay.
Master signal electrician.....	\$75.00
Master electrician—coast artillery.....	75.00
Chief musician—band, engineers, cavalry, artillery, infantry.....	75.00
Engineer—coast artillery.....	65.00
Sergeant, first class—Hospital Corps.....	50.00
Electrician sergeant, first class—coast artillery.....	45.00
Sergeant, first class—Signal Corps.....	45.00
Battalion sergeant-major—engineers.....	45.00
Battalion quartermaster-sergeant—engineers.....	45.00
Ordnance sergeant—post non-commissioned staff.....	45.00
Commissary sergeant—post non-commissioned staff.....	45.00
Quartermaster-sergeant—post non-commissioned staff.....	45.00
Regimental sergeant-major—cavalry, field artillery, infantry.....	45.00
Regimental quartermaster sergeant—cavalry, field artillery, infantry.....	45.00
Regimental commissary sergeant—cavalry, field artillery, infantry.....	45.00
Senior sergeant-major—coast artillery.....	45.00
First sergeant—engineers.....	45.00
First sergeant—cavalry, artillery, infantry.....	45.00
Master gunner—coast artillery.....	40.00
Squadron sergeant-major—cavalry.....	40.00
Battalion sergeant-major—field artillery, infantry.....	40.00
Battalion quartermaster sergeant—field artillery.....	40.00
Junior sergeant-major—coast artillery.....	40.00
Chief trumpeter—cavalry, artillery.....	40.00
Principal musician—engineers, cavalry, artillery, infantry.....	40.00
Electrician sergeant, second class—coast artillery.....	36.00
Sergeant—engineers, ordnance, Signal Corps.....	36.00
Quartermaster sergeant—engineers.....	36.00
Drum-major—band, engineers, cavalry, artillery, infantry.....	36.00
Color sergeant—cavalry, field artillery, infantry.....	36.00
Sergeant—band.....	36.00

GRADE.	Monthly Pay.
Fireman—coast artillery .....	\$30.00
Sergeant—Hospital Corps.....	30.00
Cook—engineers, Signal Corps.....	30.00
Cook—band .....	30.00
Sergeant—cavalry, artillery, infantry.....	30.00
Quartermaster sergeant—cavalry, artillery, infantry.....	30.00
Cook—cavalry, artillery, infantry.....	30.00
Stable sergeant—field artillery.....	30.00
Corporal—band.....	30.00
Corporal—Hospital Corps.....	24.00
Corporal—engineers, ordnance, Signal Corps.....	24.00
Mechanic—coast artillery.....	24.00
Chief mechanic—field artillery.....	24.00
Private—band.....	24.00
Corporal—cavalry, artillery, infantry.....	21.00
Farrier and blacksmith, saddler—cavalry.....	21.00
Artificer—infantry.....	21.00
Mechanic—field artillery.....	21.00
Wagoner—cavalry.....	21.00
Private, first class—Hospital Corps .....	18.00
Private, first class—engineers, ordnance, Signal Corps.....	18.00
Private—Hospital Corps.....	16.00
Trumpeter—cavalry .....	15.00
Musician—engineers, artillery, infantry.....	15.00
Private—Signal Corps, cavalry, artillery, infantry.....	15.00
Private, second class—engineers, ordnance.....	15.00

For continuous service, the pay of enlisted men is increased as follows, viz.: For those whose initial pay, as set forth herein, is \$36.00 or more, an increase of \$4.00 a month for and during the second enlistment, and a further increase of \$4.00 a month for and during each subsequent enlistment up to and including the seventh. For those whose initial pay, as set forth herein, is \$18.00, \$21.00, \$24.00, or \$30.00, an increase of \$3.00 a month for and during the second enlistment, and a further increase of \$3.00 a month for and

during each subsequent enlistment up to and including the seventh. For those whose initial pay, as set forth herein, is \$15.00 or \$16.00, an increase of \$15.00 a month for and during the second and third enlistments each, and a further increase of \$1.00 a month for and during each subsequent enlistment up to and including the seventh. When a soldier re-enlists within three months from the date of discharge at the termination of an enlistment period, his service is continuous for the purpose of the increase of pay provided herein. When a soldier has been honorably discharged at the termination of his first or any succeeding enlistment period and re-enlists after the expiration of three months, he is regarded as in his second enlistment, and a soldier who receives an honorable discharge for the convenience of the Government, after having served more than half of his enlistment, is considered as having served an enlistment period.

Any private soldier, musician, or trumpeter honorably discharged at the termination of his first enlistment period who re-enlists within three months of the date of said discharge is entitled upon such re-enlistment to an amount equal to three months' pay at the rate he was receiving at the time of his discharge.

Qualified gunner, first class, artillery, \$3.00 a month additional; qualified gunner, second class, artillery, \$2.00 a month additional; qualified expert rifleman, \$5.00 a month additional; qualified sharpshooter, \$3.00 a month additional; qualified marksman, \$2.00 a month additional. In the Coast Artillery Corps: Casemate electrician, observer, first class, and plotter, \$9.00 a month additional; chief planter, chief loader, observer, second class, gun commander, gun pointer, \$7.00 a month additional. Cavalry and Field Artillery: Horseshoer, \$9.00 a month additional. Mess sergeant, \$6.00 a month additional.

The pay of enlisted men "serving beyond the limits of the States comprising the Union and the Territories of the United States contiguous thereto (excepting Porto Rico and Hawaii)" is

increased 20 per centum, and the time of such service is counted from the date of departure from the United States to the date of return thereto. Increase accrues on additional pay for length of service, gunners, expert riflemen, casemate electricians, etc.

Whenever a soldier is honorably discharged at the expiration of his term of enlistment, or on account of disability, his travel-pay is ample to carry him to the place of enlistment.

By care and economy, a soldier can save from his clothing allowance a considerable sum, payable to him on his discharge.

The soldier can deposit his savings in sums of not less than \$5.00 with any Army paymaster, and for sums so deposited for the period of six months or longer, the soldier, on his discharge, will be paid interest at the rate of 4 per centum per annum. These deposits are non-forfeitable except by desertion.

Soldiers who have served honestly and faithfully for twenty years, or who have been discharged on account of wounds received or disease contracted in the line of duty, are entitled to admission to the Soldiers' Home in the city of Washington, District of Columbia.

After thirty years' service enlisted men are entitled to be retired, and upon retirement will receive three-fourths of the monthly pay allowed to them by law in the grade they held when retired, \$9.50 a month additional as commutation for clothing and subsistence, and \$6.25 a month additional in lieu of quarters, fuel, and light. In computing time for retirement, credit will be given to a soldier for double the time of his actual service in China, Cuba, Philippine Islands, Island of Guam, Alaska, and Panama.

A certificate of merit for distinguished service entitles a soldier to \$2.00 a month additional while in the Army, whether on the active or the retired list.

In case an enlisted man on the active list dies from wounds or disease contracted in line of duty, his widow or any other person

previously designated by him is entitled to an amount equal to six months' pay at the rate received by him at the date of death, less \$35.00 or such part thereof as is expended by the Government for interment.

## LOCATION OF GENERAL RECRUITING STATIONS OF THE UNITED STATES ARMY.

### RECRUIT DEPOTS.

Columbus Barracks, Ohio; Jefferson Barracks, Mo.; Fort Logan, Colo.; Fort McDowell, Cal.; and Fort Slocum, N. Y.

### RECRUIT DEPOT-POSTS.

Fort Bliss, Texas; Fort Douglas, Utah; Fort George Wright, Wash.; Jackson Barracks, La.; Fort Lawton, Wash.; Fort Sam Houston, Texas; Fort Snelling, Minn.; Vancouver Barracks, Wash.; Fort William Henry Harrison, Montana.

### GENERAL RECRUITING STATIONS.

Albany, N. Y., 513 Broadway.  
 Allentown, Pa., 201 Commonwealth Bldg.  
 Altoona, Pa., Post-office Bldg.  
 Asheville, N. C., 3 S. Main St.  
 Atlanta, Ga., 23½ Whitehall St.  
 Baltimore, Md., 204 W. Fayette St.  
 Bangor, Me., 67 Exchange St.  
 Bluefield, W. Va., Thornton Bldg.  
 Boston, Mass., 73 Hanover St.  
 Bridgeport, Conn., 62 Cannon St.  
 Buffalo, N. Y., White Bldg., 298 Main St.  
 Charleston, W. Va., 601 Kanawha St.  
 Charlotte, N. C., 22 W. Trade St.  
 Chattanooga, Tenn., Loveman Bldg., 20 E. Eighth St.  
 Chicago, Ill., 601 W. Madison St., 14 S. Canal St., 323 S. State St., 194 S. Clark St., 100 E. Van Buren St., 488 S. State St., 2133 Wabash Ave., 9151 Commercial Ave.



