THE
PLATTSBURG
MANUAL
A HANDBOOK FOR
MILITARY TRAINING

MAJOR O. O. ELLIS
AND
MAJOR F. B. CAREY
THE PLATTSBURG MANUAL

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BY
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AND
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WITH MORE THAN 220 ILLUSTRATIONS

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TO

THOSE FAR-SEEING MEN

WHO INAUGURATED AND ATTENDED THE
FIRST FEDERAL TRAINING CAMP
THIS TEXT IS RESPECTFULLY
DEDICATED
FOREWORD

The Plattsburg Manual, written by Majors Ellis and Garey, will prove very useful to men who are contemplating military training. It will also be of great value to those who are undergoing training.

It is full of practical information presented in a simple and direct manner and gives in detail much data not easily found elsewhere. It is a useful book, easily understandable by those who have had little or no military experience.

It will be useful not only at training camps but it will be of very great value at schools and colleges where military instruction is being given.

The authors of this book have performed a valuable service, one which will tend to facilitate and aid very much the development of military training in this country. In addition to the purely mechanical details of training the book presents in a very effective and simple manner the tactical use of troops under various conditions.

In a word it is a useful and sound work and one which can be commended to those who contemplate a course in military training.

(Signed)  LEONARD WOOD,
Major General U. S. A.

February 27, 1917.
PREFACE

This book is intended to serve as a foundation upon which the military beginner may build so that he may in time be able to study the technical service manuals intelligently. It has been written as an elementary textbook for those who desire to become Reserve Officers, for schools and colleges, and for those who may be called to the colors.

The authors have commanded companies at Plattsburg, New York, and, noting the need of such a text, compiled their observations while there.

The average man undergoing military training wants to know as much as possible about the art and science of war. He wants to acquire a good knowledge of the principles involved. He is interested in the technique of movements. He is willing to work for these things, but he often becomes lost in confusion when he attempts to study the technical service manuals. He does not know how to select the most important and omit the less important. The authors have selected from the standard texts some of the vitally important subjects and principles and have presented them to the civilian in a simple and plain way.

The first part of the text is for the beginner. It tells him how to prepare physically for strenuous military
PREFACE

work. After assisting him through the elementary part of his instruction, it presents for his consideration and study the Officers' Reserve Corps.

The second part, or supplement, is a more technical discussion of those subjects introduced in the first. It is intended principally for those who have made excellent progress.
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The United States is divided geographically into military departments with a general officer commanding each department. The departments and their headquarters are as follows:

(1) The Northeastern Department, with headquarters at Boston, Massachusetts.
(2) The Eastern Department, with headquarters at Governors Island, New York.
(3) The Southeastern Department, with Headquarters at Charleston, South Carolina.
(4) The Central Department, with Headquarters at Chicago, Illinois.
(5) The Southern Department, with Headquarters at Fort Sam Houston, Texas.
(6) The Western Department, with Headquarters at San Francisco, California.

Overseas Departments

(7) The Philippine Department, with Headquarters at Manila.
Overseas Departments

(8) The Hawaiian Department, with Headquarters at Honolulu, Hawaii.

(For States comprising each department, see Appendix)

If you are a civilian and desire any information in regard to the army, any training camps, the officers' reserve corps, or any military legislation or orders affecting you, write to the "Commanding General" of the Department in which you live. Address your letter to him at his headquarters.

MAIL

Mail is most often delayed because there is not sufficient information for the Postmaster on the envelope. The delivery of your mail will be delayed unless your letters are sent to the company and the regiment to which you belong. Therefore, prepare, before you reach camp, several stamped postal cards, addressed to your family and business associates, containing directions to address all communications to you care of Company——, Regiment——. As soon as you are assigned to a company and regiment, fill in these data and mail these postal cards at once. This should be done by wire in case important mail is expected during the first week of camp. Mail is delivered to each company as soon as a complete roll of the organizations can be made out and sent to the post-office.

INOCULATIONS AND VACCINATION

As soon as you become a member of the army,
whether as a private or as an officer, you will receive the typhoid prophylaxis inoculation and be vaccinated against smallpox.

**WHAT TO BRING**

1. Travel light. Bring only the bare necessities of life with you. Don't bring a trunk. Enlisted men (not officers) will be supplied with all necessary uniforms and underwear. This includes shoes.

2. Bring a pair of sneakers, or slippers. They will add greatly to your comfort after a long march or hard day's work. A complete bathing suit often comes in handy.

3. Report in uniform if you have one.

4. The Government will provide you with the necessary shoes. However, if you can afford it, buy before you report for duty, a pair of regulation tan shoes, larger than you ordinarily wear, and break them in well before arrival. Rubber heels are recommended.

5. Bring your toilet articles (comb, brush, mirror shaving equipment, etc.), and a good supply of handkerchiefs, and towels.

**WHAT TO DO ON YOUR ARRIVAL**

There is a general rule of procedure to follow in reporting for duty at any post or training camp.

1. If you receive an order directing you to report for duty at a camp or post at a certain specified time, read it carefully, put it in a secure place, and, on the day that you are to report for duty at the camp or post, present
yourself in uniform, if you have one, with your order. Be careful not to lose your order or leave it at home. Have it in your pocket book.

2. Upon being assigned to a company, unless you receive orders to the contrary, report at once with your baggage to your company commander (captain), whom you can easily find when you reach your barracks or company street. If you cannot locate your company commander, report to the first sergeant.

3. It is a custom of the service to have an experienced soldier explain to a new man exactly where he is to go and what he is to do. Feel no embarrassment at being ignorant of your new duties and surroundings. The Government does not expect anything of you except eagerness to learn and willingness to obey.

4. After reporting to your company commander or first sergeant, you will have a bed assigned to you and you will be issued the property and uniforms necessary to your comfort and duties. Check your property carefully as it is issued to you. You will have to sign for all of it. Look after your property at all times.

5. After checking your property, make up your bed and arrange neatly your personal and issued property on or under your bed or cot.

6. Spend all your spare time cleaning your rifle and bayonet until they satisfy your company commander. Then keep them clean.

7. Don’t leave the company street or barracks on the first day, except with the permission of your company
commander. Don’t ask for this permission unless you have a valid reason.

RULES OF CONDUCT FOR CAMP LIFE

The first few days will be easy and profitable if you will read carefully and adhere to the following plan of procedure:

1. Get up at the first note of reveille and get quickly into proper uniform.

2. Get within two or three feet of your place in ranks and await the sounding of assembly for reveille and then step into ranks.

3. Stand at attention after the first sergeant commands “Fall In.” Remember that this command is equivalent to “Company, Attention.”

4. After reveille, make up your bed, arrange neatly your equipment, and clean up the ground under and around your cot. The company commander will require the beds made up and the equipment arranged in a prescribed way.

5. Wash for breakfast.

6. Upon returning from breakfast, go at once to the toilet. Next, prepare the equipment prescribed to be worn to drill. This is especially important when the full pack is prescribed. Assist your tent mates in policing the ground in and around your tent.

7. If you need medical attention give your name to the first sergeant at reveille and report to him at his tent upon your return from breakfast. Don’t wait until
you are sick to report to the hospital, but go as soon as you feel in the least unwell.

8. When the first call for drill is blown, put on your equipment, inspect your bed and property to see that everything is in order, and then go to your place in ranks.

9. After the morning drill, get ready for dinner. Get a little rest at this time if possible.

10. After dinner a short rest is usually allowed before the afternoon drill. Take advantage of this opportunity; get off your feet and rest. Be quiet so that your tent mates may rest.

11. Following the afternoon drill there is a short intermission before the ceremony of retreat. During this time take a quick bath, shave, get into the proper uniform for retreat, shine your shoes and brush your clothes and hat. Be the neatest man in the company.

12. Supper usually follows retreat.

13. After supper, you usually have some spare time until taps. The Y. M. C. A. generally provides a place supplied with Bibles, newspapers, good magazines, and writing material. Don't be ashamed to read the Bible. Don't forget to write to the folks back home.

14. Be in bed with lights out at taps. After taps and before reveille, remain silent, thus showing consideration for those who are sleeping or trying to sleep.

15. Consult the company bulletin board at least twice daily. On this bulletin board is usually found the following information:

(a) A list of calls.
(b) The proper uniform for each formation.
(c) Schedule of drills.
(d) Special orders and instructions.

16. Get all your orders from (a) the bulletin board, (b) the first sergeant, (c) the acting noncommissioned officers, (d) the company commander. Don’t put much faith in rumors.

ADVICE REGARDING HABITS

Your life in camp in regard to food, exercise, hours of sleep, surroundings, and comforts, will differ greatly from that you lead as a civilian. You will submit your body to a sudden, severe, physical test. In order to prepare your body for this change in manner of living and work, we recommend that for a short time prior to your arrival in camp, and thereafter, you observe the following suggestions:

1. Use no alcohol of any kind.
2. Stop smoking, or at least be temperate in the use of tobacco.
3. Eat and drink moderately. Chew your food well. It is advisable, however, to drink a great deal of cool (not cold) water between meals.
4. Don’t eat between meals.
5. Accustom yourself to regular hours as to sleeping, eating, and the morning functions.
6. Keep away from all soda fountains and soft drink stands.
7. For at least two weeks prior to your arrival at
camp, take regularly the exercises described in this book. Most men are troubled with their feet during the first week of each camp, usually because they do not observe the following precautions:

1. If you have ever had trouble with the arches of your feet, wear braces for them.
2. Lace your shoe as tightly as comfort will permit.
3. Wash the feet daily.
4. Every morning shake a little talcum powder or "Foot Ease" in each shoe.
5. Each morning put on a fresh pair of socks. Your socks should fit the feet so neatly that no wrinkles remain in them and yet not be so tight that they bind the foot. Do not wear a sock with a hole in it or one that has been darned.
6. Some men cannot wear light wool socks with comfort. Do not wear silk or cotton socks until you have given light wool socks a fair trial.
7. In case of a blister, treat it as directed in Chapter X.
8. Most of the foot troubles are caused by wearing shoes that do not fit properly. If the shoe is too large it rubs blisters, if too small it cramps the foot and causes severe pain. Marching several hours while carrying about thirty pounds of equipment causes each foot to expand at least one half a size in length and correspondingly in breadth; hence the size of the shoe you wear in the office will be too small for training camp use. If you have been living a sedentary life, ask for a pair of shoes larger than you ordinarily wear.
9. In case the tendon in your heel becomes tender, report at once to the hospital tent and get it strapped.

A DISCIPLINED SOLDIER

You will be expected to become quickly amenable both mentally and physically to discipline. A clear conception on your part of what drills are disciplinary in character and what discipline really is, will help you to become a disciplined soldier. Drills executed at attention are disciplinary exercises and are designed to teach precise and soldierly movements and to inculcate that prompt and subconscious obedience which is essential to proper military control. Hence, all corrections should be given and received in an impersonal manner. Never forget that you lose your identity as an individual when you step into ranks; you then become merely a unit of a mass. As soon as you obey properly, promptly, and, at times, unconsciously, the commands of your officers, as soon as you can cheerfully give up pleasures and personal privileges that conflict with the new order of life to which you have submitted, you will then have become a disciplined man.

DRESS

The uniform you will wear stands for Duty, Honor, and Country. You should not disgrace it by the way you wear it or by your conduct any more than you would trample the flag of the United States of America under foot. You must constantly bear in mind that in our country a military organization is too often judged by
the acts of a few of its members. When one or two soldiers in uniform conduct themselves in an ungentlemanly or unmilitary manner to the disgrace of the uniform, the layman shakes his head and condemns all men wearing that uniform. Hence, show by the way in which you wear your uniform that you are proud of it; this can be best accomplished by observing the following rules:

1. Carry yourself at all times as though you were proud of yourself, your uniform, and your country.
2. Wear your hat so that the brim is parallel to the ground.
3. Have all buttons fastened.
4. Never have sleeves rolled up.
5. Never wear sleeve holders.
6. Never leave shirt or coat unbuttoned at the throat.
7. Have leggins and trousers properly laced.
8. Keep shoes shined.
9. Always be clean shaved.
10. Keep head up and shoulders square.
11. Camp life has a tendency to make one careless as to personal cleanliness. Bear this in mind.

SALUTING

The military salute is universal. It is at foundation but a courteous recognition between two individuals of their common fellowship in the same honorable profession, the profession of arms. Regulations require that it be rendered by both the senior and the junior, as bare courtesy requires between gentlemen in civil life. It is
the military equivalent of the laymen's expressions "Good Morning," or "How do you do?" Therefore be punctilious about saluting; be proud of the manner in which you execute your salute, and make it indicative of discipline and good breeding. Always look at the officer you are saluting. The junior salutes first. It is very unmilitary to salute with the left hand in a pocket, or with a cigarette, cigar, or pipe in the mouth. Observe the following general rules:

1. Never salute an officer when you are in ranks.
2. Indoors (in your tent) unarmed, do not salute but stand at attention, uncovered, on the entrance of an officer. If he speaks to you, then salute.
3. Indoors, armed, render the prescribed salute, i.e., the rifle salute at order arms or at trail.
4. Outdoors, armed, render the prescribed salute, i.e., the rifle salute at right shoulder arms.
5. Outdoors, unarmed, or armed with side arms, salute with the right hand.

ARMY SLANG

The following army slang is universally employed:
"Bunkie"—the soldier who shares the shelter half or tent of a comrade in the field. A bunkie looks after his comrade's property in the event the latter is absent.
"Doughboy"—the infantryman.
"French leave"—unauthorized absence.
"Holy Joe"—the chaplain.
"K.O."—the commanding officer.
"On the carpet"—a call before the commanding officer for admonition.
“Q.M.”—quartermaster.
“Rookie”—a new recruit.
“Sand rat”—a soldier on duty in the rifle pit during target practice.
“Top sergeant”—the first sergeant.
“Come and get it”—the meal is ready to be served.

HOW TO CLEAN A RIFLE AND BAYONET

Get a rag and rub the heavy grease off; then get a soft pine stick, pointed at one end, and with this point remove the grease from the cracks, crevices and corners. Clean the bore from the breech. When the heavy grease has been removed, the metal part of the gun, bore included, should be covered with a light coating of “3-in-1” oil. Heavy grease can be removed from the rifle by rubbing it with a rag which has been saturated with gasoline or coal oil.

FRIENDS

There are a few men in all companies who play, loaf, and who are constantly in trouble. As the good men in each company will not become friendly with them, they seek their acquaintances among the new men on whom they have a baneful influence. We wish to warn you about making friends too quickly.

FINAL SUGGESTIONS

Don’t be profane or tell questionable stories to your bunkies or around the company. There is a much greater number of silent and unprotesting men in camp than is generally supposed, to whom this is offensive. Keep everything on a high plane.
CHAPTER II

Read this chapter as soon as you decide to attend a Camp.

PHYSICAL EXERCISE

The greatest problem you will have to solve will be that of making your body do the work required. Everyone else will be doing exactly what you are doing, and you have too much pride to want to take even a shorter step than the man by your side. Some men have to leave the training camps because they are not in the proper physical condition to go on with the work. If this chapter is taken as seriously as it should be, it will be of great help to you.

If you have not a pair of sensible marching shoes (tan, high-tops, no hooks on them) get a pair. These shoes should be considerably larger than a pair of office shoes.

Walk to and from your business. Take every opportunity to get out in the country where the air is pure. Fill your lungs full. Get into the habit of taking deep breaths now and then. Don’t make this a task, but surround it with pleasantries. Get some delightful companion to walk with you. Walk vigorously.

1 These exercises are selected from those commonly given by Major H. J. Koehler, United States Army.
Let down on your smoking. Better to leave it alone for a while. You will enjoy the air. Deep breathing seems to be more natural.

Make it a work for your country. View it in that light. If you are not going to be called upon to undergo the cruel hardships and physical strain of some campaigns, your son will be, and you can be of great help to him by being fit yourself. You and your sons will form the backbone of America’s strength in her next peril.

You will have a great deal of walking after you arrive in camp, possibly a great deal more than you have ever had, and probably a great deal more than you expect, even with this word of warning. If you have failed to provide yourself with proper shoes and socks, great will be the price of your lack of forethought. You will wince at your own blisters. You will get no sympathy from any one else. It is the spirit of the camp for each man to bear his own burdens. So arrive at camp with hardened legs and broken in shoes. Don’t buy shoes with pointed or narrow toes. They should be broad and airy.

Immediately after you arise in the morning and just before you retire at night, go through the following exercises for two or three minutes. In a short time you may want to make it more. No objection. Give it a fair trial. Be brisk and energetic. Forget, for the time being, what you are going to get out of it. Give and then give more. The result will take care of itself.
1ST EXERCISE

Involving practically every important muscle in the body.

From first position spring to second position; instantly return to first position and continue.

Be light on your feet. Alight on your toes. Begin with a limited number of times. Day by day increase it a little until you reach a fair number. Be most moderate at first. Never allow yourself in any exercise to become greatly fatigued.
2D Exercise

To reduce waist, strengthen back muscles, and become limber.

Assume position No. 1.
Swing to position (No. 2), return at once to No. 1, and continue.
Shoot your head and arms as far through your legs as your conformation permits.
3rd Exercise

To harden leg muscles and exercise joints.

From position No. 1 come to position No. 2. Return at once to No. 1 and continue.

Toes turned well out. Body and head erect. Up with a slight spring. After a little practice, you will have no difficulty with this exercise in balancing yourself.
4TH EXERCISE

To exercise arms and shoulders and organs of chest and shoulder muscles.

From position No. 1 thrust arms forward to position No. 2, and return at once to position No. 1.

Vary by thrusting arms downward, sideward and upward. Be moderate at first. Grow more vigorous with practice.
PHYSICAL EXERCISE

5TH EXERCISE

To strengthen ankles and insteps.

From position No. 1 rise on the toes to position No. 2, return at once to position No. 1, and continue.

Go up on your toes as high as you can.

No. 1

No. 2
CHAPTER III

SCHOOL OF THE SOLDIER

Based on the Infantry Drill Regulations

Success in battle is the ultimate object of all military training; hence the excellence of an organization is judged by its field efficiency. Your instruction will be progressive in character, and will have as its ultimate purpose the creation of a company measuring up to a high standard of field efficiency.

The Preparatory Command, such as **Forward**, indicates the movement that is to be executed.

The Command of Execution, such as **MARCH**, **HALT**, or **ARMS**, *commences* the execution of the movement.

Preparatory Commands are distinguished by bold face, those of execution by capitals. As, 1. **Forward**, 2. **MARCH**.

The average man understands better and learns faster when you show him how a thing is done. Don’t be content with telling him how. Bear this in mind when you become an instructor.

On account of the absence of the Regular Army on the border, it was not practical to obtain photographs of regular troops with which to illustrate this book. The photographs used were taken under the direct supervision of the authors.
No. 1. Eyes to the front. Hands hang naturally. Rest weight of body equally on feet. Feet turned out making angles of 45°.


No. 1. Don’t gaze about. That’s not playing the game. Don’t turn your feet out making an angle of 100°.

No. 2. Don’t slouch. Hold yourself up. Keep your eyes off the ground.

These are the common errors of beginners.
1. Parade, 2. REST.

No. 1. Clasp hands without constraint in front of center of body. Left hand uppermost. Fingers joined. Thumb and fore finger right hand clasps the left thumb.

No. 2. Bend left knee slightly. Right foot is carried 6 inches straight to the rear.

No. 1. Not looking straight to the front. Right foot not carried straight to the rear.

No. 2. Leaning back too far. Right foot carried back too far.
1. Hand, 2. SALUTE.

No. 1. Look toward the person saluted.
No. 2. Tip of forefinger right hand touches cap or hat above right eye. Thumb and forefingers extended and joined. Hand and wrist straight. Palm to the left.
1. Hand, 2. SALUTE.

INCORRECT POSITIONS OR COMMON ERRORS

No. 1. Palm of the hand to the front and fingers not joined.
No. 2. Arm held too high. Fingers not perfectly joined.
No. 3. Fingers not extended and joined. Left hand not by side while salute is being made.

Some beginners forget, while saluting, to remove their pipes, cigarettes, or cigars from their mouths. This proves clearly that they are beginners, for trained and experienced men are careful about military honors and salutes.

THE RESTS

Being at a halt, the commands are: FALL OUT; REST; AT EASE; and, 1. Parade, 2. REST.

At the command fall out, the men may leave the ranks, but are
required to remain in the immediate vicinity. They resume their former places, at attention, at the command fall in.

At the command rest, each man keeps one foot in place, but is not required to preserve silence or immobility.

At the command at ease, each man keeps one foot in place and is required to preserve silence, but not immobility.

1. Parade, 2. REST. Previously explained.

To resume the attention: 1. Squad, 2. ATTENTION. The men take the position of the soldier.

EYES RIGHT OR LEFT
1. Eyes, 2. RIGHT (LEFT), 3. FRONT.

At the command right, turn the head to the right oblique, eyes fixed on the line of eyes of the men in, or supposed to be in, the same rank. At the command front, turn the head and eyes to the front. Notice the right file does not turn the eyes to the right.
FACINGS

To the flank: 1. Right (left), 2. FACE.

Raise slightly the left heel and right toe; face to the right, turning on the right heel, assisted by a slight pressure on the ball of the left foot; place the left foot by the side of the right. Left face is executed on the left heel in the corresponding manner.

Right (left) Half Face is executed similarly, facing 45°.

To the rear: 1. About, 2. FACE.

Carry the toe of the right foot about a half foot-length to the rear and slightly to the left of the left heel without changing the position of the left foot; face to the rear, turning to the right on the left heel and right toe; place the right heel by the side of the left. There is no left about face.
All steps and marchings executed from a halt, except right step, begin with the left foot.

The length of the full step in quick time is 30 inches, measured from heel to heel, and the cadence is at the rate of 120 steps per minute.

The length of the full step in double time is 36 inches; the cadence is at the rate of 180 steps per minute.

The instructor, when necessary, indicates the cadence of the step by calling one, two, three, four, or left, right, the instant the left and right foot, respectively, should be planted.

All steps and marchings and movements involving march are executed in quick time unless the squad be marching in double time, or double time be added to the command; in the latter case double time is added to the preparatory command. Example: 1. Squad right, double time, 2. MARCH (School of the Squad).

**QUICK TIME**

Being at a halt, to march forward in quick time: 1. Forward, 2. MARCH.

At the command forward, shift the weight of the body to the right leg, left knee straight.

At the command march, move the left foot smartly straight forward 30 inches from the right, sole near the ground, and plant it without shock; next, in like manner, advance the right foot and plant it as above; continue the march. The arms swing naturally.
Being at a halt, or in march in quick time, to march in double time: 1. Double time, 2. MARCH.

If at a halt, at the first command shift the weight of the body to the right leg. At the command march, raise the forearms, fingers closed, to a horizontal position along the waist line; take up an easy run with the step and cadence of double time, allowing a natural swinging motion to the arms.

If marching in quick time, at the command march, given as either foot strikes the ground, take one step in quick time, and then step off in double time.

To resume the quick time: 1. Quick time, 2. MARCH.

At the command march, given as either foot strikes the ground, advance and plant the other foot in double time; resume the quick time, dropping the hands by the sides.

TO MARK TIME

Being in march: 1. Mark time, 2. MARCH.

At the command march, given as either foot strikes the ground, advance and plant the other foot; bring up the foot in rear and continue the cadence by alternately raising each foot about 2 inches and planting it on line with the other.

Being at a halt, at the command march, raise and plant the feet as prescribed above. Common errors are to raise the feet several inches and to run up the cadence, i.e., go too fast.

1. Half step, 2. MARCH.
Take steps of 15 inches in quick time, 18 inches in double time.

**Forward, half step, halt, and mark time** may be executed one from the other in quick or double time. Any step less than the full step (i.e., half step, right step, or backward) is apt to be too fast, i.e., greater than 120 steps a minute.

To resume the full step from half step or mark time: 1. **Forward,** 2. **MARCH.**

**SIDE STEP**

Being at a halt or mark time: 1. **Right (left) step,**
2. **MARCH.**

Carry and plant the right foot 15 inches to the right: bring the left foot beside it and continue the movement in the cadence of quick time.

The side step is used for short distances only and is not executed in double time.

If at order arms, the side step is executed at trail without command.

**BACK STEP**

Being at a halt or mark time: 1. **Backward,** 2. **MARCH.**

Take steps of 15 inches straight to the rear.

The back step is used for short distances only and is not executed in double time.

If at order arms, the back step is executed at trail without command.
TO HALT

To arrest the march in quick or double time: 1. Squad, 2. HALT.

At the command halt, given as either foot strikes the ground, plant the other foot as in marching; raise and place the first foot by the side of the other. If in double time, drop the hands by the sides.

TO MARCH BY THE FLANK

Being in march: 1. By the right (left) flank, 2. MARCH.

The command march must be given when the right foot is on the ground as shown in No. 1. Then advance and plant the left foot and turn on the toes to right as shown in No. 2, and step off with the right foot.
TO MARCH TO THE REAR

Being in march: 1. To the rear, 2. MARCH.

At the command march, given as the right foot strikes the ground, advance and plant the left foot; turn to the right about on the balls of both feet and immediately step off with the left foot.

The turn is made on the toes as shown.

The command march must be given when the right foot is on the ground. The left foot is then advanced to the position shown.

If marching in double time, turn to the right about, taking four steps in place, keeping the cadence, and then step off with the left foot.

CHANGE STEP

Being in march: 1. Change step, 2. MARCH.

At the command march, given as the right foot strikes the ground, advance and plant the left foot; plant the toe of the right foot near the heel of the left and step off with the left foot.

The change on the right foot is similarly executed, the command march being given as the left foot strikes the ground.
MANUAL OF ARMS

To acquire proficiency in the Manual of Arms, you should practice, practice, and practice.

Position of order arms standing, i.e., the position of attention under arms.

No. 1. Arm and hands hang naturally. Right hand holding piece between thumb and fingers. Butt rests evenly on ground. Barrel to the rear.

No. 2. Toe of the butt on a line with toe of and touching the right shoe.

To execute the movements in detail, the instructor first cautions: "By the Numbers"; all movements, divided into motions, are then executed singly. That is to say, make one motion and then wait until a further command for another. This is for the purpose of correcting erroneous positions and giving detailed instructions. We are explaining the manual by the numbers.
Being at order arms: 1. Present, 2. ARMS. It takes two counts.

At command arms, with the right hand carry the piece in front of the center of the body. Barrel to the rear and vertical. Grasp it with left hand at the balance. Left forearm is horizontal and rests against body. The balance of the piece is approximately the position of the rear sight.

FIRST POSITION OF PRESENT ARMS FROM ORDER ARMS

At command two, grasp the small of the stock with the right hand.

CORRECT POSITION OF PRESENT ARMS
INCORRECT POSITION OF PRESENT ARMS

These are the common errors made by beginners.

No. 1. Thumb along barrel.
No. 2. Piece held too low. The front sight will be a little above the eyes when the left fore arm is horizontal.
No. 3. Piece not vertical; too close to body.
Being at order arms: 1. Port, 2. ARMS. It takes one count.

CORRECT POSITION OF PORT ARMS

At the command ARMS, with the right hand raise and throw the piece diagonally across the body, grasp it smartly with both hands; the right, palm down, at the small of stock; the left, palm up, at the balance; barrel up, sloping to the left and crossing opposite the junction of the neck with the left shoulder; right forearm horizontal; left forearm resting against the body. The rifle is held in a vertical plane parallel to the front.
In executing this movement, it is a common error with beginners to raise the piece as though it weighed much more than it does. No part of the body should move except the arms, in coming to "port arms" from "order arms."

INCORRECT POSITIONS OF PORT ARMS

No. 1. Arms held away from side.
No. 2. Piece held too low and too close to body.
No. 3. Piece held too high and not in a vertical plane parallel to the body.
Being at present arms: 1. Port, 2. ARMS. It is executed in one count. At the command arms, carry the piece diagonally across the body and take the position of "port arms."

Being at port arms: 1. Present, 2. ARMS. It is executed in one count. At the command arms, carry the piece to a vertical position in front of the center of the body and take the position of present arms.

Being at present or port arms: 1. Order, 2. ARMS. It is executed in two counts.

At the command arms, let go with the right hand; lower and carry the piece to the right with the left hand; regrasp it with the right hand just above the lower band; let go with the left hand and take the position shown here, which is the next to the last position in coming to the order. The left hand should be above and near the right, steadying the gun, fingers extended and joined, forearm and wrist straight and inclined downward. Barrel to the rear. All the fingers of the right hand grasp the gun. Butt about 3 inches from the ground.

NEXT TO THE LAST POSITION OF ORDER ARMS

Being in the above position, at the command Two, lower the piece gently to the ground with the right hand, drop the left hand quickly by the side, and take the position of order arms.

The common errors are to slam the gun down on the ground and to drop the left hand by the side in a slow and indifferent manner.
INCORRECT POSITIONS

Common errors in the next to the last position of order arms.

No. 1. Thumb is up. Gun too far from the ground.
No. 2. Gun too near to ground. Thumb is up. Butt of gun too far to the right.
No. 3. Gun held too high and too far away from body.

Being at order arms: 1. Right shoulder, 2. ARMS. It is executed in three counts.
At the command arms, with the right hand raise and throw the piece diagonally across the body; carry the right hand quickly to the butt, and at the same time grasp the heel between the first two fingers as shown. Note the position of the first two fingers of right hand.

THE FIRST POSITION OF RIGHT SHOULDER ARMS FROM THE ORDER

At the command two, without changing the grasp of the right hand, place the piece on the right shoulder, right elbow near the side, the piece in a vertical plane perpendicular to the front; carry the left hand, thumb and fingers extended and joined, to the small of the stock, wrist straight and elbow down. Barrel up, and inclined at an angle of about 45° from the horizontal. Trigger guard in the hollow of the shoulder, tip of forefinger touching the cocking piece. Right fore arm horizontal.

NEXT TO THE LAST POSITION OF RIGHT SHOULDER ARMS
COMMON ERRORS IN THE NEXT TO THE LAST POSITION OF RIGHT SHOULDER ARMS

No. 1. Right arm not by side. Left arm too high. Remember that the left arm rests on the chest. This is very commonly confused with rifle salute.

No. 2. Thumb is up. Butt of rifle carried to the right.

No. 3. Trigger guard not against shoulder. Butt held too low. Hand not straight.
At the command **three**, drop the left hand by the side.

**CORRECT POSITION OF RIGHT SHOULDER ARMS**

No. 1. Right arm not by side. Right forearm not horizontal.
No. 2. Heel of gun too far to left.
No. 3. Trigger guard not against shoulder. Butt held too low.

**INCORRECT POSITION OF RIGHT SHOULDER ARMS**
Being at right shoulder Arms: 1. Order, 2. ARMS. It is executed in 3 counts.

Press the butt down quickly and throw the gun diagonally across the body, to the position shown here.

At the command two, lower the gun and assume the next to the last position of order arms. At the command three, come to the order arms.

The common errors in this movement are to move the head to the left and to throw the gun too far to the front.

Being at port arms:  1. Right shoulder, 2. ARMS.  
It is executed in three counts.

At the command arms, change the right hand to the butt.

At the command two and three, come to the right shoulder as from order arms.

Being at right shoulder arms:  1. Port, 2. ARMS.  
It is executed in two counts.

At the command arms, press the butt down quickly and throw the piece to the diagonal position across the body with the left hand grasping it at the balance; the right hand retaining its grasp of the butt.

At the command two, change the right hand to the small of the stock.
Being at right shoulder arms: 1. Present, 2. ARMS. It is executed in three counts.

At the command arms, execute port arms. (This requires two counts.) At the command three, execute present arms.

Being at present arms: 1. Right shoulder, 2. ARMS. It is executed in four counts.

At the command arms, execute port arms. At the command two, three, four, execute right shoulder arms as from port arms.

Being at port arms: 1. Left shoulder, 2. ARMS. It is executed in two counts.
At the command **ARMS**, carry the piece with the right hand and place it on the left shoulder; at the same time grasp the butt with the left hand, heel between first and second fingers. Thumb and fingers of right hand closed on the stock. Barrel up, trigger guard in the hollow of the shoulder.

**No. 1**

**No. 2**

**No. 3**

**COMMON ERRORS IN THE NEXT TO THE LAST POSITION OF LEFT SHOULDER ARMS**

No. 1. Right arm too high. Butt too high.

No. 2. Butt too close to center of body. Not grasping gun correctly with fingers of left hand.

No. 3. Right arm too high. Butt too high.
At the command two, drop the right hand by the side.

The incorrect positions are usually the same as are found in the right shoulder arms, and as illustrated here.
Being at left shoulder arms: 1. Port, 2. ARMS. It is executed in two counts.

At the command arms, grasp the piece with the right hand at the small of the stock.

At the command two, carry the piece, with the right hand to the position of port arms, regrasp it with the left.

Left shoulder arms may be ordered from the order, right shoulder or present, or the reverse. At the command arms, execute port arms and continue to the position ordered.

Being at order arms: 1. Parade, 2. REST. It is executed in one count.

At the command rest, carry muzzle in front of the center of the body, barrel to the left. Grasp piece with the left hand just below the stacking swivel, and with the right hand below and against the left. Left knee slightly bent. Carry the right foot 6 inches straight to the rear.

CORRECT POSITION OF PARADE REST

Being at parade rest: 1. Squad, 2. ATTENTION. Executed in one count.
At the command **attention** (it is a custom of the service to execute the movement at the last syllable of the command), resume the order, the left hand quitting the piece opposite the right hip.

**Being at order arms:** 1. Trail, 2. ARMS.

At the command **arms**, raise the piece, right arm slightly bent, and incline the muzzle forward so that the barrel makes an angle of about $30^\circ$ with the vertical.

When it can be done without danger or inconvenience to others, the piece may be grasped at the balance and the muzzle lowered until the piece is horizontal; a similar position in the left hand may be used.

**Correct Position of Trail Arms**

Being at trail arms: 1. **Order**, 2. **ARMS**.

At the command **arms**, lower the gun with the right hand and resume the order.

Being at right shoulder arms: 1. **Rifle**, 2. **SALUTE**. It is executed in two counts.
At the command salute, carry the left hand smartly to the small of the stock, forearm horizontal, palm of hand down, thumb and fingers extended and joined, forefinger touching end of cocking piece. Look toward the person saluted, At the command two, drop the hand by the side; turn the head and eyes to the front.

THE CORRECT POSITION OF RIFLE SALUTE, BEING AT RIGHT SHOULDER ARMS.

No. 1. Left elbow too low. Forearm should be horizontal.
No. 2. Left elbow too high. Fingers not extended and joined.

COMMON ERRORS IN RIFLE SALUTE AT RIGHT SHOULDER ARMS.
Being at order or trail arms: 1. Rifle, 2. SALUTE.

At the command salute, carry the left hand smartly to the right side, palm of the hand down, thumb and fingers extended and joined, forefinger against piece near the muzzle; look toward the person saluted. At the command two, drop the left hand by the side; turn the head and eyes to the front.

RIFLE SALUTE BEING AT ORDER ARMS

No. 1. Fingers not extended and joined.
No. 2. Fingers not joined
Gun held too high.

COMMON ERRORS IN RIFLE SALUTE AT ORDER OR TRAIL ARMS
Being at order arms: 1. **Fix**, 2. **BAYONET**.

If the bayonet scabbard is carried on the belt: execute parade rest; grasp the bayonet with the right hand, back of hand toward the body; draw the bayonet from the scabbard and fix it on the barrel, glancing at the muzzle; resume the order.

If the bayonet is carried on the haversack: draw the bayonet with the left hand and fix it in the most convenient manner.

Being at order arms: 1. **Unfix**, 2. **BAYONET**.

If the bayonet scabbard is carried on the belt: Execute parade rest; grasp the handle of the bayonet firmly with the right hand, pressing the spring with the forefinger of the right hand; raise the bayonet until the handle is about 12 inches above the muzzle of the piece; drop the point to the left, back of the hand toward the body, and, glancing at the scabbard, return the bayonet, the blade passing between the left arm and the body; re-grasp the piece with the right hand and resume the order.

If the bayonet scabbard is carried on the haversack: Take the bayonet from the rifle with the left hand and return it to the scabbard in the most convenient manner.

If marching or lying down, the bayonet is fixed and unfixed in the most expeditious and convenient manner and the piece returned to the original position.

Fix and unfix bayonet are executed with promptness and regularity but not in cadence.

Exercises for instruction in bayonet combat are prescribed in the Manual for Bayonet Exercise.
Being at order arms: 1. Inspection, 2. ARMS.

At the command arms, take the position of port arms; at the command two, seize the bolt handle with the thumb and forefinger of the right hand, turn the handle up, draw the bolt back, and glance at the chamber. Having found the chamber empty, or having emptied it, raise the head and eyes to the front. Keep your right hand on the bolt.

INSPECTION ARMS

It is a very common error to change the position of the piece while drawing the bolt back. Guard against this.

Being at inspection arms: 1. Order (or right shoulder, or port), 2. ARMS.

At the preparatory command (i.e., at the command order), push the bolt forward, turn the handle down, pull the trigger, and resume port arms. At the command arms, complete the movement ordered.

TO DISMISS THE SQUAD

Being at a halt: 1. Inspection, 2. ARMS, 3. Port, 4. ARMS, 5. DISMISSED.
Make a point of becoming sufficiently familiar with the different parts of the rifle to obey the following general rules governing the manual.

The following rules govern the carrying of the piece:

First. The piece is not carried with cartridges in either the chamber or the magazine except when specifically ordered. When so loaded, or supposed to be loaded, it is habitually carried locked; that is, with the safety lock turned to the "safe." At all other times it is carried unlocked with the trigger pulled.

Second. Whenever troops are formed under arms, pieces are immediately inspected at the commands: 1. Inspection, 2. ARMS, 3. Order (right shoulder, port), 4. ARMS.

A similar inspection is made immediately before dismissal.

If cartridges are found in the chamber or magazine they are removed and placed in the belt.

Third. The cut-off is kept turned "off" except when cartridges are actually used.

Fourth. The bayonet is not fixed except in bayonet exercise, on guard, or for combat.

Fifth. Fall in is executed with the piece at the order arms. Fall out, rest, and at ease are executed as without arms. On resuming attention the position of order arms is taken.

Sixth. If at the order, unless otherwise prescribed, the piece is brought to the right shoulder at the command march, the three motions corresponding with the
first three steps. Movements may be executed at the trail by prefacing the preparatory command with the words *at trail*; as, 1. *At trail, forward, 2. MARCH*; the trail is taken at the command *march*.

When the facings, alignments, open and close ranks, taking interval or distance, and assemblings are executed from the order, raise the piece to the trail while in motion and resume the order on halting.

Seventh. The piece is brought to the order on halting. The execution of the order begins when the halt is completed.

Eighth. A disengaged hand in double time is held as when without arms.

The following rules govern the execution of the manual of arms:

First. In all positions of the left hand at the balance (center of gravity, bayonet unfixed) the thumb clasps the piece; the sling is included in the grasp of the hand.

Second. In all positions of the piece, “diagonally across the body” the position of the piece, left arm and hand are the same as in port arms.

Third. In resuming the order from any position in the manual, the motion next to the last concludes with the butt of the piece about 3 inches from the ground, barrel to the rear, the left hand above and near the right, steadying the piece, fingers extended and joined, forearm and wrist straight and inclining downward, all fingers of the right hand grasping the piece. To complete the order, lower the piece gently to the ground.
with the right hand, drop the left quickly by the side, and take the position of order arms.

Allowing the piece to drop through the right hand to the ground, or other similar abuse of the rifle to produce effect in executing the manual, is prohibited.

Fourth. The cadence of the motions is that of quick time; the recruits are first required to give their whole attention to the details of the motions, the cadence being gradually acquired as they become accustomed to handling their pieces. The instructor may require them to count aloud in cadence with the motions.

Fifth. The manual is taught at a halt and the movements are, for the purpose of instruction, divided into motions and executed in detail; in this case the command of execution determines the prompt execution of the first motion, and the commands, two, three, four, that of the other motions.

To execute the movements in detail, the instructor first cautions: *By the numbers*; all movements divided into motions are then executed as above explained until he cautions: *Without the numbers*; or commands movements other than those in the manual of arms.

Sixth. Whenever circumstances require, the regular positions of the manual of arms and the firings may be ordered without regard to the previous position of the piece.

Under exceptional conditions of weather or fatigue the rifle may be carried in any manner directed.
CHAPTER IV

SCHOOL OF THE SQUAD

Based on the Infantry Drill Regulations

CLOSE ORDER DRILLS

For several days after reporting you will undergo many hours of close order drill. You will ask yourself, "Why is all this mental and physical strain necessary when these exercises are not used in battle?" The answer is: they are disciplinary exercises and are designed to inculcate that prompt and subconscious obedience which is essential to proper military control and to teach you precise and soldierly movements; hence, they are executed at attention.

DEFINITIONS

Deploy. To extend the front. A squad deploys when it goes "As skirmishers." A company likewise deploys when it goes from column into line.

File. Two men, the front rank man and the corresponding man in the rear rank. The front rank man is the file leader. A file which has no rear rank man is a blank file.

Interval. Space between elements of the same line. The interval between men in ranks is 4 inches and is measured from elbow to elbow. It is to get this interval that each man is required to raise his arm when the company is formed.
Distance. Space between elements in the direction of depth. It is measured from the back of the man in front to the breast of the man in rear. The rear rank when in line or column is 40 inches from the front rank.

The guide of a squad in line is right unless otherwise announced.

The guide of a squad deployed, (i.e., skirmishers) is center unless otherwise announced.

TO FORM THE SQUAD

To form the squad the instructor places himself 3 paces in front of where the center is to be and commands: Fall in.

The men assemble at attention, pieces at the order, and are arranged by the corporal in double rank, as nearly as practicable in order of height from right to left, each man dropping his left hand as soon as the man on his left has his interval. The rear rank forms with distance of 40 inches.

The instructor then commands: Count off.

At this command all except the right file execute eyes right, and beginning on the right, the men in each rank count one, two, three, four—one, two, three, four; each man turns his head and eyes to the front as he counts.

Pieces are then inspected.
The purpose of putting the left hand on the hip is to get enough elbow room. A man should have sufficient space to operate his piece. These four-inch intervals give it to him.

Note the space between elbows (interval) is 4 inches. The space between the front and rear rank (distance) is 40 inches, and is measured from the back of the man in front to the breast of the man in the rear.
ALIGNMENTS

To align the squad, the base file or files having been established: 1. Right (left), 2. DRESS, 3. FRONT.

At the command dress, all men place the left hand upon the hip (whether dressing to the right or left); each man, except the base file, when on or near the new lines executes eyes right, and, taking steps of 2 or 3 inches, places himself so that his right arm rests lightly against the elbow of the man on his right (vice versa in left dressing), and so that his eyes and shoulders are in line with those of the men on his right, and also that each man can see the eyes of at least two men on his right.

The instructor verifies the alignment of both ranks from the right flank and orders up or back such men
as may be in the rear, or in advance, of the line; only the men designated move.

At the command front, given when the ranks are aligned, each man turns his head and eyes to the front and drops his left hand by his side.

There are in dressing a number of common errors that we should try to avoid. Don’t jab the man on your left with your elbow. If you are not on the line, move your feet. Don’t lean forward or backward. Be sure to touch gently the man on your right with your right arm. Be certain to keep your left elbow forced well to the front. This is a little uncomfortable at first, but unless we do this our arms will not measure the 4 inches correctly. Don’t hump up the left shoulder, and don’t turn the shoulders to the right. Keep fingers of left hand extended and joined.

We want to place especial stress on the importance of three movements in the school of the squad. When you have thoroughly mastered these three, you will have a splendid basis for the remainder of the School of the Squad, the full value of which you will later appreciate. These are: Squad right, Squad right about, and Right turn.

The first line drawing in this chapter shows correct proportions of interval and distance. To save space and for convenience, the drawings hereafter are made without regard to proportions (intervals and distances).
First Movement
Squad Right

Being in line, to turn and march: 1. Squad right (left), 2. MARCH.

In this movement many instructors have recruit squads step off on the 7th count. When the drill progresses the squad should step off on the 5th count.

At the command march, No. 1 in the front rank faces to the right in marching and marks time; Nos. 2, 3, and 4 of the front rank turn 45 degrees to the right (right oblique), place themselves abreast (on the same line) of No. 1 and mark time.

Now it is difficult quickly to understand the movements of the rear rank.

Give them a lot of study and don’t go on until you are certain that you understand.

No. 3 moves straight to the front.

No. 2 follows No. 3.

No. 1 follows No. 2.

When they (Nos. 3, 2 and 1) arrive in rear of their
file leaders, (Nos. 3, 2 and 1, front rank) they face to the right in marching and mark time.

No. 4 of the rear rank moves straight to the front four paces, and places himself abreast of No. 3, rear rank.

When No. 4, front rank, and No. 4, rear rank, are on the line, (and the remainder of the squad must glance toward them to see when that is true), the whole squad moves forward without further command.

Note that we have said that No. 1 front rank marks time. We see that he becomes, temporarily, an immovable pivot for his squad. We, therefore, call him a fixed pivot.

Had the command been squad left, instead of squad right, No. 4 would have been the fixed pivot instead of No. 1.

Being in line, to turn and halt: 1. Squad right (left), 2. MARCH, 3. Squad, 4. HALT.

The turn is executed as prescribed in the preceding case except that all men, on arriving on the new line, mark time until the command halt is given, when all halt.

Whenever the third command (i.e., squad) is given it means that the command halt is to follow. This is a caution to the squad to prepare to halt. The command halt should be given as No. 4 arrives on the line.
SECOND MOVEMENT

SQUAD RIGHT ABOUT

Being in line, to turn about and march: 1. Squad right (left) about, 2. MARCH.

At the command march, the front rank twice executes Squad right, initiating (starting) the second Squad right when No. 4 has arrived on the line. That much is very simple.

The rear rank has a harder task. Let us have the front and rear rank execute the movement separately:

The rear rank is to take its place on the dotted line a b.
No. 3 rear rank moves straight to the front until in
prolongation of the line to be occupied by the rear rank.

No. 2 follows No. 3.
No. 1 follows No. 2.

When No. 3 arrives on the line to be occupied by the rear rank he changes direction to the right; he moves in the new direction until in rear of No. 3, front rank, when Nos. 3, 2, and 1, rear rank, are in rear of Nos. 3, 2, and 1, front rank, (i.e., when they are in rear of their front rank men), they face to the right in marching and mark time. No. 4 marches on the left of No. 3 to his new position. As he arrives on the line, both ranks execute forward march without command. For the remainder of the squad to know when No. 4 front and rear rank have arrived on the line, they glance to see. The squad should step off on the 9th count.

**THIRD MOVEMENT**

**RIGHT TURN**

Being in line: 1. Right (left) turn, 2. MARCH.

![Diagram of movement]

*Before*

1. 2. 3. 4

*After*

2. 3. 4

3. 4

**THIS IS THE WAY IT IS DONE**

At the command march, No. 1 front rank faces to the right in marching and takes the half step. Nos. 2,
3, and 4 front rank right oblique (turn 45 degrees to the right) until opposite their places in line, then execute a second right oblique and take the half step on arriving abreast of the pivot man. When No. 4 arrives on the line Nos. 1, 2, 3, and 4 take the full step without further command. (To know when No. 4 arrives on the line it is necessary to glance in his direction.) Full step on the 7th count.

The rear rank executes the movement in the same way and turns on the same ground as the front rank. The rear rank, therefore, moves forward at the command march, or continues to move forward, if already marching, until it arrives at the place where the front turned, when it turns.

Note that the squad turns on No. 1 front rank but that he does not remain in his position even temporarily, as in squad right; he is, therefore, called the moving pivot. No. 4 is called the marching flank.

Had the command been left turn, No. 4 would have been the moving pivot, and No. 1 the marching flank.

Knowing the three above movements, we are prepared for the following:

Being in line at a halt: 1. Take interval, 2. To the right (left), 3. MARCH, 4. Squad, 5. HALT.

\[
\begin{array}{cccc}
\square & \square & \square & \square \\
1 & 2 & 3 & 4 \\
\times & \times & \times & \times \\
1 & 2 & 3 & 4 \\
\end{array}
\]

Assembled.

BEING IN THIS FORMATION
At the command to the right (left), the rear rank men march backward four steps (15 inches each step) and halt.

LIKE THIS

Note that the actual distance from the front rank to the rear rank is now 40 plus 4x15 inches, i.e., 100 inches.

At the command march, all face to the right and No. 1 front and rear rank step off. No. 2, front and rear rank, follow No. 1, front and rear rank, at a distance of four paces. Likewise with the other numbers.

Like this, when No. 1 front and rear rank have gained four paces distance.

At the command halt, given when No. 3 is three paces distant from No. 4, all halt and face to the front.

The squad looks like this when the movement is completed.
Being at intervals: 1. Assemble, to the right, (left), 2. MARCH.

At the command march, No. 1 front rank stands fast. No. 1 rear rank closes to 40 inches. The other men face to the right, close by the shortest line, and face to the front.

Being in line at a halt: 1. Take distance, 2. MARCH, 3. Squad, 4. HALT.

At the command march, No. 1 of the front rank moves straight to the front; Nos. 2, 3, and 4 of the front rank and Nos. 1, 2, 3, and 4 of the rear rank, in the order named, move straight to the front, each stepping off so as to follow the preceding man at four paces. The command halt is given when all have their distances.

In case more than one squad is in line, each squad executes the movement as above. The guide of each rank of numbers is right.
The front rank men should walk straight to the front and their rear rank men should cover them accurately.

Being at distances, to assemble the squad: 1. Assemble, 2. MARCH.

No. 1 of the front rank stands fast; the other numbers move forward to their proper places in line.
THE OBLIQUE MARCH

For the instruction of recruits, the squad being in column or correctly aligned, the instructor causes the squad to face half right (or half left), points out to the men their relative positions, and explains that these are to be maintained in the oblique march.

1. Right (left) oblique, 2. MARCH.

Each man steps off in a direction 45 degrees to the right of his original front. He preserves his relative position, keeping his shoulders parallel to those of the guide (the man on the right front of the line or column), and so regulates his steps that the ranks remain parallel to their original front.

At the command halt, the men halt faced to the front.

To resume the original direction: 1. Forward, 2. MARCH.
The men half face to the left in marching and then move straight to the front.

If at \textit{half step} or \textit{mark time} while obliquing, the oblique march is resumed by the commands: 1. \textit{Oblique}, 2. \textit{MARCH}.

\section*{TO FOLLOW THE CORPORAL}

Being assembled or deployed, to march the squad without unnecessary commands, the corporal places himself in front of it and commands: \textbf{FOLLOW ME}.

If in line or skirmish line, No. 2 of the front rank follows in the track of the corporal at about 3 paces; the other men conform to the movements of No. 2, guiding on him and maintaining their relative positions.

If in column, the head of the column follows the corporal.

Note that No. 4 rear rank takes the place of the corporal when the corporal is in front of the squad. This is a general rule. When any front rank man is absent his rear rank man steps up in the front rank. When
the squad is following the corporal No. 4 rear rank remains blank (i.e., No. 3 does not step to the left and cover No. 4).

TO DEPLOY AS SKIRMISHERS

Being in any formation, assembled: 1. As skirmishers, 2. MARCH.

The corporal places himself in front of the squad, if not already there. Moving at a run, the men place themselves abreast of the corporal at half-pace intervals. Nos. 1 and 2 on his right, Nos. 3 and 4 on his left, rear-rank men on the right of their file leaders, extra men on the left of No. 4; all then conform to the corporal’s gait.

There is a rule of thumb that must be remembered. The rear-rank man is always on the right of his file leader.

A common error is for beginners to execute the movement at a slow trot when a run is required.

When the squad is acting alone, skirmish line is similarly formed on No. 2 of the front rank, who stands fast or continues the march, as the case may be; the corporal places himself in front of the squad when advancing and in rear when halted.

When deployed as skirmishers, the men march at ease, pieces at the trail unless otherwise ordered.

The corporal is the guide when in the line; otherwise No. 2 front rank is the guide. The guide is center.

The normal interval between skirmishers is one-half
pace, resulting practically in one man per yard of front. The front of a squad thus deployed as skirmishers is about 10 paces.

The common error is to keep an interval of a very few inches when 15 inches are required.

To increase or diminish intervals

If assembled, and it is desired to deploy at greater than the normal interval; or if deployed, and it is desired to increase or decrease the interval: 1. As skirmishers, (so many) paces, 2. MARCH.
Intervals are taken at the indicated number of paces. If already deployed, the men move by the flank or away from the guide.

The above command is used but very little.

THE ASSEMBLY

Being deployed: 1. Assemble, 2. MARCH.

The men move toward the corporal and form in their proper places.

If the corporal continues to advance, the men move in double time, form, and follow him.

The assembly while marching to the rear is not executed.

Note. It will be better for the beginner to let the remainder of this chapter go for awhile. Your instructor will explain all of the following points in a way that will be easier for you than for you to try to work them out alone. They will come up in the first month’s work and will be explained and shown as you go along. As you become more proficient we advise you, then, to take up the remainder of the chapter.