Cincinnati, Ohio, Burnet House, 303 Vine St.  
Clarksburg, W. Va., Irwin Bldg.  
Cleveland, Ohio, 54 Public Square.  
Columbus, Ohio, 222½ N. High St.  
Cumberland, Md., 39 Baltimore St.  
Dallas, Texas, 346 Main St.  
Danville, Ill., 34 N. Vermilion St.  
Dayton, Ohio, Fourth and Jefferson Sts.  
Denver, Colo., 1705 Lawrence St.  
Detroit, Mich., 212 Griswold St.  
Duluth, Minn., Torrey Bldg.  
Evansville, Ind., 214½ Upper Second St.  
Fort Smith, Ark., 715 Garrison Ave.  
Fort Wayne, Ind., 702 Calhoun St.  
Fort Worth, Tex., 513½ Main St.  
Grand Rapids, Mich., 25 Canal St.  
Hannibal, Mo., 220 S. Main St.  
Harrisburg, Pa., Bergner Bldg., Third and Market Sts.  
Helena, Mont., Gold Block.  
Hoboken, N. J., 62 Newark St.  
Huntington, W. Va., McCrory Bldg., 905 Third Ave.  
Hutchinson, Kas., 5 S. Main St.  
Indianapolis, Ind., 25 N. Illinois St.  
Jacksonville, Fla., 108 W. Forsyth St.  
Jersey City, N. J., 47 Montgomery St., 169 Pavonia St.  
Johnson City, Tenn., 122 Buffalo St.  
Joplin, Mo., 416 Main St.  
Kansas City, Mo., 728 Main St.  
Knoxville, Tenn., 405½ W. Depot St.  
Lancaster, Pa., 49 N. Queen St.  
Lansing, Mich., 109 Washington Ave., S.  
Lexington, Ky., 139 E. Main St.  
Lima, Ohio, Market and Main Sts.  
Little Rock, Ark., Main and Markham Sts.  
Los Angeles, Cal., 115½ N. Main St.  
Louisville, Ky., 514 W. Jefferson St.  
Lowell, Mass., 84 Middlesex St.  
Macon, Ga., 411 Cherry St.  
Marion, Ind., Fourth and Adams Sts.  
Mattoon, Ill., 1506 Broadway.

- Memphis, Tenn., 126 North Court Ave.  
 Middlesboro, Ky., Scarret Bldg.  
 Minneapolis, Minn., 254 First Ave., S.  
 Mobile, Ala., 217 Dauphin St.  
 Muncie, Ind., 403 S. Walnut St.  
 Muskogee, Okla., Flynn-Ames Bldg.  
 Nashville, Tenn., 323 Fourth Ave., N.  
 Newark, N. J., 266 Market St.  
 New Haven, Conn., 890 Chapel St.  
 New Orleans, La., 327 St. Charles St.  
 New York City, N. Y., 25 Third Ave., 2362 Third Ave.,  
 749 Sixth Ave., 131 Park Row, 109 West St., 100  
 Delancey St., 363 Fulton St., 269 Broadway, Brook-  
 lyn.  
 Norfolk, Va., Columbia Bldg., Granby St.  
 Oakland, Cal., 856 Broadway.  
 Oklahoma City, Okla., Patterson Bldg., Main and Hud-  
 son Sts.  
 Omaha, Neb., Thirteenth and Douglas Sts.  
 Paducah, Ky., N. E. cor. Second and Broadway.  
 Parkersburg, W. Va., 310½ Market St.  
 Paterson, N. J., 202 Market St.  
 Peoria, Ill., 415 S. Adams St.  
 Philadelphia, Pa., 1229 Arch St.  
 Pittsburg, Kas., 305½ N. Broadway.  
 Pittsburgh, Pa., 510 Smithfield St.  
 Pittsfield, Mass., 21 North St.  
 Portland, Me., 205½ Middle St.  
 Portland, Oregon, Ainsworth Block, Third and Oak Sts.  
 Providence, R. I., 402 Westminster St.  
 Pueblo, Colo., 130½ S. Union St.  
 Reading, Pa., 619 Penn St.  
 Richmond, Va., 820 E. Broad St.  
 Roanoke, Va., Terry Bldg.  
 Rochester, N. Y., 26 E. Main St.  
 Sacramento, Cal., Stoll Bldg., 428 K St.  
 Saginaw, Mich., Heavenrich Block.  
 St. Joseph, Mo., 413½ Edmond St.  
 St. Louis, Mo., cor. Third and Olive Sts. and 1835 Mar-  
 ket St.

St. Paul, Minn., 327 Jackson St.  
San Francisco, Cal., 660 Market St.  
Savannah, Ga., 13 York St., W.  
Schenectady, N. Y., 437 State St.  
Scranton, Pa., 302 Lackawana Ave.  
Seattle, Wash., 335 Pioneer Bldg.  
Seymour, Ind.  
Sioux City, Iowa, Massachusetts Bldg.  
Somerset, Ky.  
Spokane, Wash., Zeigler Block, cor. Howard St. and  
Riverside Ave.  
Springfield, Ill., 100 East Side Square.  
Springfield, Mass., 17 Hampden St.  
Springfield, Mo., College and Campbell Sts.  
Springfield, Ohio, High and Fountain Aves.  
Syracuse, N. Y., Bastable Bldg.  
Tacoma, Wash., 1151 Commerce St.  
Terre Haute, Ind., 709 Wabash Ave.  
Toledo, Ohio, 416 Adams St.  
Tulsa, Okla., 19 S. Main St.  
Utica, N. Y., Arcade Bldg.  
Vincennes, Ind., 13½ N. Second St.  
Wheeling, W. Va., Mutual Savings Bank Bldg.  
Wichita, Kas., Barnes Bldg., E. Douglas Ave.  
Worcester, Mass., 405 Main St.  
Youngstown, Ohio, 338½ W. Federal St.

The locations of many of the recruiting offices, especially in the smaller cities, change frequently, but the new locations can always be easily located by inquiry.

## CHAPTER XII.

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### THE ARMY.

THE MILITARY EDUCATIONAL SYSTEM OF THE ARMY.—RANK AND PRECEDENCE OF OFFICERS AND NON-COMMISSIONED OFFICERS.—APPOINTMENTS AND PROMOTIONS.—MILITARY DIVISION AND DEPARTMENTS.—AUTHORIZED STRENGTH.

No attempt can be made in this volume to give a brief history of the Army of the United States, or even a condensed outline of that organization. It is believed, however, that a very condensed statement of those things pertaining to the Army which seem uppermost in the mind of the civilian, or the embryo soldier, would be of especial aid to a large number of young men who are contemplating a military career.

A study of the subjects selected will give a pretty thorough idea of the military system. The information is taken from War Department publications, and is authentic.

The heading, "The Military Educational System of the Army," will be of interest to those wholly uninformed as to the means and methods of acquiring efficiency in the military profession as practiced in our Army. The greater part of this educational system has been the growth and adoption of recent years and tends to show the spirit of progressiveness permeating every branch and arm of the Service.

### THE MILITARY EDUCATIONAL SYSTEM OF THE ARMY.

The military educational system of the Army comprises the following:

1. The Military Academy at West Point for the education of cadets.
2. Post schools for the instruction of enlisted men.
3. At each military post a garrison school for the instruction of officers in subjects pertaining to the performance of their ordinary duties.
4. Service schools—
  - a.* The Army War College, Washington, D. C.
  - b.* The Army Staff College, Fort Leavenworth, Kas.
  - c.* The Coast Artillery School, Fort Monroe, Va.
  - d.* The Engineer School, Washington Barracks, D. C.
  - e.* The Mounted Service School, Fort Riley, Kas.
  - f.* The Army Medical School, Washington, D. C.
  - g.* The Army Signal School, Fort Leavenworth, Kas.
  - h.* The Army School of the Line, Fort Leavenworth, Kas.
  - i.* The School for Bakers and Cooks, Washington Barracks, D. C.
  - j.* The School for Bakers and Cooks, the Presidio of San Francisco, Cal.
  - k.* The Army Field Engineer School, Fort Leavenworth, Kas.

5. The military department of civil institutions at which officers of the Army are detailed under the provisions of law.

The detail of officers at these institutions is announced, and the regulations governing the courses of instruction therein are issued, in orders from the War Department.

#### RANK AND PRECEDENCE OF OFFICERS AND NON - COMMISSIONED OFFICERS.

Military rank is that character or quality bestowed on military persons which marks their station and confers eligibility to exercise command or authority in the military service within the limits prescribed by law. It is divided into degrees or grades, which mark the relative positions and powers of the different classes of persons possessing it.

It is generally held by virtue of office in an arm of the Service, corps, or department, but may be conferred independently of office, as in the case of retired officers and those holding brevet rank. If, upon marches, guards, or in quarters, different corps of the Army happen to join or do duty together, the officer highest in rank of the line of the Army, Marine Corps, organized Militia, or Volunteers, by commission, there on duty or in quarters, shall command the whole and give orders for what is needful in the Service, unless otherwise specially directed by the President, according to the nature of the case.

Officers of the organized Militia of the several States, when called into the service of the United States, shall, on all detachments, courts-martial, and other duty, wherein they may be employed in conjunction with the regular or volunteer forces of the United States, take rank next after all officers of the like grade in said regular forces, and shall take precedence of all officers of the Volunteers of equal or inferior rank, notwithstanding the commissions of such Militia officers may be older than the commissions of the said officers of the regular forces of the United States.

The following are the grades of rank of officers and non-commissioned officers:

1. Lieutenant-general.
2. Major-general.
3. Brigadier-general.
4. Colonel.
5. Lieutenant-colonel.
6. Major.
7. Captain.
8. First lieutenant.
9. Second lieutenant.
10. Veterinarian, cavalry, and field artillery.
11. Cadet, United States Military Academy.