If standing: KNEEL.

Half face to the right; carry the right toe about 1 foot to the left rear of the left heel; kneel on the right knee, sitting as nearly as possible on the right heel; left forearm across left thigh; piece remains in position of order arms, right hand grasping it above the lower hand.

If standing or kneeling: LIE DOWN.

Kneel, but with right knee against left heel; carry back the left foot and lie flat on the belly, inclining body
about 35 degrees to the right; piece horizontal, barrel up, muzzle off the ground and pointed to the front; elbows on the ground; left hand at the balance, right hand grasping the small of the stock opposite the neck. This is the position of order arms, lying down.

If kneeling or lying down: \textbf{RISE}.

If kneeling, stand up, faced to the front, on the ground marked by the left heel.

If lying down, raise body on both knees; stand up, faced to the front, on the ground marked by the knees.

If lying down: \textbf{KNEEL}.

Raise the body on both knees; take the position of kneel.

In double rank, the positions of kneeling and lying down are ordinarily used only for the better utilization of cover.

When deployed as skirmishers, a sitting position may be taken in lieu of the kneeling position.

\textbf{LOADINGS AND FIRINGS}

The commands for loading and firing are the same whether standing, kneeling, or lying down. The firings are always executed at a halt.

When kneeling or lying down in double rank, the rear rank does not load, aim, or fire.

The instruction in firing will be preceded by a command for loading.

Loadings are executed in line and skirmish line only. Pieces, having been ordered loaded, are kept loaded
without command until the command *unload*, or *inspection arms*, fresh clips being inserted when the magazine is exhausted.

The aiming point or target is carefully pointed out. This may be done before or after announcing the sight setting. Both are indicated before giving the command for firing, but may be omitted when the target appears suddenly and is unmistakable; in such case battle sight is used if no sight setting is announced.

The target or aiming point having been designated and the sight setting announced, such designation or announcement need not be repeated until a change of either or both is necessary.

Troops are trained to continue their fire upon the aiming point or target designated, and at the sight setting announced, until a change is ordered.

If the men are not already in the position of load, that position is taken at the announcement of the sight setting; if the announcement is omitted, the position is taken at the first command for firing.

When deployed, the use of the sling as an aid to accurate firing is discretionary with each man.

**TO LOAD**

Being in line or skirmish line at halt: 1. *With dummy (blank or ball) cartridges*, 2. *LOAD*.

At the command *load* each front-rank man or skirmisher faces half right and carries the right foot to the right, about 1 foot, to such position as will insure the
greatest firmness and steadiness of the body; raises, or lowers, the piece and drops it into the left hand at the balance, left thumb extended along the stock, muzzle at the height of the breast, and turns the cut-off up. With the right hand, he turns and draws the bolt back, takes a loaded clip and inserts the end in the clip slots, places the thumb on the powder space of the top cartridge, the fingers extending around the piece and tips resting on the magazine floor plate; forces the cartridges into the magazine by pressing down with the thumb; without removing the clip, thrusts the bolt home, turning down the handle; turns the safety lock to the “safe” and carries the hand to the small of the stock. Each rear rank man moves to the right front, takes a similar position opposite the interval to the right of his front rank man, muzzle of the piece extending beyond the front rank, and loads.

A skirmish line may load while moving, the pieces being held as nearly as practicable in the position of load.

If kneeling or sitting, the position of the piece is similar; if kneeling, the left forearm rests on the left thigh; if sitting the elbows are supported by the knees; if lying down, the left hand steadies and supports the piece at the balance, the toe of the butt resting on the ground, the muzzle off the ground.
STACK AND TAKE ARMS

The subject of stack and take arms is less important than the rest of this chapter. It is difficult to be learned from a book. Your company commander will explain it to you. It is given here to serve as a reference.

Being in line at a halt: STACK ARMS.

Each even number of the front rank grasps his piece with the left hand at the upper band and rests the butt between his feet, barrel to the front, muzzle inclined slightly to the front and opposite the center of the interval on his right, the thumb and forefinger raising the stacking swivel; each even number of the rear rank then passes his piece, barrel to the rear, to his file leader, who grasps it between the bands with his right hand and throws the butt about 2 feet in advance of that of his own piece and opposite the right of the interval, the right hand slipping to the upper band, the thumb and forefinger raising the stacking swivel, which he engages with that of his own piece; each odd number of the front rank raises his piece with the right hand, carries it well forward, barrel to the front; the left hand, guiding the stacking swivel, engages the lower hook of the swivel of his own piece with the free hook of that of the even number of the rear rank; he then turns the barrel outward into the angle formed by the other two pieces and lowers the butt to the ground, to the right of and against the toe of his right shoe.
The stacks made, the loose pieces are laid on them by the even numbers of the front rank.

When each man has finished handling pieces, he takes the position of the soldier.

Being in line behind the stacks: **TAKE ARMS.**

The loose pieces are returned by the even numbers of the front rank; each even number of the front rank grasps his own piece with the left hand, the piece of his rear-rank man with his right hand, grasping both between the bands; each odd number of the front rank grasps his piece in the same way with the right hand, disengages it by raising the butt from the ground and then, turning the piece to the right, detaches it from the stack; each even number of the front rank disengages and detaches his piece by turning it to the left, and then passes the piece of his rear-rank man to him, and all resume the order.

Should any squad have Nos. 2 and 3 blank files, No. 1 rear rank takes the place of No. 2 rear rank in making and breaking the stack; the stacks made or broken, he resumes his post.

Pieces not used in making the stack are termed **loose pieces.**

Pieces are never stacked with the bayonet fixed.
CHAPTER V

SCHOOL OF THE COMPANY

Based on the Infantry Drill Regulations

The company in line is formed in double rank with the men arranged, as far as practicable, according to height from right to left, the tallest on the right.

The original division into squads is effected by the command: Count off. The squads, successively from the right, count off as in the School of the Squad, corporals placing themselves as No. 4 of the front rank.

At the formation of the company the platoons or squads are numbered consecutively from right to left, and these designations do not change.

For convenience in giving commands and for reference, the designations, right, center, left, when in line, and leading, center, rear, when in column, are applied to platoons or squads. These designations, right, center, left, when in line, and leading, center, rear, when in column, are applied to the actual right, left, center, head, or rear, in whatever direction the company may be facing. The center squad is the middle or right middle squad of the company. If there are an even number of squads in the company, for instance eight, the center squad would be the fourth.

The designation “So-and-so’s” squad or platoon may also be used.
This is exactly the same as the photograph. It shows the correct position of every man in the company, man for man.
During battle, these assignments are not changed; vacancies are filled by non-commissioned officers of the platoon, or by the nearest available officers or non-commissioned officers arriving with reinforcing troops.

CLOSE ORDER

In column of squads, each rank preserves the alignment toward the side of the guide.

Men in the line of file closers do not execute the loadings and firings.

TO FORM THE COMPANY

At the sounding of the assembly the first sergeant takes position 6 paces in front of where the center of the company is to be, faces it, draws saber, and commands: Fall in.

The right guide of the company places himself, facing to the front, where the right of the company is to rest, and at such point that the center of the company will be 6 paces from and opposite the first sergeant; the squads form in their proper places on the left of the right guide, superintended by the other sergeants, who then take their posts.

The first sergeant commands: Report. Remaining in position at the order, the squad leaders, in succession from the right, salute and report: All present; or Private(s) — absent. The first sergeant does not return the salutes of the squad leaders; he then commands: 1. Inspection, 2. ARMS, 3. Order, 4.
ARMS, faces about, salutes the captain, reports: Sir, all present or accounted for, or the names of the unauthorized absentees, and, without command, takes his post.

If the company cannot be formed by squads, the first sergeant commands: 1. Inspection, 2. ARMS, 3. Right shoulder, 4. ARMS, and calls the roll. Each man, as his name is called, answers here and executes order arms. The sergeant then effects the division into squads and reports the company as prescribed above.

The captain places himself 12 paces in front of the center of, and facing, the company in time to receive the report of the first sergeant, whose salute he returns, and then draws saber.

The lieutenants take their posts when the first sergeant has reported, and draw saber with the captain.

Generally in camp the saber is not worn. The officers and first sergeants carry pistols. The hand salute is rendered when so armed.

In the School of the Squad we gave three movements that formed the basis of the squad drill. There are six movements in the School of the Company that should be thoroughly understood. When the beginner knows these he will have no difficulty with the remainder of the close order.

1st MOVEMENT ON THE FIXED PIVOT

Being in line, to turn the company: 1. Company right (left), 2. MARCH, 3. Company, 4. HALT; or, 3. Forward, 4. MARCH.
Notice that the part of the company which has not completed the movement is perpendicular to the part that has. The common error is for the rear rank to oblique before marching four paces to the front.
At the second command the right-flank man in the front rank faces to the right in marching and marks time; the other front-rank men, oblique to the right, place themselves abreast of the pivot, and mark time; in the rear rank the third man from the right, followed in column by the second and first, moves straight to the front until in rear of his front-rank man, when all face to the right in marching and mark time; the remaining men of the rear rank move straight to the front 4 paces, oblique to the right, place themselves abreast of the third man, cover their file leaders, and mark time; the right guide steps back, takes post on the flank and marks time.

The fourth command is given when the last man is 1 pace in rear of the new line.

The command **Halt** may be given at any time after the movement begins; only those halt who are in the new position. Each of the others halts upon arriving on the line, aligns himself to the right, and executes **front** without command.

The difference between this movement and squad right is slight. The rear rank acts a little differently, and the company waits for the command to move forward. The idea is exactly the same.
2d Movement on the Moving Pivot

Being in line, to change direction: 1. Right (left) turn, 2. MARCH, 3. Forward, 4. MARCH.

Executed as described in the School of the Squad, except that the men do not glance toward the marching flank and that all take the full step at the fourth command. The right guide is the pivot of the front rank. Each rear-rank man obliques on the same ground as his file leader.

![Diagram of movement](image)

Third Movement to Change from Line to Column and Move Forward

Being in line, to form column of squads and move forward: 1. Right (left) by squads, 2. MARCH.

At the command march, the right squad marches forward; the remainder of the company executes squads right, column left, and follows the right squad. The right guide, when he has posted himself in front of the right squad, takes four short steps, then resumes the full steps; the right squad conforms.

A common error is for the guide to forget to take the four short steps.
Keep dressed accurately on the side of the guide. (He is always on the side opposite from the file closers. This is a rule of thumb that should be memorized at once.) The guide in every squad should keep 40 inches from the man in front. So many new men forget about the 40 inches. They usually take a little over 30. When the company is moved into line there is of course a jam. Hold your head up. Don’t look down to the ground. You will be in this formation more than any other. Try to keep the following
cautions in mind: The leading men of the company should have four inches interval. Better to have too much than too little if mistakes are to be insisted upon. Keep the pieces in the correct positions at right shoulder and then have heads and rifles in a bee line. When the movement is completed the company will be in the formation shown in the drawing.

FOURTH MOVEMENT COLUMN RIGHT

Being in column of squads, to change direction: 1. Column right (left), 2. MARCH.

At the second command the front rank of the leading squad turns to the right on moving pivot as in the School of the Squad; the other ranks, without command, turn successively on the same ground and in a similar manner.

It is a very common error for the pivot man to take too short a step and thereby cause a jam. Bear this in mind. Another very common error is for the flank man (or men) to take a very long step. This is caused by the pivot man’s forgetting to glance and see when the flank man arrives on the line, before he takes the full step. Another common error is to get out of column
while making this movement. Bear this in mind and walk straight to the turning point.

*This shows the company in column of squads, correct position*

*This shows the common errors*
Now we come to the last two movements. They cause more trouble than any others.

**FIFTH MOVEMENT ON RIGHT (LEFT) INTO LINE**

Being in column of platoons or squads, to form line on right or left: 1. On right (left) into line, 2. MARCH, 3. Company, 4. HALT, 5. FRONT.

(On right [left] into line, means turn in the direction that is on your right and get into line. You have to be in column before the movement is begun.)

Let us first consider the company in column of squads.

At the captain’s command on right into line, the corporal of the leading squad commands right turn. The corporals of all the remaining squads, if halted, command forward, if marching they caution their squads to continue the march. At the captain’s com-
mand march, the leading squad turns to the right on a moving pivot. The remaining squads march straight to the front.

Each corporal commands right turn before arriving opposite the right of his squad's place in line. When the front rank of his squad has arrived opposite that place he gives the command march.

The command halt is given when the leading squad has advanced the desired distance in the new direction. Only the leading squad halts. The corporal then commands right dress.

The remaining corporals before arrival on the line, command, squad, and add the command halt just before the front rank reaches the line. They, then, command right dress.

The captain then dresses the company and commands front.

If executed in double time the leading squad marches in double time until halted.

Now let us consider the company in columns of platoons. See illustration on next page.

At the captain's command on right into line, the leader of the first platoon commands right turn, the leaders of the rear platoons, if halted, command forward; if marching, they caution their platoons to continue the march. The first platoon executes the right turn at the captain's command march. Having completed the turn the platoon commander gives the command, forward, MARCH.
Before

After

2nd Platoon

1st Platoon
The remaining platoon commanders give right turn, MARCH, when opposite their places, and the command, forward, MARCH, when the turn has been completed.

When the leading platoon has advanced the desired distance the captain gives the command, company, HALT. At the command company, the leading platoon leader gives the command, platoon. His platoon only halts at the captain's command, halt. The platoon leader then gives the command, right dress, and takes his post in the file closers. The remaining platoons are successively halted and dressed by their leader. The captain gives the command FRONT.

SIXTH MOVEMENT RIGHT FRONT INTO LINE

Being in column of platoons or squads, to form line to the front: 1. Right (left) front into line, 2. MARCH, 3. Company, 4. HALT, 5. FRONT.

(Right [left] front into line means move to the right of the front and get into line. It is necessary to be in column to begin this movement.)

Let us first consider the company in column of squads. At the captain's command, right front into line, the corporal of the leading squad, if halted, commands forward; if marching, he cautions his squad, continue the march. The corporals of the remaining squads command right oblique. At the command march, the leading squad moves forward. The remaining squads oblique as indicated. The command halt is given when the leading squad has advanced the desired distance; its corporal then commands left dress.
The remaining corporals command forward, MARCH, when opposite their places in line. They halt and dress their squads on the line established by the leading squad.

When the company is in column of platoons the movement is executed in the same manner and by the same commands except the word platoon is substituted for squad. The Captain gives the command FRONT.

Being in line, to form column of platoons, or the reverse: 1. Platoons right (left), 2. MARCH, 3. Company, 4. HALT; or, 3. Forward, 4. MARCH.
Executed by each platoon as described for the company.

Before forming line the captain sees that the guides on the flank toward which the movement is to be executed are covering. This is effected by previously announcing the guide to that flank.

The two common errors are: 1. First, the pivot man takes a short step instead of marking time. Second, (being in line), the pivot men of the platoons forget that they are the pivots and therefore do not execute the command when ordered.

The following illustration shows the side view of a platoon. Note the common errors: No. 1 rear rank is closed up to about twenty inches. He is looking down
at the heels of his front rank file (man). Rifles are improperly held. Some men in the rear rank have more than forty inches distance from their front rank men.

Being in line, to form column of squads, or the reverse; or, being in line of platoons, to form column of platoons, or the reverse: 1. Squads right (left), 2. MARCH; or, 1. Squads right (left), 2. MARCH, 3. Company, 4. HALT.

Executed by each squad as described in the School of the Squad.

If the company or platoons be formed in line toward the side of the file closers they dart through the column and take posts in rear of the company at the second command. If the column of squads be formed from line, the file closers take posts on the pivot flank, abreast of and 4 inches from the nearest flank.

Being in column of platoons, to change direction: 1. Column right (left), 2. MARCH.

At the first command the leader of the leading platoon commands: Right turn. At the command march the leading platoon turns to the right on moving pivot; its leader commands: Forward, 2. MARCH, on completion of the turn. Rear platoons march squarely up to the turning point of the leading platoon and turn at
the command of their leaders. When each platoon has completed its turn, the leader commands **forward, MARCH.**

![Diagram](attachment:image.png)

Being in column of squads, to form line of platoons or the reverse: 1. **Platoons, column right (left), 2. MARCH.**

Executed by each platoon as described for the company.

Being in line, to form column of squads and then change direction. 1. **Squads left (right), column right (left), 2. MARCH.**

The dotted line shows the company in line before the new movement is begun.

The left squad initiates (begins) the **column right** as soon as it has completed the **squad left.**

Being in line, to form line of platoons: 1. **Squads left (right), platoons, column left (right), 2.**
LINE OF PLATOONS
MARCH; or, 1. Platoons, right (left) by squads, 2. MARCH.

Executed by each platoon as described for the company in the preceding paragraph.

FACING OR MARCHING TO THE REAR

Being in line, line of platoons, or in column of platoons or squads, to face or march to the rear: 1. Squads right (left) about, 2. MARCH; or, 1. Squads right (left) about, 2. MARCH, 3. Company, 4. HALT.

Executed by each squad as described in the School of the Squad.

If the company is in line of platoons, or in column of squads, the file closers turn about toward the column, and take their posts; if in line, each darts through the nearest interval between squads.

To march to the rear for a few paces: 1. About, 2. FACE, 3. Forward, 4. MARCH.

If in line, the guides place themselves in the rear rank, now in front rank; the file closers, on facing about, maintain their relative positions. No other movement is executed until the line is faced to the original front.

Being in column of squads to form column of platoons, or being in line of platoons, to form the company in line: 1. Platoons, right (left) front into line, 2. MARCH, 3. Company, 4. HALT, 5. FRONT.

Executed by each platoon as described for the company. If forming column of platoons, platoon leaders
verify the alignment before taking their posts; the captain commands **front** when the alignments have been verified.

When **front into line** is executed in double time the commands for halting and aligning are omitted and the guide is toward the side of the first unit in line.

**ROUTE STEP AND AT EASE**

The column of squads is the habitual column of route, but **route step** and **at ease** are applicable to any marching formation.

To march at route step: 1. **Route step**, 2. **MARCH**. Sabers are carried at will or in the scabbard; the men carry their pieces at will, keeping the muzzles elevated; they are not required to preserve silence, nor to keep the step. The ranks cover and preserve their distance. If halted from route step, the men stand **at rest**.

To march at ease: 1. **At ease**, 2. **MARCH**.

The company marches as in route step, except that silence is preserved when halted, the men remain **at ease**.

Marching at route step or at ease: 1. **Company**, 2. **ATTENTION**.

At the command **attention** the pieces are brought to the right shoulder and the cadenced step in quick time is resumed.

**RULES FOR GUIDES**

A guide is a noncommissioned officer or a private upon whom the company regulates its march.
It is not difficult for an inexperienced man to learn, with a little practice, the duties and the correct positions of a guide. Remember the rule of thumb, *The guide and the file closers are on the opposite flanks when the company is in column of squads.* In squads right about it would be ridiculous for the file closers to move from one flank to another. Guides are permitted and supposed to look around to see if they are in their proper places; most new men are timid about this.

The following general rules and examples will help you:

The guide of a company or platoon in line is right, unless otherwise announced.

The guide of a company or platoon in column of squads is toward the side of the guide, who places himself on the side of the company away from the file closers.

The guide of a deployed line (a skirmish line) is always center unless otherwise announced.

**EXAMPLES**

Suppose the company to be in line.

In executing:
1. Squads right. The guides go to the left flank.
2. Right by squads. The guides go to the left flank.
3. Squads left. The guides go to the right flank.
4. Left by squads. The guides go to the right flank.

If the company is in column of squads and the command is either squads right or left about, the guides simply remember to remain on the flank opposite from
the file closers. It is very easy to see that a world of confusion would be caused by the file closers attempting to move to the opposite flank during squads right or left about. If the guides are in doubt look to see where the file closers are and then apply the rule of thumb: File closers and guides are always on opposite flanks.

**TO DIMINISH THE FRONT OF A COLUMN OF SQUADS**

Being in column of squads: 1. **Right (left) by twos**, 2. **MARCH**.

At the command *march* all files except the two right files on the leading squad execute "in Place Halt"; the two left files of the leading squads oblique to the right when disengaged and follow the right files at the shortest practicable distance. The remaining squads follow successively in like manner.

Being in column of squads or twos: 1. **Right (left) by file**, 2. **MARCH**.

At the command *march*, all files execute "In Place Halt," except the right file of the leading two or squad. The left file or files of the leading two or squad oblique successively to the right when disengaged and each follows the file on its right at the shortest practicable distance. The remaining twos or squads follow successively in like manner.
Being in column of files or twos, to form column of squads; or, being in column of files, to form column of twos: 1. Squads (twos), right (left) front into line, 2. MARCH.

At the command march, the leading file or files halt and come to order arms. The remainder of the squad, or twos, obliques to the right and halts on line with the leading file or files. The remaining squads or twos close up and successively form in rear of the first in like manner.

The movement described in this paragraph will be ordered right or left, so as right by file to restore the files to their normal relative positions in column of twos or in column of squads.

The movements prescribed in the three preceding paragraphs are difficult of execution at attention and have no value as disciplinary exercises.

Marching by twos or files can not be executed without
serious delay and waste of road space. Every reasonable precaution will be taken to obviate the necessity for these formations.

The remainder of chapter on close order drill, School of the Company, is in general for those above the grade of private, therefore, unless we are perfectly clear in what we have had so far, let us not go too deeply into these special features until we have more experience.

The captain is responsible for the theoretical and practical instruction of his officers and noncommissioned officers, not only in the duties of their respective grades, but in those of the next higher grades.

If the left squad contains less than six men, it is either increased to that number by transfers from other squads or is broken up and its members assigned to other squads and posted in the line of file closers. These squad organizations are maintained, by transfers if necessary, until the company becomes so reduced in numbers as to necessitate a new division into squads. No squad will contain less than six men.

The company is further divided into two, three, or four platoons, each consisting of not less than two nor more than four squads. In garrison or ceremonies the strength of platoons may exceed four squads.

Platoons are assigned to the lieutenants and noncommissioned officers, in order of rank, as follows: 1, right; 2, left; 3, center (right center); 4, left center.

The noncommissioned officers next in rank are as-
signed as guides, one to each platoon. If sergeants still remain, they are assigned to platoons as additional guides. When the platoon is deployed, its guide, or guides, accompany the platoon leader.

The first sergeant is never assigned as a guide. When not commanding a platoon, he is posted as a file closer opposite the third file from the outer flank of the first platoon; and when the company is deployed he accompanies the captain.

Musicians, when required to play, are at the head of the column. When the company is deployed, they accompany the captain.

Guides and enlisted men in the line of file closers execute the manual of arms during the drill unless specially excused, when they remain at the order. During ceremonies they execute all movements.

In *taking intervals and distances*, unless otherwise directed, the right and left guides, at the first command, place themselves in the line of file closers, and, with them, take a distance of 4 paces from the rear rank. In taking intervals, at the command *march*, the file closers face to the flank and each steps off with the file nearest him. In *assembling* the guides and file closers resume their positions in line.

Being in line at a halt, the captain directs the first sergeant, *dismiss the company*. The officers fall out; the first sergeant places himself faced to the front, 3 paces to the front and 2 paces from the nearest flank of the company, salutes, faces toward opposite flank of
the company, and commands: 1. Inspection, 2. ARMS, 3. Port, 4. ARMS, 5. DISMISSED.

The alignments are executed as prescribed in the School of the Squad, the guide being established instead of the flank file. The rear-rank man of the flank file keeps his head and eyes to the front and covers his file leader.

At each alignment the captain places himself in prolongation of the line, 2 paces from and facing the flank toward which the dress is made, verifies the alignment, and commands: FRONT.

Platoon leaders take a like position when required to verify alignments.

EXTENDED ORDER DRILLS

As soon as your progress in close order is sufficiently advanced, you will be given extended order drill, which will teach you the formations used in battle, and how a firing line is controlled. They are executed at ease.

We should know the meaning of the two following terms: Base and Deploy.

Base. The element on which a movement is regulated. In company drill it is usually the right or left; leading, rear, or center squad.

Deploy. To extend the front. The company deploys when it executes as skirmishers.

There are really only two conditions that we must consider in this drill. The movements are very easy to
understand, but they require a lot of practice to prevent confusion.

First Case. Let us take the company in line at a halt. It is desired to form a skirmish line to the front. 1. As skirmishers, guide right (left or center), 2. MARCH.

At the preparatory command (i.e., as skirmishers, guide right) all the corporals, except the corporal of the first squad, give the command, by the left flank, the corporal of the first squad gives the command, as skirmishers.

At the command march, all squads, except the first squad, move to the left, and when they have their proper intervals they are deployed to the right (left) and on the line of the base squad by the corporals giving the commands: As skirmishers, 2. MARCH. The corporal of the first squad deploys his squad as soon as he has sufficient room (interval).

That's all there is to the first movement with some slight modifications.

Of course if the command had been as skirmishers, guide left, the base squad would have been the left or fourteenth squad instead of the first squad, for when we speak of the right or left of a company, in the deployments, the company being in line, we mean the right or left squads of the company.

Another modification: Suppose the command had been as skirmishers, guide center. In that case the base squad would be the center or seventh squad. The
base (seventh) squad deploys without moving to the right or left. There is only one thing for the first six squads to do and that is to move to the right. There is only one thing for the last seven squads to do and that is to move to the left.

We have considered the company so far to be at a halt; suppose that it had been moving forward. The corporal of the base squad deploys his squad as soon as he has sufficient interval, and then continues straight to the front until the command: 1. **Company**, 2. **HALT**, is given by the captain. The other corporals move their squads to the left front (or right front), by commanding their squads, **Follow me**. They conduct their squads on the shortest and easiest route to their places on the line and then deploy their squads as they arrive on the general line.

![Diagram of a company moving forward](attachment://company_movement.png)

The corporals should remember that they are not to step out from their squads to conduct them to their proper places until the captain has given the command **march**.
The corporals often fail to take sufficient intervals thus causing a jam.

The company being at a halt, the corporals should remember to give by the right or left flank instead of right or left face.

SECOND CASE

Now suppose the company is in column of squads at a halt. It is desired to form a skirmish line to the front: 1. As skirmishers, guide right (left), 2. MARCH.

At the command march, the corporal of the first, or leading squad, deploys his squad without advancing. All of the other corporals move to the left front and deploy their squads on the line formed by the first squad. At the preparatory command the corporals command, follow me, and at the command MARCH, they step in front of their squads and conduct them to their places.