12. (a) Sergeant-major, regimental; sergeant-major, senior grade, Coast Artillery; (b) master electrician, Coast Artillery; master signal electrician; (c) engineer, Coast Artillery; (d) electrician sergeant, first class, Coast Artillery.
13. Ordnance sergeant; post commissary sergeant; post quartermaster sergeant; sergeant, first class, Hospital Corps; first-class signal sergeant; electrician sergeant, second class, Coast Artillery; master gunner, Coast Artillery.
14. Quartermaster sergeant and commissary sergeant, regimental; chief musician.
15. Sergeant - major, squadron and battalion; sergeant-major, junior grade, Coast Artillery; color sergeant; chief trumpeter; principal musician; battalion quartermaster sergeant, engineers and field artillery.
16. First sergeant; drum-major.
17. Sergeant; quartermaster-sergeant, company; stable sergeant
18. (a) Corporal, (b) fireman, Coast Artillery.

In each grade and sub-grade, date of commission, appointment, or warrant determines the order of precedence, except as above noted.

#### APPOINTMENTS AND PROMOTIONS.

Appointment to the grade of brigadier-general is usually made by selection from the Army, and usually from the colonels. The President, however, may appoint anyone he wishes, even a private soldier. Within recent years appointments have been made to this grade from the Volunteers.

Promotions in established staff corps and departments are limited to officers holding permanent appointments therein and to include the grade of colonel will be made by seniority, subject to the examination required by law.

Promotions in the line of the Army to include the grade of colonel, in each arm of the Service, will be made by seniority, subject to the required examinations.

Surgeons of the Army enter the service, subject to the examination prescribed by law, with the rank, pay, and allowances of a first lieutenant of cavalry. After three years' service, they receive the rank, pay, and allowances of a captain of cavalry.

Chaplains enter the Army with the rank, pay, and allowances of a first lieutenant, mounted. They are commissioned officers. After seven years' service, they receive the rank, pay, and allowances of a captain, mounted. From time to time the President selects for promotion to the grade of major chaplains having not less than ten years' service in the grade of captain and who have been commended as worthy of special distinction for exceptional efficiency. The number so promoted cannot at any time exceed fifteen.

No candidate can be appointed chaplain unless he is a regularly ordained minister of some religious denomination; is in good standing in such denomination; is recommended for appointment by some authorized ecclesiastical body, or by not less than five accredited ministers of the same; is not over forty years of age, and passes a satisfactory examination as to his moral, mental, and physical qualifications.

Oaths of office of officers of the Army will be taken before some officer who is authorized by the law of the United States or by the local municipal law to administer oaths; before the judge-advocate of a department or of a court-martial, or before the trial officer of a summary court. Officers of the Army other than those above specified are not authorized to administer such oaths.

All officers below the rank of major are examined, mentally and physically, for promotion. In the Medical Corps the majors are also examined.

All notices of appointment and promotions are issued by the War Department through the office of the Adjutant General of the Army.



## MILITARY DIVISION AND DEPARTMENTS.

For purposes of administration, the United States and island possessions are divided into territorial divisions and departments, and commanders are assigned by the President.

The commander of a territorial division or department commands all the military forces of the Government within its limits, whether of the line or staff, which are not excepted from his control by the War Department. The Army War College, the Army Staff College, the Engineer School, the Coast Artillery School, the School of Submarine Defense, the Army School of the Line, the Army Signal School, and the Mounted Service School in all that pertains to the courses of instruction or their separate organizations and administration as schools, the Military Academy, the Army Medical School at Washington, D. C., the arsenals, the general depots of supplies, the general Service recruiting stations, the general recruit depots, the United States Military Prison and any branch thereof, general hospitals, such permanent fortifications as may be in process of construction, and officers employed on special duty under the Secretary of War, are excepted from control of such commanders. But in the matter of trials by general court-martial all officers and enlisted men stationed within a department remain, notwithstanding the exemptions of this regulation, under the jurisdiction of the department commander, to whom charges will be forwarded through the usual channels.

A division is generally commanded by a major-general, a department by a major-general or brigadier-general.

The following are the territorial division and departments of the United States and its dependencies:

## THE PHILIPPINES DIVISION.

Embraces the Department of Luzon, Department of the Visayas and Department of Mindanao; headquarters at Manila, P. I.

## THE DEPARTMENT OF LUZON.

Embraces all that portion of the Philippine Archipelago lying north of a line passing southeastwardly through the West Pass of Apo, or Mindoro Strait, to the twelfth parallel of north latitude; thence east along said parallel to longitude 124 degrees, 10 minutes east of Greenwich, but including the Island of Palawan and adjacent islands, the entire Island of Masbate; thence northerly to and through San Bernardino Straits; headquarters at Manila, P. I.

## THE DEPARTMENT OF THE VISAYAS.

Embraces all islands of the Philippine Archipelago lying south of the southern boundary line of the Department of Luzon and east of longitude 121 degrees, 45 minutes east of Greenwich and north of the ninth parallel of latitude, except the islands of Mindanao, Paragua, and all islands east of the Straits of Surigao; headquarters at Iloilo, P. I.

## THE DEPARTMENT OF MINDANAO.

Embraces all islands of the Philippine Archipelago not included in other departments; headquarters at Zamboanga, P. I.

## THE DEPARTMENT OF CALIFORNIA.

Embraces the States of California and Nevada, the Hawaiian Islands and their dependencies; headquarters at San Francisco, Cal.

## THE DEPARTMENT OF COLORADO.

Embraces the States of Colorado, Utah, and the Territories of Arizona and New Mexico; headquarters at Denver, Colo.

## THE DEPARTMENT OF THE COLUMBIA.

Embraces the States of Washington, Oregon, and Idaho (except that part included in the Yellowstone National Park), and the Territory of Alaska; headquarters at Vancouver Barracks, Wash.

THE DEPARTMENT OF DAKOTA.

Embraces the States of Minnesota, North Dakota, Montana, and so much of Wyoming and Idaho as is included in the Yellowstone National Park; headquarters at St. Paul, Minn.

THE DEPARTMENT OF THE EAST.

Embraces the New England States, New York, New Jersey, Pennsylvania, Delaware, Maryland, District of Columbia, West Virginia, Virginia, the Island of Porto Rico and the islands and keys adjacent thereto; headquarters at Governor's Island, N. Y.

THE DEPARTMENT OF THE GULF.

Embraces the States of North Carolina, South Carolina, Tennessee, Georgia, Florida, Alabama, Louisiana, and Mississippi; headquarters at Atlanta, Ga.

THE DEPARTMENT OF THE LAKES.

Embraces the States of Wisconsin, Michigan, Illinois, Indiana, Ohio, and Kentucky; headquarters at Chicago, Ill.

THE DEPARTMENT OF THE MISSOURI.

Embraces the States of Missouri, Iowa, Nebraska, South Dakota, Wyoming (except that part included in the Yellowstone National Park), and Kansas; headquarters at Omaha, Neb. .

THE DEPARTMENT OF TEXAS.

Embraces the States of Texas, Arkansas, and Oklahoma; headquarters at San Antonio, Texas.

AUTHORIZED STRENGTH OF THE ARMY.

	Ma- jor- Gen- erals.	Brig- adier Gen- erals.	Colo- nels.	Lieu- ten- ant Colo- nels.	Ma- jors.	Cap- tain- s.	First Lieu- ten- ants.	Sec- ond Lieu- ten- ants.	Chap- lain- s.	Total Com- mis- sioned Offic- ers.	Enlist- ed Men.
General officers.....	6	15	5	7	10	..	..	..	..	21	..
Adjutant General's Department.....	1	1	3	4	9	..	..	..	..	24	..
Inspector General's Department.....	..	1	2	3	6	..	..	..	..	17	..
Judge-Advocate General's Department.....	..	1	6	9	20	60	..	..	..	12	200
Quartermaster's Department.....	..	1	3	4	9	27	..	..	..	96	200
Subsistence Department.....	..	1	15	21	102	112	*401	..	..	44	..
Medical Department.....	..	1	3	4	20	25	..	..	..	*652	..
Pay Department.....	..	1	3	4	20	25	..	..	..	53	..
Corps of Engineers.....	..	1	10	16	32	43	43	43	1	189	2,002
Ordnance Department.....	..	1	6	9	19	25	25	..	..	85	720
Signal Corps.....	..	1	1	2	6	18	18	..	..	46	1,212
Bureau of Insular Affairs.....	..	1	..	..	1	..	..	..	..	2	..
Fifteen regiments of Cavalry.....	..	..	15	15	45	225	225	225	15	765	12,775
Six regiments of Field Artillery.....	..	..	6	6	12	66	78	62	6	236	5,220
Coast Artillery Corps.....	..	1	14	14	42	210	210	167	14	672	19,321
Thirty regiments of Infantry.....	..	..	30	30	90	450	450	450	30	1,530	25,231
Porto Rico Regiment of Infantry.....	..	..	..	..	..	11	10	10	1	32	576
Military Academy.....	..	..	4	2	..	..	..	..	..	6	500
Recruiting parties, recruit depots, and unassigned recruits.....	..	..	..	..	..	..	..	..	..	..	8,000
Service School detachments.....	..	..	..	..	..	..	..	..	..	..	546
United States Military Prison guards.....	..	..	..	..	..	..	..	..	..	..	320
Indian Scouts.....	..	..	..	..	..	..	..	..	..	..	75
Total Regular Army.....	7	27	123	146	423	1,272	1,460	957	67	4,482	76,898
Additional force: Philippine Scouts.....	..	..	..	..	..	52	64	64	..	180	5,732
Grand total.....	7	27	123	146	423	1,324	1,524	1,021	67	4,662	82,630

\*Includes 228 first lieutenants of the Medical Reserve Corps on active duty.

†Under the act of Congress approved March 1, 1887 (24 Stat. L. 435), the enlisted men of the Medical Department (Hospital Corps) are not to be counted as part of the strength of the Army. The authorized strength of the Hospital Corps is 3,500 enlisted men.

## CHAPTER XIII.

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### A FEW WORDS FROM A SOLDIER'S DICTIONARY.

**B-ACHE**—To complain.

**BEANS**—The commissary sergeant.

**BEAN-SHOOTER**—A commissary officer.

**BELLY-ACHE**—To complain. (See B-ache.)

**BLACK STRAP**—Liquid coffee.

**BLIND**—Sentenced by a court-martial to forfeiture of pay, without confinement.

**BOB-TAIL**—A dishonorable discharge, or a discharge without honor. The word came from a former custom in the Service of cutting off the bottom of the discharge, the "character" part, when a soldier had been sentenced to dishonorable dismissal.

**BOB-TAILED**—Dishonorably discharged. Leaving the Service without "character."

**BONE**—To study; to try; to earnestly seek.

**BOOT-LICK**—To cultivate favor by sycophantic methods; an obsequious flatterer; a parasite.

**BOW-LEGS**—A cavalryman.

**BUCKING FOR ORDERLY**—The act of cleaning clothing and equipment preparatory to going on guard with the view of being adjudged by the adjutant or inspecting officer the neatest man at guard-mounting, and consequently being selected as orderly for the commanding officer. Competing for orderly.

**BUCK-PRIVATE**—A term sometimes used in referring to a private soldier.

**BUNK FATIGUE**—Lying on one's bunk during fatigue hours; having no duty to perform.

**BUNKIE**—The soldier occupying the adjoining bunk or bed; a soldier who shares the same shelter as a comrade.

**BUST**—To reduce a non-commissioned officer to the grade of private.

**BUTTER CHIPS**—The mythical checks which recruits are often instructed to demand of the "top sergeant."

- BUTCHER**—The company barber.
- BUTTON STICK**—A flat piece of metal or wood having a narrow slit in the center into which the buttons are run when being scoured with metal polish. The stick protects the cloth from the polish.
- CANNED HORSE**—Canned beef.
- CANTEEN CHECKS**—Brass checks of various denominations, having a purchasing value at the post canteen.
- CHASING PRISONERS**—On guard over prisoners at work.
- CHIEF**—Name by which the chief musician of the band is frequently called by the enlisted men.
- CIT**—A civilian. (See Juniper.)
- CITS**—Civilian clothes.
- C. O.**—The commanding officer. (See K. O.)
- COFFEE-COOLER**—A soldier who seeks and performs duties that excuse him from the usual or strictly military duties of a soldier.
- COFFEE-MONEY**—Money paid soldiers, when traveling, *in lieu* of their regular coffee ration.
- COLD FEET**—Lack of courage; fear; afraid.
- COMMISSARIES**—Food-stuffs; groceries; the articles issued by the commissary department.
- COME-AND-GET-IT**—A soldier-cook's words to notify his comrades that the meal is prepared and ready to serve.
- COMMISSION-BUCKER**—An enlisted man who is trying for a commission as a second lieutenant.
- COOK'S POLICE**—Men detailed to assist the cook in the kitchen.
- CRACKER LINE**—The line of communication with the base of commissary supplies; sometimes applied to the transportation used in bringing up the commissary supplies or rations.
- CRAWL**—A mild form of reprimand. (See Jump.)
- DADIAC**—A liquid polish used in polishing leather equipment. It was well known to the "Old Army," but is now little used. It is also used as a verb to designate the act of polishing leather equipment.
- DOG-ROBBER**—An enlisted man who works for an officer. It is an offensive term. (See Striker.)

DOUGH-BOY—An infantryman. (See Mud-splasher.)

DOUGH-PUNCHER—The post baker.

DUFF—A plum pudding.

DUTY SERGEANT—A company sergeant other than the first sergeant or the company quartermaster sergeant.

FATIGUE—Work; any duties of the nature of manual labor.

FEED—Food; rations victuals; to eat.

FILE—A man; an individual; a number on the lineal list.

FINALS—Money due a soldier from the Government at the date of his discharge.

FOGY—Five years' service; the increase in pay for five years' service.

FOUND—Failed; deficient in something, especially in an examination.

FRENCH LEAVE—Unauthorized absence.

GOAT—The junior officer in the post or regiment. (See Shavey.)

GOATY—Inexperienced; unsophisticated; awkward.

GUARD-HOUSE LAWYER—An enlisted man who is constantly giving free advice, especially to recruits, as to their rights, etc.

GUN—A general term designating the arm supplied a soldier; a rifle, carbine, or revolver.

HAND-SHAKER—Same as "coffee-cooler."

HARDTACK—Hard bread; the crackers issued by the commissary department as a part of the field ration; usually a very hard cracker.

HEELBALL—A wax-like substance used in polishing leather and the stocks of rifles.

HERO-STORIES—Tales of reminiscences told by men returning from field service which are considered of doubtful veracity.

HIKE—A march; to march.

HOBO—The provost-sergeant.

HOLD-UP-YOUR-HAND—The act of enlisting. (See Take On.)

HOLY JOE—The chaplain. (See Sky Pilot.)

HOP—A dance.

"How"—The Army toast.

I. C.—Inspected and condemned.

JAWBONE—On credit.

JUMP—A mild form of reprimand.

JUNIPER—A civilian; any person not in the military service. (See Cit.)

KITCHEN POLICE—(See Cook's Police.)

K. O.—The commanding officer.

LANCE-JACK—A lance corporal; an acting corporal.

LEATHER-POUNDER—A cavalryman; a mounted soldier.

LOCKER—A box or closet in which soldiers keep their extra clothing.

LONG TOM—The infantry rifle.

MAJOR—Name by which the sergeant-major is called by the enlisted men.

MESS HALL—The room in which a company or other organization eats its meals.

MEX—Half. Comes from the comparative value of Mexican silver money with United States money.

MILL—The guard-house; a cell or room in which soldiers are confined when serving punishment for the commission of military offenses.

MUD-SPLASHER—An infantryman; a dismounted soldier. (See Dough-boy.)

MULE-SKINNER—A teamster.

NON-COM—A non-commissioned officer.

O. D.—The officer of the day.

OFFICERS' LINE—The quarters or houses where the officers and their families live.

OFFICERS' ROW—Same as Officers' Line.

OLD ISSUE—An old soldier.

OLD MAN—The commanding officer. (See The Old Man.)

OLD FILE—An old officer; sometimes applied to an old soldier.

ON OFFICIAL TERMS—Not on speaking terms, except officially.

OPENERS—A laxative.

ORDERLY BUCKER—A soldier who tries for orderly to the commanding officer when going on guard. (See Bucking for Orderly.)



- ORDERLY-ROOM—The company, troop, or battery office.
- PILLS—The doctor. Sometimes applied to the hospital steward.
- PLUM DUFF—Plum pudding. (See Duff.)
- POLICE—To cleanse; to free from dirt; to clean up around the barracks or quarters.
- PULL-THROUGH—A string used for pulling rags through the bore of a rifle.
- PUNK—Light bread.
- Q. M.—The quartermaster.
- QUARTERS—The barracks; the houses where the officers live.
- RANKED OUT—Compelled to vacate quarters to a senior.
- REAR—The water-closet, or toilet-room.
- RED TAPE—The strict observance of form; excessive observance of form and routine in official matters.
- REGIMENTAL MONKEY—The drum-major.
- RE-UP—To re-enlist at once.
- ROOKIE—A raw recruit.
- ROOM ORDERLY—A soldier detailed to clean the barracks or squad-room. His duties are to build the fires, fill the lamps, and see that everything is in order during his tour of duty.
- SAND RAT—An officer or soldier on duty behind the targets at rifle practice.
- SAWBONE—The doctor.
- SHAVEY, or SHAVE-TAIL—An officer just appointed to the service; usually applied to the newest second lieutenant.
- SHUTTERS—An astringent.
- SHORT MONTH—Every other month; so called because 25 cents is taken from the soldier's pay for the support of the National Soldiers' Home at Washington.
- SKY PILOT—The chaplain.
- SKY SCOUT—The chaplain.
- SINKERS—Dumplings.
- SLAPJACKS—Pancakes.
- SLUM—Irish stew; a stew made of meat, potatoes, and onions.
- SLUMGULLION—Same as Slum.

SOAPSUDS ROW—The laundresses' quarters.

SOLDIER—To shirk.

SOUNDING-OFF—Voluble language of doubtful veracity.

SOW-BELLY—Bacon.

STARS AND STRIPES—Beans.

STRIKER—A soldier who works for an officer. (See Dog-robber.)

TAKE ON—To enlist.

THE OLD MAN—Sometimes used in referring to the commanding officer. Soldiers frequently apply the term to their company commander.

TOAD-STICKER—A sword.

TO TAKE ANOTHER BLANKET—See Take On.

TOP SERGEANT—The first sergeant.

TRIPOLI—A fine, gritty powder, which, when mixed with vinegar or alcohol, is used for polishing brass buttons and brass parts of equipment.

TURN OUT—To appear outside the barracks for police or other duties.

VAMOOSE—Get away; get out.

WAGON SOLDIER—A field artilleryman; formerly a light battery-man.

WIND-JAMMER—A field musician; a trumpeter.