Had the command been as skirmishers, guide left, of course all except the leading squad would have moved to the right. For when the company is in column of squads, as skirmishers, guide right means that the first or leading squad is to be the right of the skirmish line. If left, instead of right is given that simply means that the leading or base squad is to be the left of the skirmish line.

Now we come to the last variation. It is difficult for the new man. The command as skirmishers, guide center, the company being in column of squads, simply means that the center squad is to be the base squad.
All other squads are to regulate their movements on the base squad as in all other cases.

This is a peculiar case and for it the authorities have adopted a rule of thumb. All squads in front of the base squad go to the right, those in rear to the left. That's all there is to it. But that must be remembered. Corporals will conduct their squads to their proper places by the shortest and easiest routes.

We will use a platoon of four squads to illustrate the idea.

Note that the leading corporal turns his squad well to the right rear and then to the left.

We have assumed the company to be at a halt; suppose it is moving forward. In that case the base squad simply continues moving forward after it has deployed until the captain gives the command **halt**. The other corporals conduct their squads by the shortest routes to their proper places and deploy them on the general line.
When the company, while moving, is deployed, it is a common error for squads in rear of the base squad to take long and fast steps and come up on the line of the base squad. This should not be done unless the command **double time** is given. In which case all the squads take up the double time, except the base squad.

**Extended Order**

**Rules for Deployments**

The command **guide right** (left or center) indicates the base squad for the deployment; if in line it designates
the actual right (left or center) squad; if in column the command guide right (left) designates the leading squad, and the command guide center designates the center squad. After the deployment is completed, the guide is always center without command, unless otherwise ordered.

At the preparatory command for forming skirmish line, from either column of squads or line, each squad leader (except the leader of the base squad, when his squad does not advance) cautions his squad, follow me or by the right (left) flank, as the case may be; at the command march, he steps in front of his squad and leads it to its place in line.

Having given the command for forming skirmish line, the captain, if necessary, indicates to the corporal of the base squad the point on which the squad is to march; the corporal habitually looks to the captain for such directions.

The base squad is deployed as soon as it has sufficient interval. The other squads are deployed as they arrive on the general line; each corporal halts in his place in line and commands or signals, as skirmishers march; the squad deploys and halts abreast of him.

If tactical considerations demand it, the squad is deployed before arriving on the line.

Deployed lines preserve a general alignment toward the guide. Within their respective fronts, individuals or units march so as best to secure or to facilitate the
advance but the general and orderly progress of the whole is paramount.

On halting, a deployed line faces to the front (direction of the enemy) in all cases and takes advantage of cover, the men lying down if necessary.

The company in line or column of squads may be deployed in an oblique direction by the same commands. The captain points out the desired direction; the corporal of the base squad moves in the direction indicated; the other corporals conform.

To form skirmish line to the flank or rear the line or the column of squads is turned by squads to the flank or rear and then deployed as described.

The intervals between men are increased or decreased as described in the School of the Squad, adding to the preparatory command, guide right (left or center), if necessary.

THE ASSEMBLY

The captain takes his post in front of, or designates, the element on which the company is to assemble and commands: 1. Assemble, 2. MARCH.

If in skirmish line the men move promptly toward the designated point and the company is re-formed in line. If assembled by platoons, these are conducted to the designated point by platoon leaders, and the company is reformed in line.

Platoons may be assembled by the command: 1. Platoons, assemble, 2. MARCH.
Executed by each platoon as described for the company.

One or more platoons may be assembled by the command: 1. Such platoon(s), assemble, 2. MARCH.

Executed by the designated platoon or platoons as described for the company.

Wherever it is necessary in campaign to deploy troops there is often so much noise and confusion that it is impossible for the officers and noncommissioned officers to make themselves heard. Signals must be used instead of verbal commands.

**WHISTLE SIGNALS**

There are only two kinds of whistle signals; a short blast and a long blast. A short blast means pay attention, or look out for a signal or command.

A long blast means stop firing for a minute (suspend firing).

**THE ADVANCE**

The advance of a company into an engagement (whether for attack or defense) is conducted in close order, preferably column of squads, until the probability of encountering hostile fire makes it advisable to deploy. After deployment, and before opening fire, the advance of the company may be continued in skirmish line or other suitable formations, depending upon circumstances. The advance may often be facilitated, or better advantage taken of cover, or losses reduced by the
employment of the platoon or squad columns or by the use of a succession of thin lines. The selection of the method to be used is made by the captain or major, the choice depending upon conditions arising during the progress of the advance. If the deployment is found to be premature, it will generally be best to assemble the company and proceed in close order.

Patrols are used to provide the necessary security against surprise.

Being in skirmish line: 1. Platoon columns, 2. MARCH.

The platoon leaders move forward through the center of their respective platoons; men to the right of the platoon leader march to the left and follow him in file; those to the left march in like manner to the right; each platoon leader thus conducts the march of his platoon in double column of files; platoon guides follow in the

SHOWING HOW PLATOON COLUMNS ARE FORMED
Corporal.

SQUAD COLUMN

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rear of their respective platoons to insure prompt and orderly execution of the advance.

Being in skirmish line: 1. Squad columns, 2. MARCH. See preceding page.

Each squad leader moves to the front; the members of each squad oblique toward and follow their squad leader in single file at easy marching distances.

Platoon columns are profitably used where the ground is so difficult or cover is so limited as to make it desirable to take advantage of the few favorable routes; no two platoons should march within the area of burst of a single shrapnel (ordinarily about 20 yards wide). Squad columns are of value principally in facilitating the advance over rough or brush-grown ground; they afford no material advantage in securing cover.

To deploy platoon or squad columns: 1. As skirmishers, 2. MARCH.

Skirmishers move to the right or left front and successively place themselves in their original positions on the line.
Being in platoon or squad columns: 1. **Assemble**, 2. **MARCH**.

The platoon or squad leaders signal **assemble**. The men of each platoon or squad, as the case may be, advance and, moving to the right and left, take their proper places in line, each unit assembling on the leading element of the column and reforming in line. The platoon or squad leaders conduct their units toward the element or point indicated by the captain, and to their places in line; the company is reformed in line.
Being in skirmish line, to advance by a succession of thin lines: 1. (Such numbers), forward, 2. MARCH.

The captain points out in advance the selected position in front of the line occupied. The designated number of each squad moves to the front; the line thus formed preserves the original intervals as nearly as practicable; when this line has advanced a suitable distance (generally from 100 to 250 yards, depending upon the terrain and the character of the hostile fire), a second is sent forward by similar commands, and so on at irregular distances until the whole line has advanced. Upon arriving at the indicated position, the first line is halted. Successive lines, upon arriving, halt on line with the first and the men take their proper places in the skirmish line.

The first line is led by the platoon leader of the right platoon, the second by the guide of the right platoon, and so on in order from right to left, by the officers and non-commissioned officers in the file closers.
The advance is conducted in quick time unless conditions demand a faster gait.

The company having arrived at the indicated position, a further advance by the same means may be advisable.

The advance in a succession of thin lines is used to cross a wide stretch swept, or likely to be swept, by artillery fire or heavy, long-range rifle fire which cannot profitably be returned. Its purpose is the building up of a strong skirmish line preparatory to engaging in a fire fight. This method of advancing results in serious (though temporary) loss of control over the company. Its advantage lies in the fact that it offers a less definite target, hence is less likely to draw fire.

The above are suggestions. Other and better formations may be devised to fit particular cases. The best formation is the one which advances the line farthest with the least loss of men, time, and control.

FIELD EXERCISES

These exercises, as well as combat exercises, are for instruction in duties incident to campaign. To receive the maximum benefit from them you must know the assumed situation of each exercise.

THE FIRE ATTACK

The principles governing the advance of the firing line in attack are considered in the chapters on Attack and Defense.

When it becomes impracticable for the company to
advance as a whole by ordinary means, it advances by rushes.

Being in skirmish line: 1. By platoon (two platoons, squad, four men, etc.) from the right (left), 2. RUSH.

The platoon leader on the indicated flank carefully arranges the details for a prompt and vigorous execution of the rush and puts it into effect as soon as practicable. If necessary, he designates the leader for the indicated fraction. When about to rush, he causes the men of the fraction to cease firing and to hold themselves flat, but in readiness to spring forward instantly. The leader of the rush (at the signal of the platoon leader, if the latter be not the leader of the rush) commands: **Follow me**, and running at top speed, leads the fraction to the new line, where he halts it and causes it to open fire. The leader of the rush selects the new line if it has not been previously designated.

The first fraction having established itself on the new line, the next like fraction is sent forward by its platoon leader, without further command of the captain, and so on, successively, until the entire company is on the line established by the first rush.

If two or more platoons are ordered to rush, the senior platoon leader takes charge of them, and the junior (or juniors) carries out the wishes of the senior.

A part of the line having advanced, the captain may increase or decrease the size of the fractions to complete the movement.
When the company forms a part of the firing line, the rush of the company as a whole is conducted by the captain, as described for a platoon in the preceding paragraph. The captain leads the rush; platoon leaders lead their respective platoons, platoon guides follow the line to insure prompt and orderly execution of the advance.

When the foregoing method of rushing, by running, becomes impracticable, any method of advance that brings the attack closer to the enemy, such as crawling, should be employed.

Quibbling over minor details shows a failure to grasp the big ideas.
CHAPTER VI

FIRE SUPERIORITY

Do not study this chapter until you begin your extended order drills.

If the authors of this text were requested to select for you the most important of all information that you will receive during your instruction at a training camp, they would advise you to take home that contained in this chapter. If you have learned fully so much you will have done well. If you have failed to comprehend as much as this, you will have returned to your homes lacking in important knowledge.

If you are on the battle-field and propose to crush the other side (defeat the enemy), you have got to do one thing: you have got to make your rifle fire better than his, and you have got to keep it better.

The proposition is this: The enemy is on the defense. He is in a number-one, first-class trench. It is constructed with steel, concrete, and sandbags. It has all the improvements that science can devise. Your business is to attack and crush the enemy. How can you advance over exposed ground against such a position? The man behind all those modern improvements has got to stick his head up more or less when he fires. If the volume and rate and accuracy of your fire is greater than
his, he will grow timid about the matter. His fire will become less effective. That is to say, he cannot have fire superiority. When your side has fire superiority, it not only can advance upon such a position but it can do so without ruinous losses, and with hope of success.

To obtain this fire superiority it is necessary to produce a heavier volume of accurate fire than your opponent can produce. We can get a proper conception of the ideas involved by imagining two firemen in a fight armed with hose. One has a larger hose and a greater water pressure than the other. All else being equal, we can foresee clearly who will be the victor and who will be defeated. The more water one throws into the other’s face, the less accurate and effective will the other’s aim become. This is equally true with bullets. Put a man on the target range, where no danger whatsoever is involved, and he may fire with a nice degree of accuracy. Put him on the battle-field with a great number of bullets whizzing around his head, and he must be a trained veteran to fire with the same accuracy. This is true simply because we have been made that way.

The volume and accuracy of fire depend upon several considerations: (a) Of primary importance is the number of rifles employed. Let us imagine a battle-line one mile long. It is obvious that we cannot have one man firing behind another. We don’t want to destroy our own men. They must, therefore, be placed side by side. Each man must have sufficient room to operate his rifle. Experience tells us that we must not have more than
one man per yard. We thus see that our battle-line of a mile can only have about eighteen hundred rifles. (b) The rate of fire affects its volume; an excessive rate reduces its accuracy. If you were hunting tigers, you can easily imagine where one well-aimed and well-timed shot could be of more use to you and more harm to the tiger than half a dozen shots fired too rapidly. (c) If the target is large, is clear (can be easily seen), and is but a short distance from you, your fire, for reasons that do not require explanations, can be more rapid. Greater density increases the effect. Suppose a hundred deer were grazing on a hill; you would be more likely to kill some deer than if only a half dozen were there. (d) The position of the target influences the effect of fire. Suppose that ten men were lined up in a row against a wall and that it is your business to kill the lot with a rifle. If you are in front of them, ten shots at least will be required. But it is possible for you to take a position in prolongation of the line (on its flank) and kill the entire number with one bullet. (This also illustrates the extreme vulnerability of flanks.)

What are the important steps that must be taken if you are going to get this fire superiority? 1st, Fire Direction. 2d, Fire Control. 3d, Fire Discipline.

FIRE DIRECTION

A company that cannot start firing or stop firing, that cannot fire faster or slower, that cannot distribute equally its fire over an opposing target, that cannot
switch its fire from one place to another and make bull's-eyes, would be as unsuccessful in battle to-day as Harvard's football team would be, without practice, in its final game with Yale. The teamwork in no department of athletics is as necessary or vital as that of a military force, the teamwork of a military machine. The first is a sport, a limited time being involved. The second is a question of life and death to the nation.

It requires a nice and cool judgment, under actual conditions of war, to point out and distribute properly the target to the different groups, to find the exact range, and give all these instructions (directions) that will be necessary to produce an effective fire upon the enemy. Who is responsible for giving these instructions (fire direction), and exactly what are all the conditions that must be fulfilled in order that each individual on the firing line may know exactly where and how to fire?

The captain (company commander) is responsible for all. In the military world there is no such thing as shifting responsibilities. The commander assumes full responsibility, whether things go right or wrong. He must handle his job through his subordinates (platoon leaders). 1st, He points out the target to his platoon leaders. 2d, He assigns a part of the target to each platoon, in such a manner that the entire target (objective) will be covered (fired upon). 3d, He determines and gives the men the distance to the objective (range). 4th, He indicates the kind of fire to be employed (that is, whether each man will fire as he pleases,
fire five shots and then stop, *et cetera*). 5th, He indicates when the company is to commence firing. 6th, Thereafter the captain observes what effect his company's fire is producing, and corrects flagrant (material) errors. He prevents the exhaustion of his ammunition and distributes such extra ammunition as may be received from the rear.

**FIRE CONTROL**

We have just described what the captain directs. Now we must put his directions (orders) into effect. This is done through his platoon leaders, assisted by the platoon guides and the corporals. 1st, The platoon leaders point out and describe their part of the objective (target) to the corporals. 2d, They assign a particular part of the objective to each corporal with the view of covering equally with the fire the entire objective. 3d, They announce the range (distance to the objective) to their platoons. 4th, If any part of the line cannot see the objective, the platoon leaders must make the changes so that it can see, or so that its fire will be effective. 5th, They order their platoons to open fire at the proper time. Thereafter they observe the target and make any necessary changes to keep the fire effective, i.e., fire fast or slow, according to the necessity, and are on the alert for any commands or signals from the captain.

The platoon guides do one thing only: they watch the firing line and check every breach of fire discipline. (See "Fire Discipline," below.)
The corporals have four distinct duties. 1st, They transmit the commands and signals to their squads when necessary. 2d, They observe the conduct of their squads and abate excitement. 3d, They do all in their power to enforce discipline. 4th, They participate in the firing.

**FIRE DISCIPLINE**

Now we come to the individual private on the firing line. All of the above measures for efficiency will come to but little unless the man with the gun can understand and do what he is directed to do. This training is called Fire Discipline.

Fire Discipline implies, besides a habit of obedience, a control of the rifle by the soldier (the result of training), which will enable him in action to make hits instead of misses. It embraces: 1st, Taking advantage of the ground. 2d, Care in setting the sight and delivery of fire. 3d, Constant attention to the orders of the leaders, and careful observation of the enemy. 4th, An increase of fire when the target is favorable, and a cessation of fire when the enemy disappears. 5th, Economy of ammunition.

**Summary**

*Fire Direction* is the issuance of instructions regarding the firing.

*Fire Control* is the explanation of these instructions through the platoon leaders.

*Fire Discipline* is the quality which enables the soldier to submit to control and fire efficiently under all conditions.
CHAPTER VII

THE SERVICE OF SECURITY

"Security" has the same meaning in the military world as elsewhere. We properly think of the security of our persons, our property, our families in connection with the term. In the military world the family, or community, being so much larger, the word "security" acquires additional dignity.

A husband and father provides for the protection of his family whether at home or abroad. So does the military commander for his command, whether it is an army or a squad; whether it is in camp, on the march, in battle, advancing upon or retreating from the enemy. The end desired is the same in all cases. A study of all the measures adopted by the successful generals in history shows that the means are not very different.

A body of troops in camp is protected (made secure) by the use of groups placed between the enemy and the camp. We were told by a bee expert in Arizona that a limited number of bees remained in the vicinity of the hive. They were quick to observe and resist (the two great duties of an outpost) any intruder.

Suppose that you are in a part of the jungles of
Borneo where wild Mohammedan tribes still exist, that you have had a strenuous day's march, and it is time for you to halt and camp for the night. If you are a thoughtful and experienced hunter you will pitch your camp where its protection will be least difficult. A few wild men may severely punish you for a lack of judgment in the matter. They may probably spring from a weak and unexpected quarter when the occasion is least favorable for you. And unless the members of your camp know that you have exercised wise discretion, and that there are proper measures for their security, they will be unable to obtain the needed repose for the following day's work. From this we can see the important business (function) of an outpost.

As a father would interpose himself between his wife and children and an attacking bulldog, so would a military commander provide a similar protection for his camp. We see from this one of the big duties of an outpost commander, i.e., especial attention should be devoted to the direction from which the enemy (bulldog) is coming or is thought to be coming, and a probably less degree of attention to other points.

Consider yourself a member of General Sherman's army during its march from the North on Atlanta. You are to camp for the night on a very open piece of ground. You do not know where the enemy is, but you believe that he is somewhere south of you. The troops are tired. They have had a long, hard march. Let us suppose it is your duty to provide the security of the
main body for the night. General Sherman has given you a certain number of men for this purpose. Just how would you go about it?

Regardless of other considerations, it is imperative that your own main force be not surprised or caught off guard by any contingency, however exceptional. To secure this immunity, it is necessary to send men or groups of men in the direction of the probable advance of the enemy, and to arrange these men or groups of men so that they can be of assistance to each other. This we call forming an outpost.

It may be possible to have a line of protection extending around the entire camp. It must be extended and arranged so as to keep the enemy so far away from our main body that he cannot observe our numbers or our position. The enemy must not be permitted to approach close enough to the main body to annoy or surprise it. Experience shows that all of this is best accomplished by placing: 1st, some groups or line of groups farthest from our main body and closest to the enemy in order to observe, to report the movements of the enemy, and, when necessary, to make a temporary resistance; 2d, a line of resistance ("supporting groups") called "supports" upon which the first line can retire before being swamped by superior numbers; 3d, large groups, or line of groups ("line of reserves"), so located that they may go to the assistance of the second line in case of necessity. Such arrangements may be illustrated by the following diagram.
Assume that we want to afford security for our main body from any especially dangerous sector such as ABC. Our cavalry is in front of our first line and in touch with the enemy. The danger zone represents the direction from which the enemy is expected.

This plan must be modified according to the particular case. Let us suppose that we are camping by a large body of water, or that we are surrounded by mountains.
We can easily imagine where we could change the above general plan so as to give adequate protection and at the same time lessen the number of men detailed for security. We must never forget that men are generally tired when they arrive in camp, and that we should make their work as light as circumstances permit. It requires a nice judgment to choose the correct number for security.

We should know the names of these groups. Farthest away is the line that sees, and reports what it sees, but can offer only a limited resistance. This is called the "line of observation" or the "line of outguards." In rear of the line of outguards we have larger groups placed at greater distances. These are called "supports." This is the line that fights. This is the line that makes extensive preparations for fighting (or resisting). It is called the "line of supports" or the "line of resistance."* We have one farther and last line of groups which is still larger and occupies still greater distances than the two we have just discussed. This is the safety valve and is called the "reserve," or the "line of reserves." This is the line that gives a sound factor of safety. It will only be called upon in cases of emergency and may therefore generally enjoy a considerable degree of repose. But it and the line of supports combined must have sufficient strength to delay the enemy, in case of a general attack, long enough for our main body to form for battle.

Let us look at the line of outguards for further im-

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*The line of supports and the line of resistance need not necessarily be the same.
portant considerations and distinctions. The enemy's movements and operations should ordinarily be expected where there are for him least difficulties. Large (dangerous) bodies of troops find trouble in marshes, thick forests, steep mountainous country. They avoid these obstacles as much as possible, selecting open country, solid soil, strong bridges, and good roads. Here is where large and strong groups in opposition are necessary. Small and unimportant groups (or no groups at all) should be placed where the enemy's advance is exceptionally difficult. Finally, there will be places between these last two extremes that require just an average amount of attention, that is to say, require groups of medium strength.

The groups that are largest and are used at the important places where danger is most expected, are called "Pickets." (These consist of from two squads of eight men each to eight squads.) The least important groups are called "Cossack Posts." (These consist of four men, usually a noncommissioned officer and three privates.) The groups of average importance are called "Sentry Squads." (These consist of eight men, a corporal and seven privates.)

Having discussed in broad terms the security of troops in camp, we are prepared to consider their security while either advancing upon or retreating from the enemy. In either case groups are placed between our main body and the actual or supposed position of the hostile troops. When we are advancing upon an
enemy our advanced groups constitute what we term the "advance guard." If we are retreating from the enemy, our rear groups compose the "rear guard."

The main general ideas of an advance guard are illustrated by the husband who takes his wife and family to his house after an evening's absence. The house is dark and without occupants. The wife and children are apprehensive of danger. The husband goes first, turns on the light, and searches for any indications of an enemy. He looks, if desirable, in the closets and under the beds. If there is any one that may harm his family it is his duty to find out and dispose of him.

In the advance guard we have exactly the same general scheme as with outposts. Far advanced to the front (and often to the sides or flanks) we have small groups (called, when considered collectively, the "advance party") whose business it is to inform us of the presence of the enemy. Next we have a large group ("support") to assist these small and rather helpless ones in advance in case of difficulty. And last we have a still larger group ("reserve") that may be called upon in great emergencies.

We should fully understand that all these groups are out to accomplish several ends, but their one great and ultimate object should be to push on ahead of the main body so that it may be secure and its march uninterrupted. To accomplish this it is desirable to get all possible information about the enemy; it is also desir-
able to keep him from getting any information about your own troops.

The ideas are nearly the same with rear guards. Note this important difference: if, in an advance upon the enemy, your advance guard should suddenly be fired upon, your main body would (temporarily) halt. If, in a retreat, your rear guard is halted by the enemy's fire, your main body would normally be marching farther from it. In the first case assistance is near at hand. In the second it is withdrawing. The rear guard in a retreat should therefore be a little larger than in an advance. It must be able to extricate itself from any situation however difficult or it loses its usefulness. Its commander should have a cool, level head. To delay the enemy and thus assist the main body to escape is his mission. For him to remain too long in a good position might endanger not only his safety but that of the main body as well.
CHAPTER VIII
ATTACK AND DEFENSE

The European War has demonstrated more clearly than ever before two points in attack and defense. First, no people, or group of people, can claim a monopoly on bravery. They all move forward and give up their lives with the same utter abandon. Courage being equal, the advantage goes to him in the attack who possesses superior leaders, greater training, and better equipment. Second, a man's training and courage, his clear eye and steady nerve, his soul's blood and iron, constitute a better defense than steel and concrete.

A soldier has little business attacking or defending anything in this day unless he is an athlete, unless he is skilled in the technique of manœuvre, unless he is a good shot, unless he knows the value of many features of the terrain (which means the nature of the country—its hills, rivers, mountains, depressions, etc.—considered from a military point of view), unless he is disciplined to a splendid degree, and unless his training has imbued him with an irresistible desire to push forward, to get at his opponent. Assuming, at least, as much as this, we are prepared to consider the subject of the attack (the offensive).

To have your troops superior in number, condition,
training, equipment, and morale to that of your enemy; to be at the right place, at the right time, and there to deliver a smashing, terrific blow—this is the greatest principle of the attack. And history shows that victory goes more often to him who attacks.

Initiative in war is no less valuable than in business life. Become at once imbued with the desire to put "the other fellow" on the defensive. That makes him somewhat dependent upon your own actions. That gives you opportunities to fool him that he does not so fully enjoy. Your commander can elect to attack any point of the defensive line. Your dead and wounded—always a demoralizing element—are left behind. Your target is stationary. Your side is closing in. The enemy is straining every nerve to fire faster and more effectively, and still your side is closing in. There is the thrill of motion.

To attack, you will usually require a greater number of troops than the defense. Why so? Because you will be more exposed. You will have to move forward, however dangerous the ground. Your enemy, for his protection, will be certain to utilize and improve every advantage of cover. Your losses will be greater. You should have a greater number of reserves to fill the depleted ranks. If the defensive can maintain a better (superior) fire, that is to say, a fire that kills and wounds a greater number than the opposing fire (this we call fire superiority), he will stop the advance of the attacking force unless that force is so superior in numbers that
it can send forward reinforcements after reinforcements as an ocean sends shoreward its series of waves.

Suppose that you were in command of a group of men and that you were ordered to attack. Just what principal points should you weigh? First, you should avail yourself of every opportunity to obtain all information of military value, such as the enemy's strength, his position, and intentions. For this you would have to send out groups of reconnoitering patrols exceptionally skilled in woodcraft, or trained to gather information. As soon as such information as is available is reported to you, you should at once begin the consideration of all the important elements that affect your problem. You must not lose sight of what you were sent out to do (your mission). Consider how this and that fact bear upon your course of action (estimate the situation). For instance: the enemy's force is reported to be greatly inferior to your own. He is out of supplies. He is greatly fatigued with forced marches. His morale is shattered on account of recent and frequent reverses. His camp is disorganized. It is poorly guarded. Certain roads are in fine condition. Others are very poor. Your troops are in splendid shape and excellent spirits. They believe that they can crush the enemy and want to attack. As you easily see, all such points have great significance in sizing up the case (estimating the situation).

Having estimated the situation, you should investigate and consider all possible courses of attack that are
open to you. Don't ask any advice from any one. Select the course that appears to offer the greatest chance of success. Make up your mind what you are going to do (come to a decision).

Having come to a decision, stick to it, right or wrong. Your next and final thing to do is to put your decision into action. To do that, give your subordinates the information they should possess; tell them what you are going to do and how you are going to do it; i.e., issue your orders.

A study of the orders of successful generals in history teaches us that we will be greatly aided in issuing them, if we will observe a system. We understand an order more easily and quickly if it conforms to some plan with which we are familiar.

In order to give your group an opportunity to act with a greater degree of teamwork, and intelligence in case of an emergency, it is necessary to give it data (information) concerning the enemy. Your men should know where there are friendly troops. Now tell them what you are going to do (your plan), whether it be to attack, retire, or assume the defensive. And then order the execution of that plan by assigning to each group its task. Next tell (direct) what is to be done with the wagons (trains), and last, state where you may be found at any time in case of need or where messages may be sent to you.

Having issued the order, let us now observe the progress of the attack. You are probably three or four thou-
sand yards from the enemy. His position is invisible. His artillery has opened fire. Your artillery is replying. The troops must advance cautiously over exposed ground. They are not firing. They are not deployed for action (in battle line). They are waiting to get within as short a distance of the enemy’s line as possible, for their ammunition is limited; and after troops are actually launched in the attack, control over them, for ordinary purposes, is practically lost. The farther from the enemy the attack is launched, the longer the exposure to their fire and the greater the number of casualties, so the leaders of the different groups are taking advantage of all the accidents of the ground, of all cover in advancing. They are using one formation here, another there, with a view to minimizing the losses and reaching an advantageous position as soon as possible where they can open an effective fire on the enemy.

Now the enemy’s fire is severe. Casualties are becoming heavy. The men are growing restless. It is necessary to return the fire. Fire superiority should be gained at once. Don’t move forward until you gain it. If difficult to gain, use every means at your disposal. When you have it, keep it. Part of your men can advance when your side has fire superiority. The remainder of the firing line should fire faster to maintain that superiority. If you lose fire superiority, regain it. If necessary, troops from the rear will generally be sent forward.

Now you are approaching the point where the charge
is to be made. Bayonets are fixed; not all at one time, for that would affect the advantage that you possess with your fire. Groups that have been held back in support are advanced. These are to be used at decisive moments. They are held well in hand. The firing line is lost in noise and confusion. Not so the supports; control is exercised over them. If they are not used in the attack they can be used to great advantage to complete the discomfort of the enemy after the clash (shock).

There is at last, if the enemy remains in his position, the clash. Bayonet against bayonet, man against man, nerve against nerve. Apply the great principle of attack and decide for yourself who the victor will be. If successful, then organize your men and prepare for the pursuit or for the return (counter attack) of the enemy.

Now you are to handle groups on the defense. You must bear in mind that there are two kinds of defense: first, where you do nothing but defend (passive defense); second, where you defend, but temporarily, with the idea of attacking the enemy as soon as a favorable opportunity arises (active defense). Let us assume that you have been ordered by superior authority to locate and prepare a definite position to check the advance of an enemy. Just what main points should you bear in mind? Suppose you have found an ideal position; what conditions should it fulfil? You should be able to see the enemy long before he arrives at your position. Intervening objects and trees would make
that impossible. You should be hidden from his view. The ends of your lines (your flanks) should rest, if possible, on ground easy to defend; for instance, a high mountain, a large body of water, or an impassable swamp. A few acres of ground will not hold tens of thousands of men. Therefore the extent of the ground must be suitable for the size of your group (force or command). It would be of great advantage to have such cover that one group (for instance, a support) could move from this position to that without danger of being fired upon or observed. A wise general has plans for any contingency. He is either going to win or he is not going to win. If he loses, he should have a means of escape (retreat). In selecting his position he should place it where the enemy must attack or give up his mission. Verdun had to be attacked before the advance on Paris from the east was practicable.

In defense there is a generous allowance of advantages. Usually you have time to select and prepare your position. By preparing a position we mean, you can dig trenches, destroy intervening objects that obstruct the view of what you should see, construct obstacles that will embarrass the enemy in his advance, estimate (or determine) distances to important places. You have opportunities for collecting ammunition, arranging wires for communication, establishing stations for the wounded. Troops in motion are easier to see. You are not called upon for as much physical strain as the attacking troops. You are less fatigued. Your
machine guns are better concealed and the gunners know the ranges better than those of the attack.

But it is most distressing to a man on the defense to see the enemy, regardless of everything he can do, advance step by step. He begins to question within himself the efficacy of his fire, which is to doubt his own ability. The more he questions and worries, the less effective his aim becomes. His comrades are dead and wounded about him. Their cries of distress are heard above the noise and confusion of battle. He becomes less methodical and deliberate in his actions. His shooting becomes high and wild. This becomes generally true. The attacking force gains fire superiority.

Suppose that it is actually your business to construct a defensive position. Just how will you assign the tasks? What are the important things to be done at first, and what, if time is pressing, may with least hardship be omitted? You would first cut down trees, blow up buildings, destroy crops that prevented you from seeing in any direction of danger. Next you should provide protection (concealment and cover), so that there will be as few casualties as possible. Then do what is in your power to make it most difficult for the enemy to arrive at your position; i.e., construct some barbwire fences (entanglements) that he will be unable to cross. Have your expert range finders determine and make notes of the distances to important points from which the enemy must advance. Next, dig ditches (trenches) so that your groups (supports or reserves).
may pass from one point to another without danger. Now take steps to protect your most vital and vulnerable points, your flanks. Have them so strong, if practicable, that the enemy will leave them alone. Assign to each group of men a section of the ground to defend. Having done these important things, then go about those things that will make you more comfortable in the trenches.
CHAPTER IX

GENERAL PRINCIPLES OF TARGET PRACTICE

The most thrilling experience you will have at a training camp will probably come when you step up to the firing line on the target range to fire your first shot. The great majority of new men grow pale, become nervous, lose their calm and poise, while they are on the firing line. This is a fact, not a theory. And this loss of nerve is not confined to the new man. Any shot, however old and experienced, will tell you that he fully understands what we have just described.

To become a good shot, we must solve a mental condition that corresponds in a way to that of beginners in golf. And we must master some details in technique.

We should know something about the machine (rifle) we are to operate. We must know what the sights are and how to use them. We should know how those men most successful in the science and art of shooting hold the rifle under different conditions, how they adjust their slings, how they prepare (blacken) their sights and care for their rifles, what practice and preparation they take, and what bits of advice they have to offer.

The primitive man had no means of accurately aiming his crude devices to throw stones. But in this day and age we have. The modern rifle is one of the most per-
fect pieces of scientific machinery in the world. Very shortly after you arrive in camp your captain will explain to you its sights and how they are adjusted. He has a sighting bar for that purpose. It will take you only a few minutes to grasp the subject when you have a rifle in your hands, and your instructor is pointing out and explaining just what you should know. On paper it seems to be hard.

Now you will want to learn how to load your piece (rifle), work your bolt, and squeeze the trigger. Simple as these points may seem, you will have something to learn after you have been at it ten years. Practise! practise! practise! Sit on your bunk and work your bolt ten thousand times before you go on the range. Get in the habit of doing it quickly. Learn to keep your piece at your shoulder while you pull the bolt back and push it home. Learn to make the fewest possible motions of your body in working it. To pull a bolt back and push it forward seems to be a simple thing to do. It is simple. But when you are actually firing at the target, experience tells you that you will have more trouble and a greater collection of hard luck stories to amuse your friends with than you ever imagined possible, unless you have had plenty of practice.

To squeeze a trigger seems to be a simple thing to do. It is simple. But after you have been squeezing triggers for twenty years you will have something more to learn about it. Ninety-five per cent. of the failures on the target range in the training camps come from not
squeezing the trigger properly. You can't learn how to squeeze it on paper. You have got to practise. Every time you work your bolt, squeeze your trigger. Get in some extra "squeezes." You will find that your whole muscular and nervous system will need to be co-ordinated and harmonized. After you have been long about it you will find an extreme delicacy in its operation. You will find that it requires a great deal more than a finger. All the muscles of your hand and arm will be required. We cannot overemphasize the importance of squeezing your trigger. When you learn to do this without jumping (flinching), without moving an eyelash, you are making progress and are prepared for more advanced work.

Why do you suppose we have "gallery practice," i.e., practice with a greatly reduced charge of powder? Simply to determine and correct your errors. We assume that you have normal sight and that you are in fair physical condition. Suppose that you make a perfect score. What conditions must you fulfil? 1st, You must aim in exactly the same way every time. 2d, At the instant of firing your body must be in perfect repose. 3d, You must squeeze your trigger properly (without a jerk).

You could not aim exactly the same way every time unless you understood your sights and unless you could see them plainly. You will be told to blacken them. Many forget and fail to do this. They do not fully realize that the sights are much easier to see when black-
ened, and that therefore the chances of hitting the bull's-eye are much greater. There's no more luck in shooting than there is in solving a problem in geometry, or in a game of billiards. It's all practice, nerve, and science.

Your body cannot be in repose at the instant you fire unless you have your sling properly adjusted, unless you are reasonably comfortable (not constrained), and unless you, temporarily, stop breathing. Your body must be, for an instant, a vise. Any trivial thing such as a puff of wind, a jerk of the trigger, or a noise near you, will ordinarily change your hold and throw you off the bull's-eye.

Suppose you are making a poor score. What is the trouble? In the first place don't blame it on the rifle or the ammunition. Assume full responsibility yourself. You are the responsible party. Practise a great deal and see if you can locate the fault. If you cannot, your captain will assist you.

When we go from gallery practice to the target range, where we fire the service rifle with the service charge, we find a great difference in the recoil of the rifle and in the sound. The good Lord has made our muscles and nervous system to react automatically at danger or anything connected with it. That is probably why we shudder and close our eyes when a door is slammed very near to us. But sound, unless we get too close, does not hurt any one, and we should steel our
nerves to remember that fact when we are firing. We also know that there is going to be a certain amount of recoil of the rifle. But if you will hold your sling as you have been instructed, if you will provide yourself with proper elbow and shoulder padding, the authors of this text assure you that you will experience no pain or harm from the recoil. It is their judgment that if you are healthy and can see and will go on the range with your jaws set to fire with anything like your gallery practice coolness, and calmness, you will qualify. Your greatest stumbling block will be your rapid fire. This is where you fire a definite number of shots in a limited time. And this is where you will experience the extreme amount of nervousness.

When you return from firing your first score at rapid fire, and have had time to think calmly over your actions, you will probably realize that your nerves were pitched up in G and that you did a number of foolish things. You should realize that you are not an exceptional man. Ninety-nine out of every hundred normal, virile men are more or less nervous when they first step up for rapid fire. Practice and will power are the correctives.

Let us suppose that you have ten shots to fire in two minutes. If you fire your ten shots in one minute it is plain that you return unused one minute given to you. This minute may have been of great use to you in getting closer to the bull’s-eye. If you fire at the rate of
ten shots in three minutes, it is plain that when your two minutes shall have expired you have missed the opportunity of firing four times at the bull's-eye.

Get one of your bunkies to go back of your tent and time you. Then swap about and you hold the watch for him. Try to make of yourself a machine that finishes the ten shots just before the time expires.

And here is a little rule of thumb we want you to bear constantly in mind while you are having rapid fire: Load your piece quickly, but aim and squeeze your trigger deliberately. Keep cool.

The best shot in the company is the man who practises the most.
CHAPTER X

PRACTICE MARCH OR "HIKE"

The manoeuvre practice march will be the most instructive, the most pleasant, and one of the hardest periods of your service. You will return from it proud of the hardships you have undergone and capable of speaking with authority on many practical matters pertaining to soldiering. You will be able to amuse yourself and your friends with reminiscences of the many incidents which you will never forget. It is during the practice march that you will put into practical use the tactical principles and battle formations of which, up to that time, you will have heard at lectures, or which you will have executed in a mechanical manner at drill. You will return from each march with a knowledge of many practical points on camp sanitation, of the pleasures and hardships incident to manoeuvre warfare, and of the manner in which a soldier adapts himself to changing conditions, all of which cannot be learned from books or lectures.

The practice march demands a large expenditure of physical and mental energy; however, the hardships are greatly exaggerated by the old soldiers. To make up a set of equipment, to assist in cleaning up camp and loading trucks, to march and fight for a distance
of ten or twelve miles while carrying a heavy pack on the back and a nine-pound gun on the shoulder, and upon reaching camp to pitch your tent, make up your bed, do some fatigue work, and probably some guard duty in addition, all in one day, is a hard physical strain on the average man. By obeying implicitly the advice of your company commander, you will greatly lessen the hardships incident to a practice march, and by disobeying it you may possibly undergo the mortification of having to drop out of ranks and be jeered at by the passing column. The following suggestions, if followed implicitly, will lessen the hardship of the "hike."

**Marching Rules**

1. Adjust your equipment, if necessary, at the first halt.

2. Do not leave the column without the express permission of your company commander.

3. Keep in your proper place in the column.

4. Keep forty inches from the man in front of you.

**Halts**

Halts are made for the purpose of resting. Take advantage of the opportunity by sitting down at once along the side of the road near the place where your squad will form when the march is resumed. Remain seated until the command to fall in is given.

Sit down in such a way that you do not support the weight of the pack on your shoulders while resting.
Don't go wandering off into people's yards or orchards. Relax as completely as possible. Get into place immediately when the signal is given.

CAMPING

Two men tent together—the front rank man and his rear rank file. After pitching your tent, get inside and level off the ground. Cut a drain around the tent to carry the water off; this should be done even in pleasant weather. In case you do not trench your tent and a sudden rain comes, your blankets may get wet and you will probably lose some much-needed rest and sleep. If the tent pins will not stay in the ground, cut some small sticks to a length of about twelve inches and use them as tent pins.

PREPARING YOUR BED

After you have pitched your tent, get some hay, grass, straw, or leaves and cover the floor. Place one poncho on this, then one or two blankets on top of the poncho to sleep on, and use the remaining blankets as cover. Spread the other poncho over the tent. Many men are careless about making a comfortable bed. You will be rewarded with large dividends if you are zealous in making yourself comfortable. Arrange your equipment at the rear just under the small triangle. Get your meat can, knife, fork, spoon, and tin cup out where they will be handy.
Immediately after reveille, take down your tent and make up your pack. Place your extra blankets on the pile with those of the other members of your squad. Make up your surplus kit bundle and put it in the surplus kit bag.

WATER

Fill your canteen each evening, as the water wagons sometimes do not reach camp before the morning march is commenced. Excessive water drinking on the march is the besetting sin of the inexperienced soldier. One swallow of water calls for another. Soon your canteen is empty. Your stomach feels uncomfortable. You are still thirsty. If it is necessary to replace some of the water of the body which is lost by perspiration, and this is often necessary, first gargle out the mouth and throat and spit the water out; then take a swallow or two, but be careful not to drink to excess. Injudicious and excessive water drinking fills the hospital ambulances and auto trucks with men who should be in ranks. One half a canteen of water is sufficient for you on any march you will have to make. After you arrive in camp and have cooled off a little, drink as much water as you desire, but do so slowly.

CARE OF THE FEET

The infantryman’s feet are his means of transportation. If you care for them properly, you will be rewarded.
1. Wash and dry the feet carefully and put on clean socks as soon as practicable after getting into camp.
2. Wash out the socks you have been wearing and hang them out to dry.
3. Do not wear socks with holes in them if you can possibly avoid it. Should a hole begin to cause rubbing, turn the sock inside out or change it to the other foot.
4. Just as soon as you decide to attend a training camp or join the colors, cut your toe nails square across the ends so they will not grow in.
5. In case of any foot trouble that you cannot relieve, report to the surgeon at once. Don't wait until you cannot march before reporting.

6. **A Treatment for Blisters.** Be careful not to tear off the skin covering the blister. Heat the point of a needle until it is red hot and when it cools insert it under the live skin a little distance away from the blister. Push it through to the under side of the bruised skin or blister and then press out the water. To protect the blister, grease a small piece of chamois with vaseline and place it so that it covers the blister and extends over on the solid skin surrounding it. Then place a piece of oxide adhesive tape over the chamois. This method allows the protective covering to be removed without rupturing the skin over the blister and protects the new tender and sensitive skin so that the weight can be rested upon the foot without causing severe pain. One man in each squad should be provided with a needle, adhesive
tape, a bottle of vaseline, and a piece of chamois for the common use of the squad.

7. Shoes.

a. Be sure they fit your feet. The business shoe you wear at the office won’t do for marching when, with the additional weight you carry, your foot spreads in breadth and extends in length; hence your marching shoes should be longer and broader than your business shoes. This is a very important item and should not be neglected. If your shoes are too large, blisters will result; if too small, your foot will be cramped, and every step will be painful.

b. Break your shoes in prior to the practice march.

c. Keep your shoes well oiled so they will be soft and pliable and keep out water.

d. If your shoes get wet on the inside heat some small pebbles (not so hot as to burn leather) and keep them inside the shoes until dry.

CAMP SANITATION

In camp you are really your brother’s keeper. It is the duty of every man to keep the camp clean, sanitary, and livable. Constantly bear in mind that a great number of men are living together in a very small area; that food is being prepared in the open; that there are no sewers; and that the ground or dust and streams must not be polluted. Obey conscientiously and diligently the following rules:
1. Don’t take food to your tent.
2. Use the latrines that are provided.
3. When possible bathe each day as soon as practicable after you arrive at camp.
4. Don’t throw food or fruit peeling on the ground.
5. Dispose of any food you cannot eat by burning in the kitchen incinerator.
6. Keep away from the kitchen and cooks.
7. Don’t dip your cup in the drinking water receptacle. Use the dipper provided for that purpose.
8. If sick, report to a surgeon.
9. Don’t litter up the camp with paper.
10. Get your drinking water and bathe at the authorized places. The camp commander always designates different places for cooking and drinking water, for watering the animals, for bathing and washing clothes.
11. On leaving camp the ground should be in better condition than when you arrived. All sinks, latrines, ditches, and holes are filled and the earth stamped down; all combustibles that have no value should be burned and noncombustible matter either buried or piled so it can be carted away.
12. All deposits in the rears should be covered with earth.

**MISCELLANEOUS**

1. Take great pains each morning to make a neat, small and solid pack and strap it up securely.
2. Don’t put your pack on until ordered to do so by your company commander or first sergeant.

3. Get your pack properly adjusted.

4. Don’t take your equipment off during the halts allowed for resting.

5. Don’t eat anything or patronize the soft drink stand during a march.

6. Retire early and get a good night’s rest.

7. Use only heavy or light wool socks and see that they fit perfectly. If you cannot wear wool socks, try cotton and then silk socks.

8. Don’t overeat or overdrink.

9. A light pair of sneakers or canvas tennis shoes are serviceable for camp wear in the afternoons and are restful to the feet.

10. Each morning sprinkle a little talcum powder or footease in the shoes.

11. Keep the bowels functioning properly. Should you become constipated, report to the doctor for medicine before you begin to feel badly.

12. Clean your mess kit immediately after each meal.

13. Respect the property of others.

**EQUIPMENT**

During the hike your equipment for living will be limited to: (1) your pack (things that you carry on your back), (2) a few authorized articles which are placed in a squad laundry bag (called a surplus kit), and (3) a blanket roll.
Contents of the Pack

1 bacon can. 1 comb and any other toilet articles desired.
1 condiment can. 1 cake of soap.
1 blanket. 1 or 2 towels.
1 poncho. 1 extra suit of underwear.
1 shelter half (one-half of 1 pair socks.
a small tent). 1 pair shoe strings.
5 small tent pins.
1 tooth brush.

Contents of Surplus Kit

1 pair of breeches. 1 shoe laces.
1 suit of underwear. 2 pair of socks.
1 shirt, olive drab. 1 pair of shoes (tan).

Any other article that may be prescribed by the company commander.

The surplus kit of each man will be made up into a neat, compact bundle, tied with a string (use a shoe string for the purpose), and tagged with the owner's name. These individual kits will be packed in a laundry bag, called "surplus kit bag," tagged, one for each squad.

Contents of Blanket Roll

1. Extra blankets.
2. One ramrod for each squad.
3. Any other articles that may be prescribed by the company commander.

Each squad makes these extra blankets, etc., into a
long roll which is called the "squad blanket roll." A tag is tied to it, showing to what regiment, company, and squad it belongs.

**Notes**

1. The bacon can is a convenient place to carry a small face towel, shaving outfit, and other small toilet articles.

2. Keep your soap in a soap box.

3. Each squad should have its own cleaning material which should be tied into a small package and carried in the surplus kit bag.

4. Interest in a hike or a manoeuvre will be stimulated if at least one member of each squad has a map showing all the camp sites and route of march.

5. One man in each squad should be provided with a small bottle of iodine, some absorbent cotton and adhesive tape for the common use of the squad. This saves time for the surgeon and men in caring for minor injuries, scratches, etc.

**ESPRIT DE CORPS**

Have too much esprit de corps to complain of the length of the march, or to kick about the dust on the road. Be self-controlled. Don't boast of your ability to march on forever. Such remarks are depressing to a tired comrade who is not as physically strong as you.
CHAPTER XI

OFFICERS' RESERVE CORPS

To make it possible to fill the gaps made in the Regular Army, by the heavy loss of commissioned officers which is inevitable in time of war and to make it possible to train large volunteer armies which are called into existence when war is imminent or actually upon the country, the Government has provided for an Officers' Reserve Corps.

It is, indeed, a patriotic and far-sighted act on the part of a citizen to become a reserve officer, for, by so doing, he will increase his measure of usefulness for the time when his country will need him most and when he will, if he is a real, virile man, desire to be of the utmost service to his country.

The President alone is authorized to appoint officers in the Reserve Corps. Each officer must be physically, mentally, and morally qualified to hold his commission.

The highest rank in the reserve corps will be that of major.

Age limits for appointment in the line of the Reserve Corps:

2nd Lieutenants must be under 32 years of age.
1st Lieutenants must be under 36 years of age.
Captains must be under 40 years of age.

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Majors must be under 45 years of age.

Any citizen who thinks that he has the necessary qualifications and desires to become a reserve officer should apply to the Commanding General of the Department wherein he resides for an application blank and all information pertaining thereto.

You must undergo a course of training in camp. We advise you in the strongest terms to go to camp as soon as possible. There are no short cuts in the military business. The most efficient instruction under the most ideal conditions with the most competent officers, will be found only in camp.

GENERAL INFORMATION CONCERNING THE OFFICERS’ RESERVE CORPS

An officer in the Reserve Corps cannot, without his consent, be called into service in a lower grade than that held by him in the Reserve Corps.

When a Reserve Officer reaches the age limit fixed for appointment or reappointment in the grade in which commissioned, he will be honorably discharged from the service of the United States and he will be entitled to retain his official title, and, on occasions of ceremony, to wear the uniform of the highest grade he held in the Reserve Corps. The preceding provisions as to ages of officers do not apply to the appointment or reappointment of officers of the Quartermaster, Engineer, Ordnance, Signal, Judge Advocate, and Medical Sections of the Reserve Corps.

A commission in the Reserve Corps will cover a period
of five years, except as provided in the preceding paragraph, unless sooner terminated in the discretion of the President. An officer may be recommissioned, either in the same or a higher grade for successive periods of five years, subject to examination and age limits.

To become eligible for appointment as an officer of the Officers' Reserve Corps a man must be not less than twenty-one years of age and must be a citizen of the United States.

THE OFFICERS' RESERVE CORPS IN WAR

In time of actual or threatened hostilities the President can order officers of the Reserve Corps to temporary duty with the Regular Army, or as officers at recruiting rendezvous and depots, or on such duty as he may prescribe. An officer thus called into service receives the same pay and allowances as an officer of the same rank in the Regular Army. When thus called out Reserve Officers may be promoted in rank to vacancies in volunteer organizations. Retired officers of the Officers' Reserve Corps are not entitled to retired pay but are entitled to pensions for disability incurred in line of duty and while in active service. When called out for active service an officer in the Reserve Corps will be required to obey the laws and regulations for the government of the Army of the United States in so far as they are applicable to officers whose permanent retention in the military service is not contemplated.
During peace the Secretary of War can order any Reserve Officer to duty for instruction for a period not to exceed fifteen days in any one calendar year. While so serving, an officer will receive the pay and allowance of his grade in the Regular Army. This period of service may be extended with the consent of the Reserve Officer. By thus extending such periods of instruction a Reserve Officer may, at the conclusion thereof, be examined for promotion to the next higher grade.

EXAMINATIONS

Each applicant for a commission in the Reserve Corps will be given a rigid physical examination. Make certain that you can pass such an examination. Go to your family physician and get him to examine you.

The examinations for Reserve Corps commissions are for the purpose of ascertaining the practical ability of the applicant. The record of all the service and training the applicant has had at training camps is considered as part of the examination.

Those desiring to enter the Officers’ Reserve Corps may elect any of the following sections:

1. Infantry Officers’ Reserve Corps.
2. Cavalry Officers’ Reserve Corps.
3. Field Artillery Officers’ Reserve Corps.
4. Coast Artillery Officers’ Reserve Corps.
5. Medical (to include the reserve officers of the Medi-
cal Corps, Dental Corps, and Veterinary Corps) Officers’ Reserve Corps.

6. Adjutant General’s Officers’ Reserve Corps.
7. Judge Advocate General’s Officers’ Reserve Corps.
8. Inspector General’s Officers’ Reserve Corps.
9. Quartermaster Officers’ Reserve Corps.
10. Engineer Officers’ Reserve Corps.
11. Ordnance Officers’ Reserve Corps.
12. Signal Officers’ Reserve Corps.

REPORTS TO BE MADE

Officers in the Officers’ Reserve Corps are required to report at once to the Adjutant General of the Department in which they live or to the heads of the Staff Corps or Departments to which they may belong of any permanent change of address. If a change of address to any other department is involved the adjutant of each department should be notified.

THE RESERVE OFFICERS’ TRAINING CORPS

The President is authorized to establish and maintain in civil educational institutions a Reserve Officers’ Training Corps which shall consist of senior and junior divisions.

SENIOR DIVISION

A senior division of the Reserve Officers’ Training Corps may be established at any university and college requiring of its students four years of collegiate study
for a degree, and at essentially military schools which, as a result of annual inspection of such institutions by the War Department, are especially designated as qualified to establish a unit of the senior division. Authorities of the former (universities and colleges not essentially military) must establish and maintain a two years' elective or compulsory course of military training, as a minimum, for its physically fit male students. This course, when entered upon, must in the case of such students be a prerequisite for graduation.

When any member of this senior division has completed two academic years of service in that division; has been selected by the president of the institution and by its professor of military science and tactics (who must be an army officer); has made a written agreement to continue in the Reserve Officers' Training Corps for the remainder of his course in the institution, devoting five hours per week to the military training prescribed by the Secretary of War; has also made a written agreement to pursue the courses in training camps (one camp of not more than six weeks' duration each year) prescribed by the Secretary of War)—when he has fulfilled all these conditions, he may be given, at the expense of the United States, a money commutation of subsistence at a rate not exceeding the cost of the garrison (army) ration during the remainder of his service in the Reserve Officers' Training Corps. This will amount to about thirty cents a day. This provision applies only to the senior division.
OFFICERS’ RESERVE CORPS

JUNIOR DIVISION

A junior division of the Reserve Officers’ Training Corps may be established at any institution to which an army officer has been detailed as the professor of military science and tactics, and which cannot meet the necessary requirements for the senior division. In this case the Government does not give a commutation of subsistence and the students are not asked to obligate themselves as in the senior division.