WHITE MONEY—Silver money. The word is used by soldiers in contradistinction from canteen checks, which are usually made of brass, and when so made are called "yellow money."

WITHIN THE LIMITS—Within the period which the War Department allows an enlisted man to re-enlist in order to get his re-enlisted pay; three months from date of discharge.

WOOD-BUTCHER—The company artificer.

YEAR AND A BUTT—A year and a fraction of a year. A soldier who is started on the second year of a three-year enlistment would say that he had "a year and a butt" yet to serve.

YELLOW-LEGS—Cavalrymen.

YOUNGSTER—A young officer in point of years of service; usually a second lieutenant.

## CHAPTER XIV.

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### MILITARY SCHOOLS AND COLLEGES.

MILITARY INSTRUCTION. — DISTINGUISHED INSTITUTIONS, APPOINTMENT OF HONOR GRADUATES. — CLASSIFICATION OF INSTITUTIONS. — LIST OF INSTITUTIONS HAVING ARMY DETAILS.

Congress has authorized the Secretary of War to detail for duty as professors of military science and tactics one hundred officers of the Regular Army to be equitably distributed among the educational institutions of the different States and Territories.

### MILITARY INSTRUCTION.

It is the duty of these officers to enforce proper military discipline at all times when students are under military instruction and to give instruction in Infantry Drill Regulations, Small-Arms Firing Regulations, Field Service Regulations, and the Manual of Guard Duty. The instruction must be practical. Theoretical work on these and other military subjects may be undertaken if the students have sufficient time and after they have become efficient in the practical work.

Infantry drill and training is considered paramount. Instruction in artillery and other branches of the Service will not be undertaken unless the instruction in infantry tactics has reached a satisfactory plane of efficiency.

The main object of the military instruction given at these institutions is to qualify students to become efficient officers of infantry, Volunteers or Militia.

Pupils under military instruction at civil institutions of learning are organized into companies, battalions, and regiments of infantry, the organization, drill, and administration of which must conform, as far as possible, to those of the Army.

The rules and orders relating to the organization and government of the military students, the appointment, promotion, and change of student officers, and all other orders affecting the military department, excepting those relating to routine duty, are made and promulgated by the Army officer on duty at the school.

Students are required to appear in uniform on occasions of ceremony, execution of drills, guard duty, and when receiving any other practical military instruction.

The theoretical instruction, where time permits, consists of talks and lectures covering the essential details of the subjects a company officer of infantry, Volunteers or Militia, should know.

These institutions are inspected annually by an officer of the General Staff of the Army, the inspections taking place between April 1st and June 1st of each year.

#### DISTINGUISHED INSTITUTIONS.

“The President of the United States authorizes the announcement that an appointment as second lieutenant in the Regular Army will be awarded annually to an honor graduate of each of the institutions designated as ‘Distinguished Institutions’ for that year, provided that sufficient vacancies exist after the appointment of the graduates of the United States Military Academy at West Point and the successful competitors in the annual examination of enlisted men. By the term ‘honor graduate’ is understood a graduate whose attainments in scholarship have been so marked as to receive the approbation of the president of the school or college, and whose proficiency in military training and knowledge and in-

telligent attention to duty have merited the approbation of the professor of military science and tactics."—G. O., 231, W. D., 1910.

Institutions having officers detailed to them are supplied with arms, ammunition, equipment, and military text-books by the War Department.

#### CLASSIFICATION OF INSTITUTIONS.

They are classified annually by the officers of the General Staff who make the inspections, according to the following plan of classification:

Class A. Schools or colleges whose organization is essentially military, whose students are habitually in uniform, in which military discipline is constantly maintained, and one of whose leading objects is the development of the student by means of military drill, and by regulating his daily conduct according to the principles of military discipline.

Class B. State land grant or agricultural colleges established under the provisions of the act of Congress of July 2, 1862, and which are required by said act to include military tactics in their curriculum.

Class B A. Any college of Class B which attains the state of efficiency required for schools or colleges of Class A shall be classed as B A.

Class C. All schools or colleges not essentially military which maintain a course of military instruction equal or superior in character and hours of instruction to that required of institutions of Class B.

Class D. All other schools or colleges at which officers of the Army may be detailed and which do not maintain a course of military instruction equal to that required of institutions of Class B, and at which such instruction is regarded as nominal.

Institutions, not exceeding ten, whose students have exhibited the greatest application and proficiency in military training and knowledge during the year are designated annually as "Distinguished Institutions." An asterisk against the name of an institution indicates that it is one of those that have been so designated, the year or years in which it was designated being placed after the name of the institution.

LIST OF INSTITUTIONS HAVING ARMY DETAILS.

State.	Name of Institution.	Class.
Arizona	University of Arizona, Tucson	C
Arkansas	Ouachita College, Arkadelphia	C
	University of Arkansas, Fayetteville	B
California	University of California, Berkeley	B
	Mount Tamalpais Military Academy, San Rafael	A
	The Harvard School, Los Angeles, Cal.	
Colorado	State Agricultural College of Colorado, Ft. Collins	B
Delaware	Delaware College, Newark	B
Florida	University of Florida, Gainesville	B
Georgia	Georgia Military College, Milledgeville	C
	North Georgia Agricultural College, Dahlonega	BA
	Gordon Institute, Barnesville	C
	University of Georgia, Athens	B
	Georgia Military Academy, College Park, Ga.	A
Hawaii Territory	The Kamehameha Schools, Honolulu	A
Idaho	University of Idaho, Moscow	B
Illinois	University of Illinois, Urbana	B
Indiana	Concordia College, Fort Wayne	A
	University of Notre Dame, Notre Dame	
	Purdue University, Lafayette	B
	*Culver Military Academy, Culver (1906, 1907, 1908, 1909)	A
Iowa	Simpson College, Indianola	C
	State University of Iowa, Iowa City	C
Kansas	Kansas State Agricultural College, Manhattan	B
Kentucky	State University, Lexington	B
	Kentucky Military Institute, Lyndon	A
Louisiana	Louisiana State University and Agricultural and Mechanical College, Baton Rouge	B
Maine	University of Maine, Orono	B
Maryland	*St. John's College, Annapolis (1905, 1909, 1910)	A
	*Maryland Agricultural College, College Park	BA
Massachusetts	Massachusetts Agricultural College, Amherst	B
	Massachusetts Institute of Technology, Boston	B
Michigan	Michigan Agricultural College, Lansing	B
Minnesota	*College of St. Thomas, St. Paul (1908-1909)	A
	*Shattuck School, Faribault (1904, 1906, 1907, 1908, 1909)	A
	University of Minnesota, Minneapolis	B
Mississippi	Mississippi Agricultural and Mechanical College, Agricultural College	BA
Missouri	Drury College, Springfield	C
	Wentworth Military Academy, Lexington	A
	Kemper Military School, Boonville	A
	University of Missouri, Columbia	B
Nebraska	University of Nebraska, Lincoln	B
Nevada	University of Nevada, Reno	B
New Hampshire	New Hampshire College of Agriculture and the Mechanic Arts, Durham	B
New Jersey	Rutgers Scientific School, New Brunswick	B

## LIST OF INSTITUTIONS HAVING ARMY DETAILS—CON.

State,	Name of Institution.	Class.
New Mexico.....	New Mexico College of Agriculture and Mechanic Arts, Agricultural College.....	C
	*New Mexico Military Institute, Roswell (1909-1910)....	A
New York.....	College of St. Francis Xavier, New York City.....	C
	*St. John's School, Manlius (1904, 1905, 1906, 1907, 1908, 1909, 1910).....	A
	Cornell University, Ithaca.....	B
	De La Salle Institute, New York City.....	C
	New York Military Academy, Cornwall-on-Hudson.....	A
	Riverview Academy, Poughkeepsie.....	A
North Carolina...	North Carolina College of Agriculture and Mechanic Arts, West Raleigh.....	B
North Dakota...	North Dakota Agricultural College, Fargo.....	B
Ohio.....	Miami Military Institute, Germantown.....	A
	Ohio State University, Columbus.....	B
	Ohio Northern University, Ada.....	C
	Wilberforce University, Wilberforce (Colored).....	C
	Ohio Wesleyan University, Delaware.....	C
Oklahoma.....	Oklahoma Agricultural College, Stillwater.....	B
	Oklahoma University Preparatory School, Tonkawa.....	C
Oregon.....	Oregon Agricultural College, Corvallis.....	B
Pennsylvania.....	Grove City College, Grove City.....	C
	Girard College, Philadelphia.....	C
	*Pennsylvania Military College, Chester (1904, 1905, 1906, 1907, 1908, 1909, 1910).....	A
	Pennsylvania State College, State College.....	B
Porto Rico.....	University of Porto Rico, Rio Piedras.....	C
Rhode Island.....	Rhode Island State College, Kingston.....	B
South Carolina...	Clemson Agricultural College, Clemson College.....	BA
	*The Citadel, Charleston (1904, 1905, 1908, 1909, 1910)..	A
South Dakota....	South Dakota State College of Agriculture and Mechanic Arts, Brookings.....	B
Tennessee.....	Sewanee Military Academy, Sewanee.....	C
	University of Tennessee, Knoxville.....	B
	Columbia Military Academy, Columbia.....	A
Texas.....	The Peacock Military College, San Antonio.....	A
	West Texas Military Academy, San Antonio.....	A
	*Agricultural and Mechanical College of Texas, College Station (1910).....	BA
Utah.....	Agricultural College of Utah, Logan.....	B
Vermont.....	*Norwich University, Northfield (1904, 1905, 1906, 1907, 1908, 1909, 1910).....	A
	University of Vermont and State Agricultural College, Burlington.....	B
Virginia.....	Fork Union Military Academy, Fork Union.....	C
	*Virginia Military Institute, Lexington (1904, 1905, 1906, 1907, 1908, 1909, 1910).....	A
	Virginia Polytechnic Institute, Blacksburg.....	BA
Washington.....	State College of Washington, Pullman.....	B
	University of Washington, Seattle.....	B



LIST OF INSTITUTIONS HAVING ARMY DETAILS—CON.