TO ENTER THE RESERVE OFFICERS’ CORPS

The President is authorized, under such regulations as he may prescribe, to appoint in the Officers’ Reserve Corps any graduate of the senior division of the Reserve Officers’ Training Corps, who shall have satisfactorily completed the two-year course of training (five hours a week), incident to receiving a commutation of rations; also any graduate of the junior division who shall have satisfactorily completed the courses of military training prescribed for students of the senior divisions, referred to in the first part of this paragraph, and shall have participated in such practical instruction, subsequent to graduation, as the Secretary of War shall have prescribed. They must be twenty-one years of age and must make written agreement under oath to serve the United States for ten years.

Any physically fit male citizen of the United States, between the ages of twenty-one and twenty-seven years,
who graduated prior to June 22, 1916, from any educational institution at which an officer of the Army was detailed as professor of military science and tactics, and who, while a student at such institution, completed courses of military training substantially equivalent to those prescribed for the senior division of the Reserve Officers' Training Corps, may, after satisfactorily completing such additional practical military training as the Secretary of War shall prescribe, be eligible for appointment to the Officers' Reserve Corps.

The President can appoint and commission, as a temporary second lieutenant of the Regular Army in time of peace, for the purpose of instruction and for a period not to exceed six months, any Reserve Officer who was appointed in the manner described in the two preceding paragraphs. A temporary second lieutenant will receive the allowance authorized by law for that grade and pay at the rate of $100 a month. He will be attached to a unit of the Regular Army for duty and training. At the end of the six months he will revert to the status of a Reserve Officer.

DEPARTMENT COMMANDER'S REPORT

At the end of each calendar year department commanders and chiefs of staff corps and departments compile lists of members of the Officers' Reserve Corps under their command, showing:

(a) Name, rank, age, and address.
(b) Amount of instruction received.
(c) Progress made.
(d) Efficiency of officer.
(e) Recommendation.

A copy of these lists will be forwarded to the Adjutant General of the Army.

The remainder of this chapter boils down to an irreducible minimum some of the most important subjects with which a Reserve Officer or an applicant for a commission in the Officers' Reserve Corps should be familiar. It emphasizes those things with which a reserve officer should at once become familiar. It merely opens up a broad field of study for a reserve officer and at the same time can be used as a place of reference.

THE LAND FORCES OF THE UNITED STATES

You now are, or expect to become, a member of the land forces of the United States. Of what do the land forces of the United States consist? They consist of the Regular Army, the Volunteer Army, the Officers’ Reserve Corps, the Enlisted Reserve Corps, the National Army, the National Guard in the service of the United States and such other land forces as Congress may authorize.

The land forces are grouped under two general heads:

(1) The Mobile Army.
(2) The Coast Artillery.

"The Mobile Army. The mobile army is primarily organized for offensive operations against an enemy, and on this account requires the maximum degree of
mobility.” (Field Service Regulations.) It consists of:

- Infantry.
- Field Artillery.
- Cavalry.
- Engineers.
- Signal Corps Troops.

"The Coast Artillery. The coast artillery is charged with the care and use of the fixed and movable elements of the land and coast fortifications.” (Field Service Regulations.)

The President of the United States is the Commander-in-Chief of the Army. He exercises his command through the Secretary of War. The Chief of Staff acts as military adviser to the Secretary of War. He puts into effect the Administration’s wishes.

For the purpose of equipping, inspecting, directing, and administering to the Army, there are the following corps and departments:

1. General Staff Corps.
2. Adjutant General’s Department.
3. Inspector General’s Department.
4. Judge Advocate General’s Department.
5. Quartermaster Corps.
6. Medical Department.
7. Ordnance Department.
10. Engineer Corps.
The following are the grades of rank and commands of officers and noncommissioned officers:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Commands</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) General</td>
<td>Armies</td>
</tr>
<tr>
<td>(2) Lieutenant-General</td>
<td>Field Army</td>
</tr>
<tr>
<td>(3) Major-General</td>
<td>Division</td>
</tr>
<tr>
<td>(4) Brigadier-General</td>
<td>Brigade</td>
</tr>
<tr>
<td>(5) Colonel</td>
<td>Regiment</td>
</tr>
<tr>
<td>(6) Lieutenant-Colonel</td>
<td>Second in command in a Regiment</td>
</tr>
<tr>
<td>(7) Major</td>
<td>Battalion</td>
</tr>
<tr>
<td>(8) Captain</td>
<td>Company</td>
</tr>
<tr>
<td>(9) First Lieutenant</td>
<td>Platoon</td>
</tr>
<tr>
<td>(10) Second Lieutenant</td>
<td>Platoon</td>
</tr>
<tr>
<td>(11) Veterinarian</td>
<td>He has no command</td>
</tr>
<tr>
<td>(12) Cadet at United States Military Academy</td>
<td>He has no command</td>
</tr>
<tr>
<td>(13) Sergeant-Major</td>
<td>He has no command</td>
</tr>
<tr>
<td>(Regimental)</td>
<td></td>
</tr>
<tr>
<td>(14) Ordnance Sergeant</td>
<td>He has no command</td>
</tr>
<tr>
<td>(15) Quartermaster Sergeant</td>
<td>He has no command</td>
</tr>
<tr>
<td>(16) Sergeant-Major (Battalion)</td>
<td>He has no command</td>
</tr>
<tr>
<td>(17) First Sergeant</td>
<td>Platoon</td>
</tr>
<tr>
<td>(18) Sergeant</td>
<td>Sometimes a Platoon</td>
</tr>
<tr>
<td>(19) Corporal</td>
<td>Squad</td>
</tr>
</tbody>
</table>

**ARTICLES OF WAR**

The Army is governed by the Articles of War, which can be found in the Army Regulations. Any laws, orders, *et cetera*, pertaining to the Army must not violate directly or indirectly any of the Articles of War. It is therefore desirable that each Reserve Officer know where to find them and become, in a general way, familiar with them.
GENERAL ADVICE

To become a first-class drillmaster is desirable and necessary. But, being one, you are not to be intrusted with the command of troops in the field unless you have gone much farther than that. To become an excellent drillmaster means simply that you have mastered a detail. In order to become one you should bear this in mind: You cannot teach a man how to do a thing unless you know that thing yourself. If you don't know your drill, don't try to "bluff" your men. Burn the midnight oil, or remain a private.

MILITARY CORRESPONDENCE

An official letter should refer to one subject only.

In writing to the War Department address your letter to "The Adjutant General of the Army, Washington, D. C."

The United States (including colonies) is divided into the following departments:

(1) The Northeastern Department, with Headquarters at Boston, Massachusetts.

(2) The Eastern Department, with Headquarters at Governors Island, New York.

(3) The Southeastern Department, with Headquarters at Charleston, South Carolina.

(4) The Central Department, with Headquarters at Chicago, Illinois.

(5) The Southern Department, with Headquarters at Fort Sam Houston, Texas.

(6) The Western Department, with Headquarters at San Francisco, California.

(7) The Philippine Department, with Headquarters at Manila, P. I.
The Hawaiian Department, with Headquarters at Honolulu, Hawaii.

You will be in one of these departments. Address your communication to "The Commanding General" at his department headquarters.

Answer all official communications promptly. This is important. Letters must be written, folded, signed as prescribed by the War Department. Models illustrating the system are furnished by the Adjutant General's office, Washington, D. C. "Ind." is the abbreviation for indorsement.

(Correspondence Model)

COMPANY B, 40TH INFANTRY,
FORT WILLIAM H. SEWARD,

From: The Commanding Officer, Co. B, 40th Inf.
To: The Adjutant General of the Army
(Through military channels.)
Subject: Philippine campaign badge, Corporal John Doe.

Inclosed are lists in duplicate of the enlisted men of Company B, 40th Infantry, entitled to the Philippine campaign badge.

JOHN A. BROWN,
Capt., 40th Inf.
1ST IND.

To the Comdg. Gen., Western Department, San Francisco, California.

A. F. R.,
Brig.-Gen., Comdg.
USE OF THE COMBINED ARMS

Every efficient officer must realize the possibilities and limitations of his own arm of the service as well as the possibilities and limitations of the other arms. Each arm of the service is necessary and important. A proper understanding of the use of the combined arms is as essential to success in battle as coöperation between the different members of a football team is to its success. Don't "knock" any arm but the one you are in, and don't knock that unless you are willing to admit you are not man enough to improve it.

INFANTRY

"The infantry is the principal and most important arm, which is charged with the main work on the field of battle and it usually decides the final issue of the combat." (Field Service Regulations.) The rôle (duty or job) of the infantry, whether offensive or defensive, is the rôle of the entire force. If it fails, all fail. When properly supported by artillery, trained infantrymen armed with rifles, bayonets, and the will to put the enemy out of action, will settle all issues.
The chief duty of the artillery is to support the infantry. It does this in three ways: 1st, By firing at the hostile infantry. 2d, By putting out of action the hostile artillery so that it cannot fire at the infantry. 3d, By demolishing the obstacles in front of the enemy's works. It smothers the enemy with a curtain of fire, so that the infantry can move forward without ruinous losses. Coöperation with the infantry is essential. If the infantry is defeated the artillery covers its withdrawal; if the infantry is successful the artillery moves forward and assists in reaping the full reward of victory by firing on the fleeing enemy. The present European War has greatly increased the prestige and importance of this arm of the service. The amount of artillery on the Western front and the amount of ammunition consumed daily is appalling.

This very important arm is the eye with which the general sees for many miles to the front and flank. In an advance it pushes ahead, combs the country for the enemy, disperses his cavalry, and thus protects the infantry in the rear. It locates the enemy, and occupies his attention until the infantry comes up. It protects the flanks and rear of the infantry and artillery during the fight. If needed, it joins in the fight. If the in-
fantry is defeated it covers the withdrawal, and if the infantry wins it pursues and pounces upon the enemy.

MACHINE GUNS

Before the present European War, machine guns were classified as emergency weapons. It was not believed that they could remain long in action, because they would soon be silenced by hostile fire (artillery and infantry). It was recommended, therefore, that a favorable opportunity be awaited before opening fire which was to be delivered with their utmost effectiveness. They were believed to possess very limited possibilities in an attacking line, but as being most valuable in defensive works where protection and concealment could be found.

During this war they have lost, as a defensive weapon, no prestige. They have also proved of great value to the attacking side. They are being made light and portable to accompany the firing line in an attack. The supply of ammunition alone limits the number that can be used.

Each side in the present war has used them by the thousands with effectiveness. Machine guns are more worthy of consideration to-day than heretofore.

BOMBS AND HAND GRENADES

The present European War has revived the use of hand grenades and bombs. A certain number of soldiers in each British and French battalion are trained
as grenade throwers. Their principal weapon is a bucket or bag of grenades or bombs. They operate not only from trenches but accompany the firing line in an attack and dispose of sheltered or isolated group of the enemy by smothering their position with a shower of hand grenades or bombs.

These weapons are in the first stages of development in this country. They offer to the service practically a virgin field of opportunities. Some Reserve Officers might make a specialty of this subject and assist in its development.

**NIGHT OPERATIONS**

"By employing night operations troops make use of the cover of darkness to minimize losses from hostile fire, to escape observation, to gain time." (Infantry Drill Regulations.) They are dangerous because control is difficult and confusion is frequently unavoidable. Only trained troops should be used, and the formation must be simple. Don't attempt anything complicated.

Observe the following suggestions. For an attack or offensive movement:

(1) Study by daylight and after dark, if possible, the ground you are to cross.

(2) Make careful preparations with secrecy.

(3) Avoid fire action. Pieces should not be loaded. Rely on the bayonet.

(4) Give each unit a definite objective and direction. Avoid collision.
(5) Have each man wear a distinctive badge. (For instance, a white band on one arm.)

If on the defensive and you expect a night attack, place obstacles in front of your position, heavily patrol your front, fix bayonets, move up your supports, open fire as soon as results may be expected, and illuminate the foreground.

OBSTACLES

The main object in placing obstacles in front of a defensive position is to delay the enemy while he is under the defenders' fire, and thus make his advance as difficult as possible. To accomplish this result they must be so placed that the enemy must cross them. They must not interfere with the defenders' view or fire; they must not be easily destroyed by artillery fire; they must not afford concealment to the enemy; and they must be so made that they will not obstruct a counter attack on the part of the defenders. The present war has demonstrated that the barb wire entanglement fulfils more of these requirements than any other form of obstacle.—See Engineer Department's "Manual on Field Fortifications" on how to construct obstacles.

MEETING ENGAGEMENTS

When two hostile forces suddenly meet we have what is termed a "meeting engagement." Very little or no reconnaissance is possible. There is an absence of trenches. Both sides deploy rapidly. The smaller the
force the more frequently will it fight a meeting engagement. Therefore, it is of the utmost importance to junior officers. A great advantage will accrue to the side which can deploy the faster. The leader who has intuition, initiative, who can make a quick decision and is willing to take a long chance, will have a great advantage.

WITHDRAWAL FROM ACTION

"The withdrawal of a defeated force can generally be effected only at a heavy cost." (Infantry Drill Regulations.) When a withdrawal is necessary, make every possible effort to place distance and a rear guard between you and the enemy. Have one part of your line withdraw under protection of the fire of the other part and so on. Reorganize your command as soon as possible.

INTRENCHMENTS

"Ordinarily infantry intrenches itself whenever it is compelled to halt for a considerable time in the presence of the enemy." (Infantry Drill Regulations.) Trenches are constructed with a view of giving cover which will diminish losses, but they must not be so built or placed as to interfere with the free use of the rifle. A good field of fire is the first consideration. The construction of a trench is simple, but the location of it is difficult. If possible, trenches are laid out in company lengths.

Intrenchments usually take the following form:
(1) **Hasty Cover.** Constructed by troops with the tools they carry on their person. It is a shallow trench with a parapet at least three feet thick and one foot high. It furnishes cover against rifle fire, but scarcely any against shrapnel.

(2) **Fire Trench.** It should be deep and narrow with the parapet flat and concealed. While in it, the troops fire at the enemy; hence the name fire trench.

Usual forms of fire trenches are as shown in the following illustration:

(3) **Support Trenches.** The supports sleep and live in these trenches; hence they are covered. The cover (roof) must be thick enough to afford protection from high angle artillery fire. It is placed as near the fire trench as possible.

(4) **Approach Trenches.** These connect fire trenches with the support trenches and the support trenches with any trenches in rear where natural cov-
There are at least two entrances to each dugout.

Sunken frames the sills of which form steps.

Dugout sometimes made large enough to accommodate a platoon.

CROSS SECTION OF A SUPPORT TRENCH AND DUGOUT
A SECTION OF A FORWARD ENTRENCHED ZONE

OTHERS ARE IN REAR
OFFICERS’ RESERVE CORPS

ered communication is impracticable. They are zigzagged to escape being enfiladed. (That is, to prevent one explosion from doing too much damage in a single trench.) During an engagement, troops by using these trenches can go safely to the help of the troops in the fire trenches. They are usually deep and narrow.

(5) Intermediate Trenches. They are constructed in rear of the support trenches when the ground renders it possible to offer a stubborn resistance between the support and the reserve trenches. They are constructed like fire trenches.

(6) Reserve Trenches. Constructed like the fire trenches and occupied by the local reserves who live in deep dug-outs. The intermediate and reserve trenches are often merged into the support trenches. All are protected by barbwire entanglements. No set plan of trenches can be used. The topographical features of the ground must govern.

MILITARY MAPS

Definition. “A military map is a drawing made to represent some section of the country, showing the features that are of military importance, such as roads, bridges, streams, houses, and hills. The map must be so drawn that you can tell the distance between any two points, the heights of the hills, and the relative positions of everything shown.” (Field Service Regulations.)

In the field the military maps are supplemented by sketches, or field maps, prepared from day to day. For facility in reading, military maps are made according to a uniform system of scales and contour intervals as follows:
Road Sketches. Three inches on the map is equal to 1 mile on the ground, contour intervals of 20 feet.

Position and Outpost Sketches. Six inches on the map are equal to 1 mile on the ground, contour intervals of 10 feet.

Manoeuvre or War Game Maps. Twelve inches on the map are equal to 1 mile on the ground, contour intervals of 5 feet.

Large Strategical Maps for Extended Manœuvres. One inch on the map is equal to 1 mile on the ground, contour intervals of 60 feet.

Every officer in the Reserve Corps should be able to read a military map and make a road, an outpost, and a position sketch.

BAYONET

Importance of the Bayonet. The infantry soldier is armed with a bayonet. He relies mainly on fire action to disable the enemy, but he should know that it is often necessary for him to cross bayonets with the enemy. Therefore he must be instructed in the use of the rifle and the bayonet in hand-to-hand encounters. The present European War is demonstrating the importance of this instruction. If you did not receive instruction in bayonet fighting at a federal training camp, it was not because it is unimportant, but because there was no available time to give it. Any Reserve Officer can well afford to specialize in this work.
AMMUNITION

An infantry soldier goes into battle carrying 220 rounds of rifle ammunition. He habitually carries in his belt 100 rounds and when a fight is imminent he gets 120 rounds (2 bandoliers) from his combat train. He keeps 30 rounds in the right pocket section of his belt to be expended only when ordered by an officer.

A cavalryman goes into battle carrying 150 rounds of rifle ammunition and 40 rounds of pistol ammunition. He habitually carries in his belt 90 rounds of rifle and 20 rounds of pistol ammunition. When about to go into a fight he gets 60 rounds of rifle and 20 rounds of pistol ammunition from his combat train.

All officers must train their men to economize in the use of ammunition. Train service, even by rail for ammunition, would be inadequate if this were not done.

TRANSPORTATION

Organization commanders are responsible for all unauthorized material or supplies that may be put on their wagons. You should therefore become acquainted with the transportation attached to the smaller organizations. The wagons that carry your ammunition are called the Combat Train. The wagons that carry your authorized baggage, kitchen equipment, and food are called the Field Train.

THE RATION

A ration is the allowance (money) for the subsistence of one person for one day. It is based on the cost of a
fixed amount of certain foods (such as meat, potatoes, bread, etc.) necessary for a workingman. As the cost of food in the different sections of the country varies, so does the cost of the ration. There are several kinds of ration based on what the soldier is doing and the climate he is in. If you are ever in command of a company, whether in the field or in barracks, one of your most important duties will be to supervise the cooking and messing of your company. You should, therefore, become familiar with the following rations:

(1) *Garrison rations.* Used by troops in garrison and during peace and on manœuvres.

(2) *Reserve ration.* Carried on the person and in the trains.

(3) *Field ration.* The ration prescribed by the commander of a field force.

(4) *Travel ration.* Used when traveling.

(5) *Emergency ration.* Used by troops on an active campaign in an emergency.

(6) *Filipino ration.* For use of Filipino Scouts.

**PROPERTY**

In the absence of regulations on the subject, each Reserve Officer should own a good watch, a pair of field glasses, a compass, and a note book.

**GUARD DUTY**

Guards are used in camp or garrison to preserve order, to protect property, and to enforce police regula-
tions. The commander of the guard is an officer or non-commissioned officer. He performs his duties under the supervision of the officer of the day. A sentinel is on post two hours out of every six. And a tour of guard duty is twenty-four hours. As guard duty is of such utmost importance, and laxity, or failure to perform it properly, is very severely punished, the duties of all connected with it are clearly prescribed in the Guard Manual.

Orders for sentinels are divided into two classes, general and special. Each should be memorized. Special orders relate to particular posts and duties. General orders apply to all sentinels and are as follows:

"(1) To take charge of this post and all government property in view.

"(2) To walk my post in a military manner, keeping always on the alert and observing everything that takes place within sight or hearing.

"(3) To report all violations of orders I am instructed to enforce.

"(4) To repeat all calls from posts more distant from the guard house than my own.

"(5) To quit my post only when properly relieved.

"(6) To receive, obey, and pass on to the sentinel who relieves me all orders from the commanding officer, officer of the day, and officers and noncommissioned officers of the guard only.

"(7) To talk to no one except in line of duty.

"(8) In case of fire or disorder to give the alarm."
“(9). To allow no one to commit a nuisance on or near my post.
“(10) In any case not covered by instructions to call the corporal of the guard.
“(11) To be especially watchful at night, and, during the time for challenging, to challenge all persons on or near my post, and to allow no one to pass without proper authority.” (Guard Manual.)

SALUTING

Saluting distance is that within which recognition is easy. In general it does not exceed thirty paces.

A junior, who is mounted, dismounts before addressing a senior who is dismounted. If the senior is mounted the junior does not dismount when addressing him.

A junior officer walks or rides on the left of his senior.

National Anthem. Whenever the National Anthem is played at any place when persons belonging to the military service are present all officers and enlisted men not in formation should stand at attention facing toward the music (except at retreat, when they should face toward the flag). If in uniform, covered, they shall salute at the first note of the anthem, retaining the position of salute until the last note of the anthem. If uncovered, stand at attention but do not salute. If not in uniform and covered they shall uncover at the first note of the anthem, holding the headdress opposite the left shoulder and so remain until its close, except that in inclement weather the headdress may be slightly raised.

The same rules apply when to the color or to the standard is sounded as when the National Anthem is played.

When played by an Army band, the National Anthem shall be played through without repetition of any part not required to be repeated to make it complete.

The same marks of respect prescribed for observance during the
playing of the National Anthem of the United States shall be shown toward the national anthem of any other country when played upon official occasions.

**Colors or Standards.** Colors are the national and regimental flags of foot troops. Standards are the national and regimental flags of cavalry or field artillery. When passing colors or standards, uncased (not in a waterproof case), the prescribed salute must always be rendered. By the prescribed salute is meant, if unarmed or armed with a saber which is sheathed, the "hand salute"; if armed with a drawn saber, the "present saber." If you, wearing civilian dress, pass them, uncover and hold the headdress opposite the left shoulder with the right hand.

**BOOKS***

We recommend that all officers, non-commissioned officers and all privates who propose to work for advancement read the following books. All can probably be obtained from the Adjutant General of the Army, Washington, D. C. Any other military books desired can be purchased from the United States Infantry Association, Union Trust Building, Washington, D. C.

3. "The Field Service Regulations, United States Army."
4. The Drill Regulations of the arm of the service to which you are assigned.

*Some government publications can be obtained at cost from the Superintendent of Public Documents, Washington, D. C.
(5) "Non-commissioned Officers' Manual" (War Department Publication).

(6) "First Aid to the Sick and Injured" (War Department Publication).

(7) "Army Regulations" (to be used as a book of reference when needed).

(8) "Small Arms Firing Regulations" (War Department Publication).


It is highly desirable for every Reserve Officer to place his name on the mailing list at the Army Service School, Fort Leavenworth, Kansas. This costs about $1 a year and in return the officer receives much valuable information. Write to the Secretary for any further information desired on this subject.

**FIELD ORDERS**

Field orders, whether written or oral, should follow a certain form. This decreases the probability of any vital part being left out and increases the probability of the receiver or reader understanding it.

In the following form for an advance, note the order in which the paragraphs occur. This is very important.

**FOR AN ADVANCE**

<table>
<thead>
<tr>
<th>Field Orders</th>
<th>(Title)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.—</td>
<td>(Place)</td>
</tr>
<tr>
<td>(Reference to map used)</td>
<td>(Date and Hour)</td>
</tr>
<tr>
<td>Troops</td>
<td>(1) (Information of enemy and of our supporting troops)</td>
</tr>
<tr>
<td>(a) Independent</td>
<td>(2) (Plan of commander)</td>
</tr>
<tr>
<td>(3) (a) (Instructions for independent</td>
<td></td>
</tr>
</tbody>
</table>
Cavalry:  
(Commander)  
(Troops)  

(b) Advance Guard:  
(Commander)  
(Troops)  

(c) Main Body—in order of march:  
(Commander)  

(d) Right (left) Flank Guard:  
(Commander)  
(Troops)  

(e) Signal Troops:  
(Commander)  

cavalry—place and time of departure, roads or country to be covered, special mission)  
(b) (Instructions for advance guard—place and time of departure, or distance at which it is to precede the main body, route, special mission)  
(c) (Instructions for main body—distance at which it is to follow the advance guard, or place and time of departure)  
(d) (Instructions for flank guard—place and time of departure, route, special mission)  
(e) (Instructions for signal troops—lines of information to be established, special mission)  
(x) (Instructions for outpost—when relieved subsequent duties)  

(4) (Instructions for field train—escort, distance in rear of column, or destination when different from that of main body, if disposition not previously covered in “Orders”)  

(Instructions for sanitary, ammunition, supply and engineer trains when necessary)  

(5) (Place of commander or where messages may be sent)  
(How and to whom issued)  

(Authentication)  

Notice in particular that the first thing in the body of the order is the information of the enemy and of supporting or friendly troops; 2d, the plan; 3d, the detailed instruction for executing the plan; 4th, the order to field train; 5th, the place where the commander can be found.
All orders, whether for a retreat, an attack, a defense, the establishment of an outpost and so on, should take this general form.

**A MODEL ORDER FOR AN ADVANCE**

Field Orders
No. 6

Three inch Leavenworth
Map

Troops

(a) Advance Guard:
Major A.
1st Bn. & 8 mtd. orderlies, 1st Inf.
1st. Plat. Tr. A.
7th Cavalry

(b) Main Body—in order of March:
Colonel B.
1st. Inf. (less 1st Bn.)
2d Infantry
Detachment 3d F.
Hosp.

"Hq. 1st Brigade, 1st Division,
Fort Leavenworth, Kansas,
20 Aug. '08, 8 P. M.

(1) Two regiments of hostile infantry are reported to have occupied Valley Falls late this afternoon, en route for Easton. Small hostile cavalry patrols were seen two miles east of Valley Falls at 6 P. M. to-day. The remainder of our division is expected to reach Fort Leavenworth to-morrow.

(2) This brigade (less the 3d Inf. which has been directed to hold the Missouri river crossing at Fort Leavenworth) will march to-morrow to Easton to hold the crossings of the Big Stranger creek.

(3) (a) The advance guard will clear D at 5-15 A. M., marching via the E—G—Atchison Pike—1-74—78—80—Q—R—Easton road. Patrols will be sent via Lowemont to reconnoiter the crossings of the Big Stranger near Millwood and via Mount Olivet to reconnoiter those near 114.

(b) The main body will follow at a distance of about 700 yards.

(4) The baggage train (less that of the 3d Inf.), escorted by one squad, 2d Inf., will start from D at 6-15 A. M. and follow to P where it will await further orders.

(5) Reports will reach the brigade commander at the head of the main body.