State.	Name of Institution.	Class.
West Virginia.....	West Virginia University, Morgantown.....	B
Wisconsin.....	University of Wisconsin, Madison.....	B
	St. John's Military Academy, Delafield.....	A
Wyoming.....	University of Wyoming, Laramie.....	B

Officers are detailed to the above institutions under the provisions of Section 1225, R. S., as amended by the acts of Congress approved September 26, 1888, January 13, 1891, and November 3, 1893.

The following institutions have

OFFICERS DETAILED UNDER SECTION 1260, R. S., AND  
THE ACTS OF CONGRESS APPROVED MAY 4, 1880;  
AUGUST 6, 1894; FEBRUARY 26, 1901, AND  
APRIL 21, 1904.

State.	Name of Institution.	Class.
California.....	Hitchcock Military Academy, San Rafael.....	A
	St. Matthew's Military School, Burlingame.....	
Missouri.....	Blees Military Academy, Macon.....	
Texas.....	Carlisle Military Academy, Arlington.....	

## CHAPTER XV.

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### SPECIMEN QUESTIONS.

The following specimen list of questions has been published by the Adjutant General's office as a sample for the information of candidates: This list of questions was asked in an examination in July, 1908. It is not likely that any of them will be asked again, but the list gives an idea of the scope of the examination. The candidate should be prepared to answer anything which can legitimately come under the head of the subjects covered.

### ARITHMETIC.

Each question values 10; total value, 50.

1. At what rate will \$576 earn \$86.40 in 2 years 6 months?
2. A garrison consists of 60 cavalrymen, 90 artillerymen, 150 engineers, and 225 infantrymen. A guard detail of 70 men is required. What number should each organization properly furnish?
3. A square parade-ground is to contain 140 acres, 100 square rods. How long is a side?
4. Required the dimensions in inches of a cube that shall have the same capacity as a box 2 feet 8 inches long, 2 feet 3 inches wide, and 1 foot 4 inches high.
5. What is the amount of \$100 at 5 per cent compound interest for 9 years? (Use logarithms and geometrical progression.)
6. If 18 men can dig a trench 30 yards long in 24 days of 8 hours each, how many men will it need to dig a trench 60 yards long, in 64 days of 6 hours each?
7. At what time between 11 and 12 o'clock are the hands of a clock opposite each other?

8. (a) What is the cost of painting a spire, in the form of a quadrangular pyramid, each side of whose base is 18 feet and whose slant height is 80 feet, at 50 cents per square yard?
- (b) What are the cubic contents of a triangular pyramid the sides of whose base are 11, 13, and 20 feet and whose altitude is 36 feet?
9. By logarithms, find the value of:
- (a)  $(.07396)^5$ .
- (b)  $\sqrt[3]{.035063}$ .
10. Solve by logarithms:  $\frac{.5134}{8.709 \times .0946}$

ALGEBRA.

Each question values 10; total value, 50.

1. Clear of fractions and reduce:

$$\left. \begin{array}{l} X^4 - B^4 \\ X^2 + 2BX + B^2 \end{array} \right\} \left\{ \begin{array}{l} X^2 + BX \\ X - B \end{array} \right.$$

2. A merchant bought a bill of goods, which he sold for \$56.00 and thereby gained a per cent equal to the number of dollars which the goods cost him. Required: The cost of goods.
3. The sum of two numbers is 40. If three times the smaller be subtracted from two times the greater, the remainder will be 15. What are the numbers?
4. Three years ago A's age was  $\frac{1}{2}$  of B's, and 9 years hence it will be  $\frac{5}{8}$  of it. What is the age of each?
5. Upon a grocer being asked what he paid for eggs, he replied: "Six dozen cost as many cents as I can buy eggs for 32 cents." What was the price per dozen?
6. What fraction will be doubled when the numerator is multiplied by 4 and 3 is added to the denominator, but will be halved when 2 is added to the numerator and the denominator is multiplied by 4?

7. A gentlemen purchased two square lots of ground for \$300. Each of them cost as many cents per square rod as there were rods in a side of the other. The sum of the perimeters of both was 200 rods. What was the cost of each?
8. Divide 100 into two parts so that the sum of their square roots is 14.
9. A regiment in garrison, consisting of a certain number of companies, receives orders to send 216 men on duty, each company to furnish an equal number. Before the order is executed, three companies leave, and it is then found that each remaining company has to send 12 men additional to make up the complement, 216. Required; (a) Number of companies in regiment; (b) number of men sent by each remaining company.
10. A regiment of troops was drawn up in a solid square with a certain number on a side, when it was found that there were 295 men left. Upon arranging the regiment so that there were 5 men more on each side, no more men were left. How many men were there in the regiment?

### GEOMETRY.

Each question values 10; total value, 50.

1. An inscribed angle is measured by what? Demonstrate. (One case will be sufficient.)
2. A straight line perpendicular to a radius at its extremity bears what relation to the circle? Demonstrate.
3. The three perpendiculars from the vertices of a triangle to the opposite sides meet in the same point. Demonstrate.
4. (a) How would you inscribe a regular hexagon in a given circle?  
(b) Assuming the construction as made, demonstrate.
5. In any right triangle, the straight line drawn from the vertex of the right angle to the middle of the hypotenuse equals  $\frac{1}{2}$  of the hypotenuse. Demonstrate.

6. If the circumference of a circle be divided into any number of equal parts, the chords joining the successive points of division form a regular polygon inscribed in the circle; and the tangents drawn at the points of division form a regular polygon circumscribed about the circle. Demonstrate.
7. What is the area of a regular polygon? Demonstrate that this formula is true.
8. Of all triangles formed with the same two given sides, that in which these sides are perpendicular to each other is the maximum. Demonstrate.
9. Through any given straight line an infinite number of planes may be passed. Demonstrate.
10. The lateral area of a cone of revolution is equal to what? Demonstrate.

TRIGONOMETRY.

Each question values 10; total value, 50.

1. A railroad 463 feet 6 inches in length has a uniform grade of 3 degrees. Find the total rise.
2. An engineer built a road and found that it rose 117 feet per mile. Find the grade.
3. Two inaccessible objects lie in a direct line from the bottom of an 120-foot tower and are on the same horizontal plane as its base. From the top of the tower, the angle of depression of the nearer is found to be 57 degrees, and that of the farther 25 degrees and 30 minutes. What is the distance between the objects?
4. In endeavoring to find the distance from a tree A to another tree B, direct measurement being prevented by a pond, the distances of a point C from each of the trees were found to be as follows:

CB, 672 yards.  
CA, 588 yards.

The angle ACB was found to be 55 degrees 40 minutes.  
Required: The distance between the two trees.

5. A tower 103 feet high casts a shadow upon the horizontal plane of its base 51.5 feet in length. Find the angle of elevation of the sun.

56150—08—2

6. A ladder 38 feet in length, placed in a street, touches a point 29 feet 6 inches in height on a vertical wall on one side of the street, or a point 28 feet in height on the opposite wall. Required: The width of the street.

(Solutions other than trigonometrical will not be considered.)

7. From the top of a tower 80 feet in height the angle of elevation to the top of a second tower on the same horizontal plane is  $28^{\circ} 15'$ , and the angle of depression to its foot is  $33^{\circ} 08'$ . Find the distance between their bases, that between their tops, and the height of the second tower.
8. The angles of elevation of the top of a flagstaff from two points 1,237 feet apart, on a horizontal straight line passing through its foot, are  $4^{\circ} 09'$  and  $26^{\circ} 29'$ . Find its height.
9. On a hill stands a tower 50 feet in height, to the top and the bottom of which the angles of elevation from a given point are  $49^{\circ} 10'$ , and  $44^{\circ} 37'$ , respectively. Find the height of the hill above that point.
10. Given:
- |                               |                     |
|-------------------------------|---------------------|
| Latitude of Sandy Hook .....  | $40^{\circ} 30' N.$ |
| Longitude of Sandy Hook ..... | $74^{\circ} 05' W.$ |
| Latitude of Queenstown .....  | $51^{\circ} 50' N.$ |
| Longitude of Queenstown.....  | $8^{\circ} 10' W.$  |

Find the length (in statute miles) of the arc of a great circle joining them.

NOTE.—The radius of the earth is 3,963 statute miles.

SURVEYING.

Each question values 10; total value, 50.

1. What is a map?  
What is a scale? Name three ways in which a scale may be stated.
2. What is a vernier scale? In regard to the manner in which read, how are verniers designated? What do you understand by the "least count" or "smallest reading"?
3. Describe Gunter's chain.  
Describe the Engineer's chain.
4. Given a chain and pins, show how you would continue a line past an obstacle by means of rectangular offsets.
5. Name the adjustments of the transit (Engineer's).
6. What are the objects to be accomplished in adjusting a wye level?
7. What are contours and what three things do they show?
8. How would you determine a true north-and-south line by means of the sun and a plumb-line?
9. State how you would make locations by intersection, using a plane table.
10. A map was reduced by photography so that its area was  $\frac{1}{4}$  of the original. The representative fraction on the original was  $\frac{1}{21120}$ .  
A graphical scale was also shown on the original. Should any change have been made in either scale on the photographic reduction? If so, what?