By command of Brig.-Gen. X:

Y,
Adjt. Gen."
GENERAL IDEAS AND RULES FOR SOLVING MILITARY PROBLEMS

The cave man knocked over his foe with a rude club. The operation is greatly refined to-day. The technique of war changes with the ages, but human nature remains the same. Whether with grenade or gas, from submarine or aëroplane, a man after all possible woe and suffering is no more than killed. Human nature will submit to losses in battle up to a certain point, after that the frailties are asserted. The instinct of self-preservation dominates. Organization and discipline and reason are dissipated. A condition ensues similar to that which we have in theaters during fires.

Napoleon's success as a military leader was due to his knowledge of men and how to handle them, common sense, and in a lesser degree to what he learned from books. Upon such a basis the young managers of industrial concerns would be most valuable material from which to select and train successful military leaders. They know men, and it is necessary to possess a world of common sense to acquire any such knowledge. Many of those elements that make success in a military man are exactly the same as those that make a man successful anywhere. A president of a university, a
lawyer or banker or merchant or engineer, has exactly the same kind of daily problems to solve, and requires much the same talents as those possessed by a military leader.

Since success in battle is the thing at which we are driving in all military training, it is common sense to prepare a machine that will do the business. Every officer and noncommissioned officer has got to know how to play the game. A good private makes a good corporal, a good corporal makes a good sergeant, a good sergeant makes a good lieutenant—a good colonel makes a good brigadier general—all exactly as in civil life.

Prussia has had her greatest military success when she devoted her energies to manoeuvres and to the solution of tactical problems. Her defeats and humiliations have come when she has neglected this work. And there's nothing mysterious about the way Prussia or Napoleon or anybody else has solved their military problems. No occult forces are involved, any more than there is in building a canal or hunting tigers. The real general is, in a sense, a postgraduate hunter, or an advanced, all-American quarterback.

One phase of the military work is significant and should cause reflection. The punishment for errors in war is very severe. A leader who makes mistakes may not only pay for them with his own blood but others too may suffer with him. In war we must obey our leaders whether they are right or wrong. How great, do you suppose, are those hordes that have been sacrificed
on history's battlefields to the goddess of ignorance?

Napoleon says in one of his maxims, "Read and re-read the campaigns of Alexander, Caesar, Gustavus Adolphus, Turrenne, Eugene, and Frederick; take them for your model; that is the only way of becoming a great captain, to obtain the secrets of the art of war." To read more intelligently such history we should know something about solving problems in minor tactics. We must know how to solve such problems if we are to master our duties as officers.

Whether, as general or corporal, you are solving a problem on a map or on the ground, your methods will be, in principle, the same. In the former case your soldiers understand thoroughly all orders and do exactly as directed. In the latter case your soldiers are human. They get tired and sick. They go in the wrong directions and get lost sometimes. One forgets, another is late, and the third misinterprets an order, etc.

Here is the common-sense way in which an all-American quarterback performs his duties. He studies carefully the opposing team (enemy) by reports beforehand and on the field of the contest, to determine his weak and strong points. The latter he wishes to avoid in directing his attack. He considers his position on the field, the wind and weather, if raining, etc., and then his different plays to hit the weaker parts of the opposing line with the advantages and disadvantages of each. To his well-trained mind all this is done in a flash, but the logic and causes and effects of action are none the
less present. This quarterback has analyzed the conditions of his problems, he has figured out what he is up against; that is to say, he has estimated the situation.

He is now ready for a decision. He determines where he is going to strike and with what kind of a play he will do it.

He gives a signal, 44—11—17—5. That is to say, he issues his orders.

That is exactly the way a military man, whether he be a corporal or a general, goes about handling a problem, whether on paper or on the ground. When he goes into battle he finds the only difference is that the problem is complicated by bullets and excitement.

Don't think that you are going to learn to solve problems from books alone, any more than you can learn to play tennis or build bridges on paper. You have got to get out into the country and work with actual troops. But first study map problems. Come to a decision slowly until you have had considerable practice, then write out your order with no guides or references. Then check yourself up. Common sense and simple plans are the safest guides.

To frame a suitable field order you must make an estimate of the situation, culminating in a decision upon a definite plan of action. You must then actually draft or word the orders which will carry your decision into effect.
THE LOGICAL WAY TO ESTIMATE THE SITUATION

1st. Consider exactly what you are to do, i.e., your mission as set forth in the orders or instructions under which you are acting or as deduced by you from your knowledge of the situation.

2d. Consider all available information of the enemy. What is his strength? How is he situated? What is he going to do? etc.

3d. Consider all conditions affecting your own troops. What advantages in numbers and position have you over the enemy? What is their morale? etc.

4th. Consider the terrain in so far as it affects the situation.

5th. Consider the various plans of action open to you and decide upon the one that will best enable you to accomplish your mission (carry out your task); that is to say, come to a decision.

It is now necessary to express that decision in the form of an order as the quarterback did in giving the signal, 44—11—17—5.

To enable the will of the commander to be quickly understood, and to secure prompt cooperation among his subordinates, field orders are required to follow a general form.

Under the stress and strain of an engagement there are many causes of excitement. Unless we have trained ourselves to act along certain lines in issuing orders, we may forget some important considerations. We
have known people of superb intelligence to do poorly before a large audience simply from lack of training and experience.

**CORRECT PROCEDURE IN GIVING THE MAIN PART OF A FIELD ORDER**

1st. Give the information of the enemy and of our own supporting troops (i.e., those who may come to our assistance in case of need) to your subordinates that will give them a clear understanding of the problem and enable them intelligently to coöperate with you.

2d. Now state what you are going to do. That is to say, give your plan.

3d. Next, how you are going to put that plan into effect. That is, the assignment of duties to each subordinate.

4th. Give instructions for the ammunition trains, stations for the slightly wounded, etc.

5th. State where you can be found or where messages may be sent.

**SOME GENERAL HINTS**

Clear and decisive orders are the logical result of definite and sure decisions. To gage a man's caliber read his orders.

You must not be hazy and indefinite in your order. You must be clear and definite. Be careful about your phrasing and expressions. An order should be like a cablegram: convey every idea but contain no unnecessary words.
Don't break up the squads or platoons or the companies. Keep the tactical units together as much as possible.

It is marvelous how many mistakes can occur on the battlefield. Attempt a complicated plan and its failure is reasonably assured. Have your plan simple. The enveloping attack is the best. That is to say, have your line longer than the enemy's so that you can attack one of his flanks. He knows this quite as well as you and he will endeavor to perform the same operation upon you. The leader, all else being equal, who has the wit to out-manœuvre the other will win the engagement.

As a rule, an affirmative form of expression is used. Such an order as: "The supply train will not accompany the division," is defective, because the gist of the order depends upon the single word "not."

Write your order so it can be read. Don't go about it as though you were a doctor writing a prescription. Things will go wrong if you do. You will find some of your troops moving in the wrong direction when you need them badly.

Be brief. Short sentences are good. They are clear. Conjectures, expectations, and reasons for measures adopted are weak. They do not inspire confidence. They should be avoided.

Accept the entire responsibility of your command. If things go wrong, it's your fault. Correct them. A large number of military men make it their particular
business to find faults in others, with scarcely a thought for their own. Don't join this club. Reverse the matter.

Avoid such expressions as "attempt to capture," "try to hold," "as far as possible," "as well as you can," etc. Tell a man what he is to do. Don't divide any responsibility with any one.

Officers and men of all ranks and grades are given a certain independence in the execution of the tasks to which they are assigned and are expected to show initiative in meeting the different situations as they arise. Every individual, from the highest commander to the lowest private, must always remember that inaction and neglect of opportunities will warrant severe censure. Do something that will help carry out the plans of your commander. The Japanese regulations caution their commanders to avoid inaction and hesitation.

If you were hunting tigers and permitted a wounded one to move to your rear and spring upon you, unaware of its presence, you would probably pay a heavy price for not being on the alert. For a military leader to be caught unawares is unpardonable.

Napoleon said in another of his maxims: "If the enemy's army were to appear on my front, or on my right or left, what would I do?" If the question is difficult for the commander to answer, his troops are not only poorly placed but are poorly led.

Don't let your force be divided up into detachments and roam all over the country. This is a very common

You cannot fire on the battlefield with the same accuracy as you do on the target range. Fear dilates the pupil of the eye. Men cannot shoot well when they are under great excitement. Don’t count on killing too many of the enemy with a carload of ammunition.

Never forget that Fire Superiority is the thing that wins battles. If you let the other fellow get it and keep it, he’s going to win, not you.

Don’t trespass upon the province of a subordinate. He will handle his job if you will handle yours.

Remember that your flanks are just as vulnerable as the enemy’s. He has his eyes on your flanks just as much as you are observing and considering his own.

Keep cool about starting the action. Don’t put all your men in before you understand thoroughly the condition confronting you. Hold a large part of your force out as supports and reserves until you know definitely the enemy’s position.

Don’t get killed unless necessary; your usefulness to the State comes to an end when that occurs. Take advantage of cover; hug the ground. Learn what is good and what is poor cover.

It is a common fault to forget about the service of information once the action has begun. Keep up your patrolling. Keep yourself posted on what the enemy is about. Otherwise he may have some unpleasant surprise for you.
Be particularly careful about details of time and place. Regulate your watch by the time kept at headquarters.

When you’ve got the enemy on the run don’t let up for an instant. Pursue him without mercy. Turn his retreat into a rout. Capture or destroy his forces.

Scarcely any of these things we are telling you are new. They are as old as war itself. The boxer of a thousand years from now may know a little more about the technique of the game, but the essentials will not change. To wear the champion’s belt, he will have to suffer some lusty blows and be able himself to deliver some more powerful. There will be no easy road to the title. So it is with all wars.

SUMMARY

We recommend that each officer become familiar with the following summary:

"1. Avoid combats that offer no chance of victory or other valuable results.

"2. Make every effort for the success of the general plan and avoid spectacular plays that have no bearing on the general result.

"3. Have a definite plan and carry it out vigorously. Do not vacillate.

"4. Do not attempt complicated manoeuvres.

"5. Keep the command in hand; avoid undue extension and dispersion.

"6. Study the ground and direct the advance in such
a way as to take advantage of all available cover and thereby diminish losses.

"7. Never deploy until the purpose and the proper direction are known.

"8. Deploy enough men for the immediate task in hand; hold out the rest and avoid undue haste in committing them to the action.

"9. Flanks must be protected either by reserves, fortifications, or the terrain.

"10. In a decisive action, gain and keep fire superiority.

"11. Keep up reconnaissance.

"12. Use the reserve, but not until needed or a very favorable opportunity for its use presents itself. Keep some reserve as long as practicable.

"13. Do not hesitate to sacrifice the command if the result is worth the cost.

"14. Spare the command all unnecessary hardship and exertion."

—Infantry Drill Regulations.

MISCELLANEOUS INFORMATION

For convenience, military information is considered under two heads, namely (1) that collected in time of peace by the body of army experts in Washington called the General Staff; and (2) that obtained by troops in the field after war has begun. The former relates to general conditions such as the geography, resources, and military strength of the various nations, information necessary to enable the General Staff to act intelligently
in the event of war. The latter relates to more local
and detailed conditions out on the firing line.

For a general to act intelligently he must possess in-
formation of the position, strength, dispositions, inten-
tions, etc., of his opponent. This may be obtained from
a number of sources—adjoining troops, inhabitants,
newspapers, letters, telegraph files, prisoners, deserters,
spies, maps, but mostly from information-gathering
groups, called reconnoitering patrols. When the avail-
able maps do not show all the military features of the
country, officers and soldiers must go on ahead and make
maps that do.

INTELLIGENCE SECTION GENERAL STAFF

There is a special committee of the Great General
Staff called the Intelligence Section, whose business it is
to weigh and classify all information sent to it. Mem-
bers of this committee are placed on duty with large or-
ganizations (for instance, a division, a field army, etc.).

ASSUMPTION OF THE ENEMY

When reliable information of the enemy cannot be ob-
tained, it must be assumed that he has sense and will
act with excellent judgment.

FALSE INFORMATION

Unless instructions have been given to spread false
information, all persons connected with the military ser-
vice are forbidden to discuss the military situation, plans,
movements, etc., with, or in the presence of, civilians of
any age, sex or nationality.
There are three kinds of fire:

(1) *Volley Fire.* Every one fires at the command FIRE. It is used at funerals and occasionally in the first part of an action when the enemy presents a large, compact target.

(2) *Fire At Will.* In this each soldier fires, loads, and fires again independently of the others. He fires fast or slow as the occasion demands.

(3) *Clip Fire.* The soldier stops firing when he has finished his clip of five cartridges. This assists in preventing an undue expenditure of ammunition and in abating excitement.

THE DIFFERENCE BETWEEN INDEPENDENT AND DIVISIONAL CAVALRY

The main difficulty in seeing the distinction between Independent and Divisional Cavalry consists in our forgetting that we have different kinds of organizations in the army as well as we have anywhere else. Let us clearly understand this:

(1) An Infantry Division is composed of nine regiments of infantry, two of artillery, and one of cavalry.

(2) A Cavalry Division is composed of nine regiments of cavalry, one regiment of horse artillery, and no infantry.

The cavalry attached to an Infantry Division is, in general, called Divisional Cavalry. It operates at but comparatively short distances from its division, its duties being of a somewhat local nature.
The Independent Cavalry, because it can move so rapidly, is sent far in advance (thirty, forty, or even fifty or more miles) of the main army to obtain general information, such as the approximate strength and location of the enemy's forces. The Division Commander, since he is so far away from the Commanding General of the army in rear, and since he has broad general duties to perform, must of necessity have broad powers and, in general, be permitted to act as the occasion demands. He is, therefore, said to act independently, and his cavalry is called Independent Cavalry.

**THE DIFFERENCE BETWEEN STRATEGY AND TACTICS**

*Strategy* is generalship in its broadest conception. A strategist conceives and projects campaigns. He determines where armies and navies are to be sent. He is not concerned with the handling or manoeuvres of armies and fleets. He turns over those details to tacticians. He is the master mind, far removed, generally, from the battle line, who picks up an army or fleet here, and puts it there.

*Tactics* is the act and science of disposing (arranging) armies and fleets in order for battle. A tactical commander (tactician) solves local details.

Strategy pertains to conception, to policy; tactics, to technique.

The great General Staff in Washington inaugurates the problems to be solved (strategy), and details commanders (tacticians) to solve them.
EMPLOYMENT OF AIR CRAFT ON AND NEAR THE FIRING LINE IN THE THEATER OF OPERATION

Airplanes will move far out, perhaps hundreds of miles, in front of our most advanced cavalry for the purpose of gathering general information of large bodies of the enemy's forces. This is called Strategical Reconnaissance. Other airplanes do more local scouting. They go but comparatively short distances from the firing line for the purpose of determining the location of trenches, supports, reserves, artillery positions, etc. This is called tactical reconnaissance. They give their artillery commanders information as to where their projectiles are falling.

During siege operations (as in Europe, where some trenches have remained in about the same place for long periods) photographers go up in airplanes each morning and photograph the enemy's trench lines. Blue prints are made of these lines. By comparing these with the lines of the previous day it is easy to determine the changes that have been made during the night.

Other airplanes are detailed for the purpose of combat. They prevent opposing airplanes from gathering information.

THE BIG IDEAS OF MARCHES

For marches to be entirely successful three conditions must be fulfilled: (1) the troops must get there; (2) they must get there on time; (3) and they must get there in good condition.
Now suppose that you were ordered to conduct the march of a company of green men for a distance of 200 miles, just how would you solve the problem?

Before starting, very careful preparations should be made. Your men should be in good physical condition; they must be given so much work that they are athletes.

Keep these points in mind:

1. Always have, when possible, the comfort of your men in mind. Their work in carrying a load of nearly forty pounds and marching around fifteen miles a day will be hard enough. Don’t give them any extra hardships.

2. Make the conditions of the march pleasant. Encourage the men to laugh and sing.

3. Use wagons, automobiles, etc., to carry heavy loads (burdens) whenever possible.

4. It is a custom of the service to help a man who may not be strong physically but who is straining every nerve to get there. Be the first to volunteer to carry for him his rifle or part of his burden.

5. Look out especially for the feet of your men and the hoofs of your animals.

6. On long marches one day in seven should be a day of rest and recreation.

7. Never take an extremely hard and long (forced) march unless imperative.

8. As a rule troops pay no compliments on the march. They have enough to do without that.

9. Let the object to be accomplished determine the
general conduct of the march (the time of starting, the rate, length of march, halts, etc.).

SHELTER

When troops are sheltered under canvas (in tents), they are in camp. When they are resting on the ground without tents (for instance, on the firing line the night before or during a battle), they are in what is called bivouac. When they occupy buildings in towns or villages, or huts especially erected, they are in cantonment. When they are assigned to public (such as post-offices, town halls, court houses, hotels, etc.) or private buildings they are said to be billeted.

SELECTION OF A CAMPING GROUND

Suppose that you were sent on ahead of troops on the march to select a camp ground for them, what big ideas should you bear in mind.

1. The ground should be large enough for the troops without crowding. In case of rain it should be easily drained. And there should be no stagnant water rear (say, within 300 yards).

2. There should be plenty of pure water.

3. There should be good roads around.

4. Wood, grass, forage, and supplies for the men and animals must be at hand or obtainable. Closely cropped turf with sandy or gravelly subsoil is best.

Let us not forget that good old-fashioned guide, common sense. Men are as human in camp as elsewhere. In hot weather shade trees are desirable. In cold
weather ground sloping to the south, with woods to break
the winds is fine.

Avoid old camp grounds, marshy ground, and places
where mosquitoes are plentiful.

ADVICE TO OFFICERS

A company of infantry is composed of three officers
and one hundred and fifty non-commissioned officers
and privates. What a shame to have a private the
mental and moral superior of those above him!
The average American makes a first-rate soldier. He
wants his officers to be efficient and high-toned leaders.
It thrills him to have their actions pitched in a high key.
He wants to be well instructed. He wants to be led
with tact and diplomacy. He wants them to be neat,
to dress immaculately, and to be military in bearing.
He wants to feel that there is no favoritism; that justice
prevails.

Be stern in discipline. Exact nothing less than the
best in a man. Tolerate no slovenliness. Deal laziness
a sharp rebuke. The great majority of your men are
doing their level best. Let them know that this is what
you expect, but at the same time you appreciate them
for it.

When a thing is wrong, say so. Explain the correct
method. Do so calmly and efficiently. You have made
worse mistakes yourself. Your men did not want to
make the mistake. They did so from ignorance. It is
possible that you have not made the matter clear to them,
or the fault is yours not theirs.
Don't be too intimate with your men. Experience has proven that you cannot fraternize with an enlisted man one minute and then punish him for misconduct the next.

When you discipline a man, first make him see his error from your point of view, and then, reprimand him or decide on his punishment in an absolutely impersonal manner.

Grow impatient, become excited, and irritable, rebuke too severely an uninstructed man who has made a small, unintentional mistake, use any words unworthy of your position—and you demonstrate clearly to your men your unworthiness to hold your office.

When there is peace and harmony and efficiency in your organization, you are responsible for it. When there are grumblings, lack of enthusiasm and *esprit-de-corps*, be honest and sensible and see if you are also not responsible for it. No matter how badly things are going at drill, never lose your temper with the company.

When things are going well, let your men feel that you are proud of them. A company should be like a good football team: every man in it right behind the captain.

**A FINAL WORD**

Now it is proper to consider your relation to your immediate superiors. You have no business commanding unless you have first learned how to obey. The finer the training and caliber of an officer, the more sensitive
is he to the wishes of his commanding officer, however informally they may be expressed.

The ideal officer is a Christian gentleman who has no task too small to faithfully perform, whose country’s welfare is above his own, ready for any sacrifice great or small; whose thoughtfulness and efficiency last twenty-four hours a day, whose relations with his superiors are based on modesty, cheerfulness, and loyalty.

A message from the Father and Mother whose son is to serve under you:

“I want my boy to do his bit. I want him to willingly submit to all sacrifices. I don’t limit them. I expect him to become efficient. I expect him to obey orders. That means all orders. Wrong orders as well as right orders.

But I want him to have a fighting chance. I don’t want him to serve under an inefficient officer who is playing to the galleries; who is in the habit of doing things wrong instead of right. If the worst should come, I want my boy to perish for a good cause. I don’t want there to be any blunders about it.

In willingly placing my boy under your orders, I charge you with a sacred task. I charge you to lead him efficiently.”
SUPPLEMENT
ADVANCE WORK
SUPPLEMENT

CHAPTER I

THE THEORY OF SECURITY

(Copied from the Field Service Regulations)

GENERAL PRINCIPLES

Security embraces all those measures taken by a command to protect itself from observation, annoyance, or surprise by the enemy.

Ordinarily this security is provided in part by cavalry. But as a command is not always preceded by cavalry, and as this cavalry can not always prevent sudden incursions of the enemy or discover his patrols, additional security becomes necessary. This is obtained by covering the immediate front of the command with detachments.

On the march these detachments are called advance, flank, or rear guards; in camp or bivouac they are called outposts.

The object of the former is to facilitate the movement of the main body and to protect it from surprise and observation; the object of the latter is to secure the camp or bivouac against surprise and to prevent an attack upon it before the troops can prepare to resist.
On the march these detachments facilitate the advance of the main body by promptly driving off small bodies of the enemy who seek to harass or delay it; by removing obstacles from the line of advance; by repairing roads, bridges, etc., thus enabling the main body to advance uninterruptedly in convenient marching formations.

They protect the main body by preventing the enemy from firing into it when in close formation; by holding the enemy and enabling the main body to deploy before coming under effective fire; by preventing its size and condition being observed by the enemy; and, in retreat, by gaining time for it to make its escape or to reorganize its forces.

As the principal duty of these bodies is the same, viz., that of protecting the main body, there is a general similarity in the formations assumed by them. There is (1) the cavalry covering the front; next, (2) a group, or line of groups, in observation; then (3) the support, or line of supports, whose duty is to furnish the observation groups, and check the enemy pending the arrival of reinforcements; still farther in rear is (4) the reserve.

An advance or flank guard commander marches well to the front, and, from time to time, orders such additional reconnaissance or makes such changes in his dispositions as the circumstances of the case demand.

In large commands troops from all arms are generally detailed, the proportion from each being determined by the tactical situation; but commanders detail no more
troops than the situation actually requires, as an excessive amount of such duty rapidly impairs the efficiency of a command. As a general rule troops detailed on the service of security vary in strength from one twentieth to one third of the entire command, but seldom exceed the latter. When practicable, the integrity of tactical units is preserved.

In mixed commands infantry usually forms the greater part of the troops detailed to the service of security. Cavalry is assigned to that duty whenever advantage can be taken of its superior mobility. The kind and amount of artillery are determined by circumstances.

The field trains of troops on this duty generally remain with the field train of the command, but if conditions permit they may join their organizations.

Troops on the service of security pay no compliments; individuals salute when they address, or are addressed by, a superior officer.

ADVANCE GUARDS

An advance guard is a detachment of the main body which precedes and covers it on the march.

Its duties are:

(1) To guard against surprise and furnish information by reconnoitering to the front and flanks.

(2) To push back small parties of the enemy and prevent their observing, firing upon, or delaying the main body.
(3) To check the enemy's advance in force long enough to permit the main body to prepare for action.

(4) When the enemy is encountered on the defensive, to seize a good position and locate his lines, care being taken not to bring on a general engagement unless the advance-guard commander is empowered to do so.

(5) To remove obstacles, repair the road, and favor in every way possible the steady march of the column.

STRENGTH AND COMPOSITION

Subject to variation according to the situation, one twentieth to one third of a command may be assumed as a suitable strength for the advance guard. The larger the force, the larger in proportion is the advance guard, for a large command takes relatively longer to prepare for action than a small one. In large commands it is usually composed of all arms, the proportions depending on the nature of the work, character of the country, etc.

DISTANCE FROM THE MAIN BODY

While the distance between these two bodies should be great enough to prevent needless interruptions in the march of the main body, and to give the latter time to deploy should the enemy be encountered, it should never be so great that timely support of the advance guard becomes impracticable.
As you go from the point to the main body note that the distances are greater as the groups become larger. Larger groups require more time and space, when getting ready for action, than small groups. A very important thing to remember in connection with this plate is that you have only such groups in an advance guard as are necessary to insure protection for the main body.

Patrols here if necessary

Point

Support

Advance Party

Such patrols on each flank as conditions make necessary

Reserve

Such patrols on each flank as conditions make necessary

Patrols if necessary

Main Body

Patrols if necessary
Distribution of Troops

An advance-guard order generally prescribes the following distribution of troops:

Advance cavalry.
Support.
Reserve.

The manner in which the advance-guard cavalry is employed depends upon the situation. Its proper place is in the direction of the enemy, and generally all or the greater part is used as advance cavalry. If weak in numbers, it may be assigned to the support.

Advance Cavalry

The advance cavalry is that part of the advance-guard cavalry preceding the support. It reconnoiters far enough to the front and flanks to guard the column against surprise by artillery fire, and to enable timely information to be sent to the advance-guard commander.

Support

Following the advance cavalry is the support, varying in strength from one fourth to one half of the advance guard. In mixed commands it consists of infantry, to which engineers may be attached. If there is no advance cavalry, some cavalry should be attached to the support for reconnoitering duty.

As the support moves out it sends forward an advance party several hundred yards, the distance varying with the terrain and the size of the command.
The advance party supplements the work of the advance cavalry, reconnoitering to the front and flanks to guard the support against surprise by effective rifle fire. The patrol preceding the advance party on the line of march is called the point, and is commanded by an officer or an experienced noncommissioned officer.

With the advance cavalry in front but little reconnoitering by infantry is necessary, and the advance party is relatively small—one eighth to one third of the support. If there is no advance cavalry, the advance party is made stronger (about one half of the support) and the flanks are guarded, if necessary, by additional patrols sent out from the support and even from the reserve.

The support commander ordinarily marches with the advance party, but goes wherever needed. He sees that the proper road is followed; that guides are left in towns and at crossroads; that necessary repairs are made to roads, bridges, etc., and that information of the enemy or affecting the march is promptly transmitted to the advance-guard commander. He endeavors promptly to verify information of the enemy.

**RESERVE**

The reserve follows the support at several hundred yards' distance. It consists of the remainder of the infantry and engineers, the artillery, and the ambulance company. The artillery usually marches near the head
of the reserve, the engineers (with bridge train, if any), and special troops at the rear.