EXAMINATION IN ARMY REGULATIONS.

Value of each question, 5; total value, 100.

1. How is military authority exercised, and to what must punishment conform?
2. What is forbidden to superiors?
3. What is required as to courtesy, respect to superiors, etc.?
4. What is the command appropriate to each grade?

5. How is the death of an officer reported?
6. When an enlisted man is detached from his company, what paper will be made out, by whom, and where sent?
7. How are transfers of enlisted men effected?
8. When a soldier deserts, what steps are taken and by whom?
9. In how many ways may an enlisted man be discharged? Name them.
10. In case of the death of a soldier, what is the duty of his immediate commander?
11. In cavalry and infantry, what is the administrative unit? What station is the headquarters of a regiment? Upon whom does the command of a regiment devolve during the absence of the colonel?
12. Who is responsible for the discipline of the company? What constitutes discipline?
13. What is a "roster" and how kept?
14. Of whom does the Militia consist?
15. Who are the proper officers to administer oaths in the administration of the affairs of the Army?
16. To how many subjects may an official letter refer, and how will a letter be folded, who "briefs" it, and how?
17. Who have power to place officers in arrest?
18. What records are kept in a company?
19. What is the company fund, who is the custodian of this fund, and how is it handled?
20. Through what agencies is damaged property disposed of?



INTERNATIONAL LAW (*Davis*).

No.	Page.	Value.	
1	2	5	Define "international law."
2	20	5	From what principal sources is international law derived?
3	32	10	What is meant by "government," and what kinds of government are there?
4	66	10	In what ways may a State acquire territory?
5	91	15	What is meant by the "perfect rights" of a State, and name the most important perfect rights?
6	110	15	What is the Monroe Doctrine? State its political principle.
7	157	10	Distinguish between "citizenship" and "domicile."
8	250	10	How are questions of international law settled? Give proceedings, and define the different methods.
9	288	10	What is meant by the "laws of war," and what are the principal subjects treated of by the laws of war?
10	395	10	What in general are the neutral duties of a State?

## THE CONSTITUTION OF THE UNITED STATES.

No.	Article.	Value.	
1		10	What departments of government does the Constitution create?
2	I., Sec. 8	15	Name generally the powers vested in the Congress by the Constitution.
3	III., Sec. 3	5	In what does treason consist?
4	IV., Sec. 3	5	How may new States be formed, and under what restrictions?
5	V.,	5	How may the Constitution be amended?
6	VI.,	5	What does the Constitution declare to be "the supreme law of the land"?
7	Amend. 1-3-4 7-14	15	What civil rights are guaranteed by the Constitution?
8	Amend. 14-15	15	What political privileges are provided for by the Constitution?
9	I., Sec. 9 III., Sec. 2-3 Amend. 5-8	15	What protections are provided by the Constitution to persons accused of crime?
10	I., Sec. 10 Amend. 5-14	10	What protection does the Constitution give to contracts and property?

EXAMINATION IN HISTORY.

Value of each question, 5; total value, 100.

GENERAL HISTORY.

1. Of what great nations do we have the earliest authentic historical knowledge? Where were they located and of what races of men were they composed? What is the estimated antiquity of their civilization?
2. What great foreign wars first threatened Greek civilization? Give names of principal leaders on both sides, decisive battles, and approximate dates.
3. What were the "Punic Wars"? Give short description, with causes, approximate dates, leaders decisive battles, and results.
4. What were the principal causes of the decline and fall of the Roman Empire? Give the principal events leading thereto, with approximate dates.
5. Describe the feudal system. Give the causes which led to its development, the causes of its decay, and the great events leading thereto.
6. What great events occurred in the latter part of the fifteenth century, A. D., which marked the close of medieval and the beginning of modern history? Give a description of these events, with approximate dates.
7. What nation of Europe was most powerful in the early period of modern history? Who were its principal rulers and through what wars and decisive battles did it lose its prestige? Give approximate dates.
8. What was the "Thirty Years' War"? Give its dates, causes, principal leaders, and results.
9. Give a short sketch of the principal events in Europe from 1789 to 1815.
10. Give the principal wars of the world from the downfall of Napoleon to 1877, with dates, nations involved, causes, and results.

## HISTORY OF THE UNITED STATES.

1. Name the original settlements on the eastern coast of North America. When and by whom were they made?
2. In what wars were the original Colonies involved? Give their causes, principal events, and results.
3. What were the causes of the American Revolution? Explain fully the circumstances in each case.
4. Give a summary of the Revolutionary War, with leaders, campaigns, and battles, with their dates and results.
5. Describe the condition of the States at the close of the Revolutionary War, their form of government, and the causes which led to the adoption of the Constitution.
6. Give the causes of the War of 1812, or second war of independence, its principal events, with dates and results.
7. What were the causes of the Mexican War, its leaders, principal battles, with dates and results.
8. What were the causes of the Civil War? Explain each in detail.
9. Give a summary of the Civil War, with its principal battles, their dates and results, its leaders, and the results of the war.
10. Give the limits of the original States and describe the territorial expansion of the country to its present limits, giving dates and circumstances of each territorial acquisition.

## EXAMINATION IN GEOGRAPHY.

Value of each question, 5; total value, 100.

1. Name the continents or grand divisions of the earth. Which are north of the Equator? Which south? The Equator crosses which?
2. Name the oceans. Name the principal mountain ranges of the earth.
3. Name the political divisions of Europe.

4. Name the States which border the Gulf of Mexico. On the Atlantic Ocean. On the Pacific Ocean.
5. Between what States does the Ohio River flow? The Mississippi? Where does the Mississippi River rise?
6. By boat going from Duluth to Quebec, through what lakes, canals, locks, and rivers do you pass?
7. Bound the State of Colorado.
8. Name twelve of the principal cities of the United States, and name the States in which those given are situated.
9. What States and countries would you traverse going by land from Chicago, Ill.; to the Isthmus of Panama?
10. Name six of the largest of the Philippine Islands, and the capital of those islands.
11. Name the political divisions of South America.
12. Name the political divisions of North America.
13. What bounds the United States on the north? On the south?
14. Name the principal islands of the West Indies.
15. Name the countries of Europe, Asia, and Africa which border on the Mediterranean Sea.
16. Where are the Aleutian Islands?
17. In what general direction does the Gulf Stream flow? The Japanese Current?
18. Where is Hudson Bay? Bay of Fundy? Puget Sound? Gulf of Campeche?
10. Where is Mount St. Elias? Pike's Peak? Mount Rainier? Mount Chimborazo?
20. Name three great rivers of South America and three of North America. Give source and waters into which each one flows.

## ENGLISH GRAMMAR.

Value of each question indicated after number.

A. M.

No.	Value.	
1	5	Give the principal parts (present indicative, past indicative, and past participle) of the following verbs: Seek, drink, shed, awake, go, shine, lay, thrust, slay, lie (to recline).
2	15	Parse the following sentence: "Go tell the Spartans, thou that passest by, That here, obedient to her laws, we lie."
3	5	Give the plurals of the following nouns: Thief, child, sheep, index, datum, politics, cherub, genius, phenomenon, court-martial.
4	2.5	State the gender of the following words and give the word of opposite gender (masculine or feminine): Stag, executor, peacock, goose, doctor.
5	2.5	Give the possessive case, singular and plural (if any) of the following nouns: Lady, conscience, ox, Charles, son-in-law.
6	2	Give the inflections of the relative pronouns "who" and "which."
7	1.5	Give three sentences showing the use of "that" (1) as a relative pronoun, (2) as a demonstrative, (3) as a conjunction.
8	15	Write the following paragraph, correcting errors in spelling and punctuation:

Whether these unparreleled outrages furnish a sufisient plea to the spainards for there invasion. Whether we are content to find a warant for it in the natural rites and demands of civilisation It is unnecessary to discuss it is more materiel too enquire whether asuming the rite The conquest of mexico was conducted with a propper regard to the clames of humanity And hear we must admit that with all alowence for the ferosity of the age and the laksity of

its principals There are pasages which every spainard who cherishes the fain of his countrey men would be glad to see expunged from there Historey pasages not too be vindicated on the score of self defense or off necessity and which must leave a dark spot on the anals of the conquest the aztec monarchy fell by its own sub jects under thee direction of uropeen sagasity and sience had it been united It might have biden defiens to the invaiders as it was the capitol Was disevered from the rest of the countrey And the bolt which might have past of comparitively harmles had the empire been semmented by a common principle of loyilty now found its weigh into every crack and crevise of the ilcompacted fabrick and who shall lamment it's fall

## EXAMINATION.

P. M.

Mo.	Value.	
9	2	Give the general rule for the formation of the comparative and superlative degrees of adjectives.
10	2	Give the comparative and superlative forms (if any) of the following adjectives: well, outrageous, near, round.
11	2	What is an auxiliary verb? Give five verbs of this class.
12	15	Give a synopsis of the verb "to teach" in the second person plural of all the moods and tenses, active and passive voices. (Use affirmative form of conjugation only.)
13	2	What parts of speech are modified by the adverb? Give examples.
14	2	Give six pairs of correlative conjunctions.
15	1.5	Give three short sentences showing the word "but": (1) as a preposition; (2) as a conjunction; (3) as an adverb.
16	20	Correct (if wrong) the following sentences, giving reasons in each case:

*Aspirants for Commissions in the*

- (a) He feared the enemy might fall upon his men whom he saw were off their guard.
- (b) A bundle of papers was produced and such particulars as the following detailed.
- (c) It is easier said than done.
- (d) The insult was offered to my friend, he whom I loved as a brother.
- (e) Neither gold or silver are so useful as iron.
- (f) The doctor said in his lecture that fever always produced thirst.
- (g) His work is one of the best that has ever appeared.
- (h) I intended to have written you last week.
- (i) I should prefer being right than being President.
- (j) Let the able-bodied fight and they that are feeble do guard duty at home.

17

5

Analyze the following sentence:

A soldier hardened to the exposures of campaign, will probably laugh when he sees the recruit that joined last week shivering on the river bank.

## EXAMINATION IN CHEMISTRY.

No.      Weight.

- |   |    |  |
|---|----|--|
| 1 | 10 | Explain the difference between a chemical compound and a mechanical mixture.   |
| 2 | 10 | What are—<br>(a) Acids? (b) Bases? (c) Salts?  |
| 3 | 10 | What is meant by the atomic weight of an element?  |
| 4 | 10 | Given the equation—<br>$\text{H}_2\text{SO}_4 + \text{Zn} = \text{ZnSO}_4 + \text{H}_2.$<br>What is the valency of zinc? Of the radical $\text{SO}_4$ ?                                    |
| 5 | 10 | Assuming that the weight of the hydrogen gas liberated in the reaction expressed by the above equation was 1 gram, what was the weight of the zinc dissolved? Of the zinc sulphate formed? |



- | No. | Weight. |  |
|-----|---------|--|
| 6   | 5       | The valency of barium is 2; what is its equivalent weight?   |
| 7   | 10      | The valency of chlorine is 1. What is the weight of chlorine in 1 gram of barium chloride?   |
| 8   | 5       | When 1 cubic foot of hydrogen combines with 3 cubic feet of nitrogen, what volume of $\text{NH}_3$ is formed?  |
| 9   | 10      | All nitrates are soluble in water and all carbonates, except those of alkalies, are insoluble in water. Write the equation to express the reaction, $\text{Ba}(\text{NO}_3)_2 + \text{K}_2\text{CO}_3 =$ , the valency of potassium being 1. If the weight of barium nitrate used in this reaction was 10 grams, what were the weights of new substances formed? |
| 10  | 20      | Given $\text{CH}_4 + 2(\text{O}_2 + 4\text{N}_2), \text{air} = \text{CO}_2 + 2\text{H}_2\text{O} + 4\text{N}_2$ , and assuming the weight of 1 cubic foot of hydrogen to be 0.0057 pounds, how many cubic feet of air will be required to burn 10 pounds of $\text{CH}_4$ ?  |

## TABLE OF ATOMIC WEIGHTS.

[Report of Committee on Atomic Weights, American Chemical Society, 1902.]

Aluminum .....	26.9	Neodymium .....	142.5
Antimony .....	119.5	Neon .....	19.8
Argon .....	39.6	Nickel .....	58.25
Arsenic .....	74.45	Nitrogen .....	13.93
Barium .....	136.4	Osmium .....	189.6
Bismuth .....	206.5	Oxygen .....	15.88
Boron .....	10.9	Palladium .....	106.2
Bromine .....	79.35	Phosphorus .....	30.75
Cadmium .....	111.55	Platinum .....	193.4
Cæsium .....	131.9	Potassium .....	38.82
Calcium .....	39.8	Praseodymium .....	139.4
Carbon .....	11.9	Rhodium .....	102.2
Cerium .....	138.0	Rubidium .....	84.75
Chlorine .....	35.18	Ruthenium .....	100.9
Chromium .....	51.7	Samarium .....	149.2?
Cobalt .....	58.55	Scandium .....	43.8
Columbium .....	93.0	Selenium .....	78.6
Copper .....	63.1	Silicon .....	28.2
Erbium .....	164.7	Silver .....	107.11
Fluorine .....	18.9	Sodium .....	22.88
Gadolinium .....	155.2	Strontium .....	86.95
Gallium .....	69.5	Sulphur .....	31.83
Germanium .....	71.9	Tantalum .....	181.5
Glucinum .....	9.0	Tellurium .....	126.1
Gold .....	195.7	Terbium .....	158.8
Helium .....	3.93	Thallium .....	202.61
Hydrogen .....	1.000	Thorium .....	230.8
Indium .....	131.1	Thulium .....	169.4
Iodine .....	125.89	Tin .....	118.1
Iridium .....	191.7	Titanium .....	47.8
Iron .....	55.5	Tungsten .....	182.6
Krypton .....	81.15	Uranium .....	237.8
Lanthanum .....	137.6	Vanadium .....	51.0
Lead .....	205.36	Xenon .....	127.
Lithium .....	5.97	Ytterbium .....	171.9
Magnesium .....	24.1	Yttrium .....	88.3
Manganese .....	54.6	Zinc .....	64.9
Mercury .....	198.50	Zirconium .....	89.7
Molybdenum .....	95.3		

## QUESTIONS ON ELECTRICITY.

- | No. | Weight. |  |
|-----|---------|--|
| 1   | 10      | Name and define the electrical units of E. M. F., resistance, inductance, power, and energy.   |
| 2   | 15      | Give the expression for Ohm's law as applied to an electrical circuit; as applied to part of an electrical circuit.<br>Ten Leclanché cells, each 1.4 volts and internal resistance of 0.4 ohm, are arranged in parallel and are connected to an external resistance of 100 ohms. What current will flow through the circuit?   |
| 3   | 10      | Name the materials of a cell to be used on closed circuit work; of one to be used on open circuit work.  |
| 4   | 20      | A motor whose back E. M. F. at its running speed is 100 volts is supplied from constant potential mains at 110 volts; the resistance through the motor between its terminals is 0.1 ohm. What current is the motor receiving? Assuming that nine-tenths of the electric power delivered to the motor is developed on the pulley, find the horsepower which is transmitted by this motor.   |
| 5   | 30      | Describe briefly and with diagram how to measure resistances under the following conditions:<br>(a) Using ammeter and voltmeter.<br>(b) Using a standard known resistance and a voltmeter.<br>(c) Using a Wheatstone bridge and galvanometer.<br>Illustrate each case by assuming data which would be obtained in an experiment for determining the resistance by each method and calculate the resistance for each set of data assumed. |
| 6   | 15      | What is meant by an "induced current"? What is a practical method of obtaining such a current? Upon what does the E. M. F. of an induced current depend?   |

## QUESTIONS IN ELEMENTARY MECHANICS.

- | No. | Weight. |  |
|-----|---------|--|
| 1   | 5       | Define mechanics, matter, mass, physical quantity. In what three fundamental units may all physical quantities be expressed? What are the two systems of units in general use for measuring physical quantities? Name the fundamental units in each of these systems.  |
| 2   | 10      | Give the equation from which the distance passed over by a body in a given time may be obtained when it is traveling with a uniform velocity; illustrate by an example. Find the velocity at the end of four seconds of a body which has a uniform acceleration of 32 feet per second. Define angular velocity; illustrate by a diagram.   |
| 3   | 15      | Define force; give the expression for the force which, acting on a body of mass $M$ , would produce an acceleration $A$ . If $V$ be the velocity at any time, give the expression for the momentum of the body.<br>What is the numerical expression for horsepower? (British units.)<br>How many heat units correspond to 100 horsepower? (British system.) Give the general expression connecting heat and work units; explain what each factor of the expression is. |
| 4   | 10      | Find the resultant in intensity and direction of the forces whose directions and intensities are given in the lines below.<br>[See diagram.]<br>When is a system of forces in equilibrium? Illustrate by diagram.  |
| 5   | 10      | $LL$ is a needle free to rotate in a horizontal plane about the point $P$ . $F$ and $F'$ are the forces acting upon it. Is the needle at rest for its present position? If not, show position for equilibrium; give the expression for the moment of each force tending to produce rotation from the present position.<br>[See diagram.]   |

## QUESTIONS IN ELEMENTARY MECHANICS.

- | No. | Weight. |   |
|-----|---------|---|
| 6   | 10      | Make a diagram illustrating the principle of the hydraulic jack and explain it. Assume data and illustrate the application of the principle in lifting heavy weights.   |
| 7   | 10      | A body falls freely from a height of 320 feet. Assume $g = 32$ . With what velocity will it strike the ground? What is its acceleration when 20 feet from the ground? What is the time occupied in falling the distance, 320 feet.                      |
| 8   | 10      | A well 100 feet deep and 10 feet in diameter is full of water. How much work is done if the well is pumped dry, the water being discharged at the surface with a velocity of 32 feet per second? Assume $g = 32$ and 1 cubic foot of water = 63 pounds. |
| 9   | 10      | A car runs upon a level circular track with its center of gravity 4 feet higher than the top of the rails, the width of the track being 4 feet and the radius of curvature 481 feet. What is the limit of speed of the car to avoid overturning?        |
| 10  | 10      | The weight of a sphere 2 feet in diameter is 1,000 pounds. It is suspended by a rope and wholly immersed in water. Find the tension on the cord and the specific gravity of the body.   |











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