**RECONNAISSANCE**

In conducting the reconnaissance the patrols are, as a rule, small—from two to six men. If additional protection is necessary, a flank guard covers the threatened flank. The flanking patrols, whether of the advance cavalry or advance party, are sent out to examine the country wherever the enemy might be concealed. If the nature of the terrain permits, these patrols march across country or along roads and trails paralleling the march of the column. For cavalry patrols this is often possible; but with infantry patrols and even with those that are mounted, reconnaissance is generally best done by sending the patrols to high places along the line of march to overlook the country and examine the danger points. These patrols report or signal the results of their observations and, unless they have other instructions, join their units by the most practicable routes, other patrols being sent out as the march proceeds and as the nature of the country required.

Deserters, suspicious characters, and bearers of flags of truce, the latter blindfolded, are taken to the advance-guard commander.

Civilians are not permitted to precede the advance guard.

Communication between the fractions of an advance
guard and between the advance guard and main body is maintained by wire, messenger service, or signals.

ADVANCE GUARD OF A SMALL COMMAND

In forming the advance guard of a command smaller than a brigade, the foregoing distribution is modified, depending upon the situation. A company or troop usually sends forward only a point, a battalion or squadron, an advance party; but a battalion or squadron at war strength should put a company or troop in the advance guard and a regiment should put a battalion or squadron, if an enemy is liable to be met. Whenever the advance guard is less than a battalion, there is no reserve.

REAR GUARDS

The rear guard is charged with the important duty of covering the retreat.

When a commander decides to retreat, he issues the necessary order. During a retreat the outpost for the night usually forms the rear guard of the following day.

STRENGTH AND COMPOSITION

The strength of a rear guard depends upon the nature of the country and the strength and character of the pursuing force. It can not, like the advance guard, count on the support of the main body.

Machine guns are especially useful in the passage of defiles and in covering the crossings of rivers.
Engineers and ambulance companies are usually assigned to rear guards.

The troops of a rear guard are selected from those that have had previous local successes, or have suffered little loss and are comparatively fresh.

**DISTRIBUTION OF TROOPS**

The proximity and conduct of the enemy control, to a large extent, the formation of a rear guard. When it is not necessary to withdraw in deployed lines, the greater part of the rear guard marches on the road in column of route, taking up a formation resembling that of an advanced guard faced to the rear. The distribution of troops is therefore similar to that of an advance guard, namely:

- Reserve.
- Support.
- Rear cavalry.

The rear cavalry is that portion of the rear-guard cavalry following the support. The support, as in an advance guard, is divided into two parts; that part nearest the enemy is called the rear party and marches with a rear point.

**DISTANCES**

The distance of the rear guard from the main body and between the fractions of the rear guard are about the same as in the case of an advance guard. If marching at night, the rear guard draws nearer the main body.
REAR GUARD OF AN ADVANCING FORCE

If there is a possibility that the rear of the column may be attacked, a rear guard of suitable strength and composition is provided. Its conduct is practically the same as that of the rear guard of a retreating force. It generally marches in rear of the trains, those organizations following the combatant troops without distance.

OUTPOSTS

The size and disposition of the outpost will depend upon many circumstances, such as the size of the whole command, the proximity of the enemy and the situation with respect to him, the nature of the terrain, etc.

A suitable strength may vary from a very small fraction to one third of the whole force. For a single company in bivouac a few sentinels and patrols will suffice; for a large command a more elaborate outpost system must be provided. It should be no stronger than is consistent with reasonable security.

The most economical protection is furnished by keeping close contact with the enemy by means of outpost patrols, in conjunction with resisting detachments on the avenues of approach.

The outpost should be composed of complete organizations.

The positions held by the subdivisions of the outpost should generally be prepared for defense, but conditions may render this unnecessary.

Troops on outpost keep concealed as much as is con-
sistent with the proper performance of their duties; especially do they avoid appearing on the sky line.

**COMPOSITION**

A mixed outpost is composed principally of infantry. The infantry is charged with the duty of local observation, especially at night and with resisting the enemy long enough for the main body to prepare for action. The cavalry is charged with the duty of reconnaissance, and is very useful in open country during the day.

If the infantry has been severely taxed by marching or fighting, a large part of the outpost may be temporarily formed of cavalry.

Artillery is useful to outposts when its fire can sweep defiles or large open spaces and when it commands positions that might be occupied by hostile artillery. The guns are carefully concealed or protected and are usually withdrawn at night.

Machine guns are useful to command approaches and check sudden advances of the enemy.

The field trains of troops on outpost duty generally join their organizations; if an engagement is probable, they may be held in rear.

**DISTRIBUTION OF OUTPOST TROOPS**

The outpost will generally be divided into four parts. These, in order from the main body, are the reserve, the line of supports, the line of outguards, and the advance cavalry.
The distance separating these parts, and their distance from the main body, will depend upon the object sought, the nature of the terrain, and the size of the command. There can be no uniformity in the distance between supports and reserve, nor between outguards and supports, even in the same outpost. The avenues of
approach and the important features of the terrain will largely control their exact positions.

The outpost of a small force should ordinarily hold the enemy beyond effective rifle range of the main body until the latter can deploy. For the same purpose the outpost of a large force should hold the enemy beyond the artillery range.

The reserve constitutes the main body of the outpost and is held at some central point from which it can readily support the troops in front or hold a rallying position on which they may retire. The reserve may be omitted when the outpost consists of less than two companies.

The reserve may comprise one-fourth to two-thirds of the strength of the outpost.

The supports constitute a line of resisting and supporting detachments, varying in size from a half company to a battalion. They furnish the line of outguards.

The supports are numbered consecutively from right to left. They are placed at the more important points on the outpost line, usually in the line on which resistance is to be made in case of attack.

As a general rule, roads exercise the greatest influence on the location of supports, and a support will generally be placed on or near a road. The section which it is to cover should be clearly defined by means of tangible lines on the ground and should be such that the support is centrally located therein.

The outguards constitute the line of small detach-
ments farthest to the front and nearest to the enemy. For convenience they are classified as pickets, sentry squads, and cossack posts. They are numbered consecutively from right to left in each support.

A picket is a group consisting of two or more squads, ordinarily not exceeding half a company, posted in the line of outguards to cover a given sector. It furnishes patrols and one or more sentinels, double sentinels, sentry squads, or cossack posts for observation.

Pickets are placed at the more important points in the line of outguards, such as road forks. The strength of each depends upon the number of small groups required to observe properly its sector.

A sentry squad is a squad posted in observation at an indicated point. It posts a double sentinel in observation, the remaining men resting near by and furnishing the reliefs of sentinels. In some cases it may be required to furnish a patrol.

A cossack post consists of four men. It is an observation group similar to a sentry squad, but employs a single sentinel.

At night it will sometimes be advisable to place some of the outguards or their sentinels in a position different from that which they occupy in the day time. In such case the ground should be carefully studied before dark and the change made at dusk. However, a change in the position of the outguard will be exceptional.

Sentinels are generally used singly in daytime, but at night double sentinels will be required in most cases.
Sentinels furnished by cossack posts or sentry squads are kept near their group. Those furnished by pickets may be as far as 100 yards away.

Every sentinel should be able to communicate readily with the body to which he belongs.

Sentinel posts are numbered consecutively from right to left in each outguard. Sentry squads and cossack posts furnished by pickets are counted as sentinel posts.

By day, cavalry reconnoiters in advance of the line of observation. At night, however, that the horses may have needed rest and because the work can be done better by infantry, the greater part of the cavalry is usually withdrawn in rear of the supports, generally joining the reserve, small detachments being assigned to the supports for patrolling at a distance.

With efficient cavalry in front, the work of the infantry on the line of observation is reduced to a minimum.

General instructions for the advance cavalry are given by the outpost commander, but details are left to the subordinate.

Instead of using outguards along the entire front of observation, part of this front may be covered by patrols only. These should be used to cover such sections of the front as can be crossed by the enemy only with difficulty and over which he is not likely to attempt a crossing after dark.

In daylight much of the local patrolling may be dispensed with if the country can be seen from the posts of
the sentinels. However, patrols should frequently be pushed well to the front unless the ground in that direction is exceptionally open.

Patrols or sentinels must be the first troops which the enemy meets, and each body in rear must have time to prepare for the blow. These bodies cause as much delay as possible without sacrificing themselves, and gradually retire to the line where the outpost is to make its resistance.

Patrols must be used to keep up connection between the parts of the outpost except when, during daylight, certain fractions or groups are mutually visible. After dark this connection must be maintained throughout the outpost except where the larger subdivisions are provided with wire communication.

In addition to ordinary outguards, the outpost commander may detail from the reserve one or more detached posts to cover roads or areas not in the general line assigned to the supports.

In like manner the commander of the whole force may order detached posts to be sent from the main body to cover important roads or localities not included in the outpost line.

The number and strength of detached posts are reduced to the absolute needs of the situation.

ESTABLISHING THE OUTPOST

The outpost is posted as quickly as possible, so that the troops can the sooner obtain rest. Until the lead-
ing outpost troops are able to assume their duties, temporary protection, known as the march outpost, is furnished by the nearest available troops.

The halt order of the commander, besides giving the necessary information and assigning camp sites to the parts of the command, details the troops to constitute the outpost, assigns a commander therefor, designates the general line to be occupied, and, when practicable, points out the position to be held in case of attack.

The outpost commander, upon receipt of this order, should issue the outpost order with the least practicable delay. In large commands it may often be necessary to give the order from the map, but usually the outpost commander will have to make some preliminary reconnaissance, unless he has an accurate and detailed map.

The order gives such available information of the situation as is necessary to the complete and proper guidance of subordinates; designates the troops to constitute the supports; assigns their location and the sector each is to cover; provides for the necessary detached posts; indicates any special reconnaissance that is to be made; orders the location and disposition of the reserve; disposes of the train if same is ordered to join the outpost; and informs subordinates where information will be sent.

After issuing the initial orders, the outpost commander inspects the outpost, orders the necessary changes or additions, and sends his superior a report of his dispositions.
THE THEORY OF SECURITY

The reserve is marched to its post by its commander, who then sends out such detachments as have been ordered and places the rest in camp or bivouac, over which at least one sentinel should be posted. Connection must be maintained with the main body, the supports, and nearby detached posts.

The supports march to their posts, using the necessary covering detachments when in advance of the march outpost. A support commander's order should fully explain the situation to subordinates, or to the entire command, if it be small. It should detail the troops for the different outguards and, when necessary, define the sector each is to cover. It should provide the necessary sentinels at the post of support, the patrols to be sent therefrom, and should arrange for the necessary intrenching. Connection should be maintained with the adjoining supports and with the outguards furnished by the supports.

In posting his command the support commander must seek to cover his sector in such manner that the enemy cannot reach, in dangerous numbers and unobserved, the position of the support or pass by it within the sector intrusted to the support. On the other hand, he must economize men on observation and patrol duty, for these duties are unusually fatiguing. He must practise the greatest economy of men consistent with the requirements of practical security.

As soon as the posting of the support is completed, its commander carefully inspects the dispositions and
corrects defects, if any, and reports the disposition of his support, including the patrolling ordered, to the outpost commander. This report is preferably made by means of a sketch.

Each outguard is marched by its commander to its assigned station, and especially in the case of a picket, is covered by the necessary patrolling to prevent surprise.

Having reached the position, the commander explains the situation to his men and establishes reliefs for each sentinel, and, if possible, for each patrol to be furnished. Besides these sentinels and patrols, a picket must have a sentinel at its post.

The commander then posts the sentinels and points out to them the principal features, such as towns, roads, and streams and gives their names. He gives the direction and location of the enemy, if known, and of adjoining parts of the outpost.

He gives to patrols the same information and the necessary orders as to their routes and the frequency with which the same shall be covered. Each patrol should go over its route once before dark.

Every picket should maintain connection by patrols with outguard on its right and left. Each commander will take precaution to conceal his outguard and will generally strengthen his position by intrenching.
RELIEVING THE OUTPOST

Evening and shortly before dawn are hours of special danger. The enemy may attack late in the day in order to establish himself on captured ground by intrenching during the night; or he may send forward troops under cover of darkness in order to make a strong attack at early dawn. Special precaution is therefore taken at those hours by holding the outpost in readiness, and by sending patrols in advance of the line of observation. If a new outpost is to be established in the morning, it should arrive at the outpost position at daybreak, thus doubling the outpost strength at that hour.
CHAPTER II
ATTACK AND DEFENSE

Combat is divided into two general classes, the offensive (attack) and the defensive.

THE THEORY OF ATTACK

Decisive results are obtained only by the offensive. Aggressiveness wins battles. If you want to thrash a man go after him; don’t wait for him to come to you. When attacking use every available man. Have every man in the proper place at the proper time and in a physical and moral condition to do his utmost.

ADVANTAGES OF THE ATTACK

(1) You can elect the point of attack while the defender must be prepared to resist at all points.
(2) The fact that you are advancing in spite of the defender’s fire stimulates you and depresses the enemy.
(3) You leave your dead behind while the defender must fight among his fallen comrades, which is demoralizing.
(4) You usually are conscious of the fact that you have more men on your side than the defender. You have more rifles on the line than the enemy.
ATTACK AND DEFENSE

(5) Your fire is usually more efficacious than that of your opponent because it is usually converging while his is diverging.

These advantages alone will not necessarily insure success, but fire superiority, if gained and maintained, does insure success. By gaining and maintaining fire superiority you remove all doubt as to the final outcome of the attack.

DIFFERENT KINDS OF ATTACK

The most usual kinds of attack are:

Frontal Attack. This attack is delivered directly against the front of the enemy. It offers little opportunity to bring more rifles against the enemy than he can bring against you. Decisive results can only be expected when your force is larger than your opponent’s or when his is unduly extended. It is a dangerous and costly method of attacking.

Enveloping Attack. Cover the front of the enemy with sufficient force to hold his attention and, with the rest of your command, strike a flank more or less obliquely. Since your line is now longer than his, and you have more rifles in action your fire is converging while that of your enemy is diverging. Never attempt the envelopment of both flanks unless you greatly outnumber your enemy. Coöperation between the frontal and enveloping attack is essential to success. The fraction of the command that envelops the enemy is generally larger than that part in his front. A wide turning
movement is not an enveloping movement. It is dangerous because your troops are separated and can be defeated in detail. In an enveloping movement your line will usually be continuous; it simply overlaps and envelops the enemy. An enveloping attack will nearly always result locally in a frontal attack, for it will meet the enemy’s reserve. Let us repeat: do not attempt a wide turning movement. Your forces will be separated, they may not be able to assist each other, and can be defeated in detail. The tendency of a beginner is to attempt a wide turning movement. The error of dispersion is then committed.

**THE ACTUAL ATTACK**

*Deployment.* To deploy means to extend the front. When does a column extend its front or prepare to fight? When open terrain, which will probably expose the troops to hostile artillery fire, is reached. This place may be two or more miles from the enemy. What is done? Strong patrols are sent out to clear the foreground of the enemy’s patrol. The plan of the attack is inaugurated. Extra ammunition is issued. Each organization is assigned its task. The organizations in the firing lines are assigned objectives and move out, followed by local supports and reserves. Don’t understand that they go “as skirmishers.” They usually march in column of squads. Strong combat patrols are sent out to protect each flank. This is very important even with small commands.
ADVANCING THE ATTACK

It is now necessary to advance the attack to a point where the rifle is effective, so the attacking line can gain fire superiority. The attack which halts to open fire at extreme range (over 1200 yards) is not likely to ever reach its destination (the enemy). Effort should be made to arrive within 800 yards of the enemy before opening fire. How can this be done? How can we pass over a mile or more of ground, swept or likely to be swept, first by the enemy's artillery fire and finally by rifle fire? Answer.—By using all the cover the terrain offers (escape the enemy's view), by using inconspicuous formations, by using such formations as to minimize the effect of the enemy's fire. Discipline at this stage of the attack is essential. Each company in the firing line will probably start its advance upon its objective in column of squads, but taking advantage of all cover. If thick underbrush is found, squad columns would probably be used. If the enemy's artillery fire becomes too effective platoon columns or thin lines are used, dependent upon terrain, cover and the time element. Every opportunity is taken to assemble the companies and continue the advance in column of squads when cover is available. The supports, following the firing line, adopt the same methods to advance as the firing line. In this stage of the attack your own artillery will be assisting you by replying to the enemy's artillery and infantry fire that is directed at you.
THE FIRE ATTACK

The fire attack commences when the infantry in the firing line first opens fire and it usually ends with the charge. A charge is sometimes not necessary because the enemy withdraws from his position. The fire attack does not start until the firing line cannot advance without ruinous and demoralizing losses. It should not be over 1200 yards from the enemy. At this time fire superiority must be gained. This may necessitate a steady, accurate fire for many hours. For this purpose the commander puts more men on the firing line than the enemy and then some more if necessary. Local supports are used if required. Having gained fire superiority, the advance by rushes commences, but each rush must leave behind or have in front of it enough rifles to maintain fire superiority. This determines the size of the rush. You cannot lose this fire superiority and advance; and once it is lost, hours may be required to regain it. The number of men in each rush will usually decrease as the enemy’s position is approached. If the firing line is stopped, if fire superiority is lost and cannot be regained, the firing line intrenches and holds on until darkness or until a favorable turn in the situation develops. It is suicidal to turn back. During the advance, supports move up as close to the firing line as cover will permit, adopting those formations best suited to keep down losses. They may be as close as fifty yards to the firing line. They should not be as far as 500 yards in rear of it.
ATTACK AND DEFENSE

THE CHARGE

There can be no rule to tell you when to charge. It may be from 25 to 400 yards. The common sense (tactical instinct) of the senior ranking officer on the firing line must tell him the psychological moment to order the charge. That moment will be when your fire has broken down the enemy's fire, broken his resistance, and destroyed his morale. The artillery increases its range. The firing line and remaining supports fix bayonets. The former increases the rate of fire, the latter rush forward under the protection of this fire, join the firing line and give it the necessary impetus. Together they rush at the enemy's position. No restraint is placed upon their ardor. Confidence in their ability to use the bayonet gives the charging troops the promise of success. If the charge is successful, the nearest formed bodies are sent instantly in pursuit and under cover of them the commands are reorganized, order restored, and arrangements made to resist a counter attack. If the charge is unsuccessful the artillery or any formed troops in rear cover the withdrawal.

THE THEORY OF THE DEFENSIVE

The defensive is divided into the purely passive defense and the active defense.

The passive defense seeks merely to delay the enemy. The results can never be other than negative. It is usually for the purpose of gaining time and most fre-
quently used by a rear guard. Since the idea of taking up the offensive is absent, no strong reserves are held out for a counter attack; the firing line is as strong as possible from the first; every advantage is taken of obstacles, natural or artificial. The flanks must be made secure.

The active defense seeks to attack the other side at some stage of the engagement. It seeks to win and only the offensive wins. It is often necessary for a commander to assume the defensive (active) either voluntarily, in order to gain time, or to secure some advantage over the enemy; or involuntarily, as in a meeting engagement where the enemy gets a start in deployment for action or where the enemy’s attack is impetuous and without sufficient preparation. In either case the defensive force contents itself with parrying the blows of the enemy, while gathering and arranging its strength, looking and waiting for the right place and time to deliver a decisive blow which is called the counter attack. Hence, a counter attack is the offensive movement of an active defense. Its success greatly depends on being delivered with vigor and at the proper time. It may be delivered in two ways: 1st—straight to the front against a weak point in the attacking line, or 2nd—by launching the reserves against the enemy’s flank after he is fully committed to the attack. The latter method offers the greatest chances for success and the most effective results.
ADVANTAGES AND DISADVANTAGES OF THE DEFENSIVE

The defense has the following advantages over the attack:

(1) Troops attacking afford a better target than the troops on the defensive.
(2) A larger amount of ammunition is usually available.
(3) The men can shoot better because they are not fatigued by advancing.
(4) Losses will be less if good cover is secured.

DISADVANTAGES OF THE DEFENSE

(1) The defender surrenders the advantage of the initiative as the attacker can elect the point of attack and the defender must be prepared at all points.
(2) The defender must fight amidst his dead and wounded which is depressing.
(3) The defender, seeing the enemy continually advancing, becomes conscious of his inability to stop him. This is depressing to the defender and is injurious to his morale.

REQUISITES OF A GOOD DEFENSIVE POSITION

If you were looking for a good defensive position, what points would you have in mind and of these points, which would be the most important? The requisites to be sought in a good defensive position are:

"(1) A clear field of fire up to the effective range of the artillery."
“(2) Flanks that are naturally secure or that can be made so by the use of the reserves.

“(3) Extent of ground suitable to the strength of the force to occupy it.

“(4) Effective cover and concealment for the troops, especially reserves.

“(5) Good communications throughout the position.

“(6) Good lines of retreat.”

—Field Service Regulations.

All of these advantages will seldom if ever be found in the position selected. The one should be taken which conforms closest to the description, but you should bear in mind that a good field of fire and effective cover, in the order named, are the most important requisites. In tracing the lines for the trenches, avoid salients (a hill, spur, woods, etc., that juts out from the general line in the direction of the enemy). Avoid placing the fire trench on the skyline. Locate it on or below the military crest. [The crest from which you can see all the ground to the front.]

PREPARING A DEFENSIVE POSITION

Now let us suppose ourselves as part of a battalion that is to occupy a defensive position. What would probably be done? How and in what order would it be done? What would the major do? He would decide upon the kind of defense (active or passive) to offer, and then find a suitable defensive position in harmony with his plans. He would determine exactly
where the firing and other trenches are to be dug. He would then call up the company commanders and issue his defense order in which the task of each company would be made clear. Those to occupy the firing line would each be assigned a sector of ground to the front to defend and a corresponding section of the fire trench to construct. The supports would construct their trenches and the communicating trenches. He would, if necessary, issue the necessary orders to protect the front and flanks by sending out patrols. He would indicate how the position is to be strengthened and make arrangements for distributing the extra ammunition. If time is a serious consideration, the major would direct the work to be done in the order of its importance, which is ordinarily as follows:

(1) Clearing of foreground to improve the field of fire and construction of fire trench.
(2) Head or overhead cover concealment.
(3) Placing obstacles and recording ranges.
(4) Cover trenches for supports and local reserves.
(5) Communicating trenches.
(6) Widening and deepening of trench; interior conveniences.

Now having cleared the foreground, dug the trenches, recorded ranges to the important objects in each sector, etc., the position can be occupied. The citizen ordinarily pictures the firing trench full of soldiers when he is told the trenches are occupied. Not so. Patrols would be operating well to the front to give timely warning to
one or two sentinels in each company fire trench of the approach of the enemy. These sentinels would in turn inform the company which would probably be resting in the trenches in the rear.

THE ACTUAL DEFENSE

Let us suppose now that our battalion, occupying this defensive position, is a part of a larger force which is supported by artillery. You see small objects one and a half to two miles to your front. You know they are the enemy's troops because your artillery is firing at them and your combat patrols are being driven in. Your entire company has moved to its fire trench. You have plenty of ammunition, you know exactly the range. What happens? You open fire on the enemy at probably the extreme range of 2000 years. Only the hostile artillery can return this fire until the enemy's firing line closes to within 1200 yards of your position. While an attacking force is thus approaching you may inflict very serious losses upon it. But it cannot stop, however serious its losses, beyond 1200 yards; for we have seen that, if it stops advancing in order to fire, it will probably never arrive at your position. When within 1200 yards the enemy will build up a strong rifle fire against you and not attempt to advance until he has gained fire superiority. It is your business not to let him get fire superiority, and if he does do so to take it away from him when he withdraws parts of his rifles to advance by rushing. Fight each
rush. If your defense is active and you permanently stop the enemy's advance by gaining fire superiority, and he cannot regain it, even though he uses up his supports, his firing line will become confused and demoralized and it will be the psychological time for the proper commander to launch his counter attack. On the other hand, if you cannot stop his advance, fix bayonets (firing line and remaining supports) when he fixes bayonets and meet his charge in front of your trench. All your supports will be moved up to assist you in opposing the charge. If you are unsuccessful in the bayonet fight or forced to retire from your trenches during the fire fight your artillery, cavalry and any formed reserves in the rear will cover your withdrawal, which, if possible, should be made straight to the rear, one part covering the withdrawal of the other part, and so on. Reorganize at the first opportunity.
CHAPTER III

PATROLLING

Everything else being equal the army that possesses the most accurate information about the enemy will win. Military history recites the fact that almost every important battle has been either lost or won because of information or lack of information that one side had or did not have of the other side. It is by the use of patrols that the most valuable information of the enemy is usually obtained.

There are many kinds of patrols, but it is with reconnoitering or information seeking patrols that this chapter deals.

DUTIES OF A PATROL

Each reconnoitering patrol is given a certain mission (duty) to perform. The name, "reconnoitering," meaning to survey, to view, indicates that its first duty is to get information, and information is always greatly increased in value if the enemy does not know it has been obtained. Having obtained valuable information, its next duty is to send this information to the officer sending out the patrol.
STRENGTH

The strength of the patrol will generally depend on its mission and on the number of messages that it will probably send back. The larger the patrol the greater the probability of the enemy seeing it. On the other hand, if it is too small, it will not have sufficient members to send in important information and continue operations. Captain Waldron in his book, "Scouting and Patrolling," recommends a patrol of a leader and six selected men for ordinary reconnaissance. This number makes it possible for the patrol leader to place a man out on each flank, a man in advance, two to remain with him and one to remain in the rear as the get-away man. The officer who sends out the patrol determines its strength.

COMMANDER

The leader should be an officer or a noncommissioned officer. He must have good judgment, be cool, be quick in making a decision, be strong in physique, have initiative, and be brave, but not to the extent of rashness. Besides his regular equipment he should have a good pair of field glasses, a compass, a watch, wire cutters, pencils, a message book, and a map of the country.

INSTRUCTIONS

The officer sending out a patrol should give it instructions on the following points:
1. Information of the enemy and of friendly supporting troops.
2. The mission of the patrol. This will include the general direction in which it is to go.
3. How long the patrol is to remain out.
4. Where messages are to be sent.

**PREPARATION**

Before going out the patrol commander will make a careful inspection of the members of his patrol in order to see:

1. That the members are in a suitable condition for the duty to be performed. (Not drunk, sick, lame, having a bad cough, etc.)
2. That each man is properly armed and has the requisite amount of ammunition.
3. That the accoutrement is so arranged that it will not rattle or glisten in the sunlight.
4. That no man has anything about him that will afford the enemy valuable information in the event of capture.

At the conclusion of this inspection he will, in the presence of the officer sending out the patrol, go over his orders, giving his men all the information that he has of the enemy and his own troops; state the duty (mission) of the patrol so that all may know what they are going to accomplish, and he will follow this with a statement of his general plan for carrying it out. He will designate an assembly point should the patrol be
dispersed. He will designate a second in command should he be disabled.

FORMATION

It is impossible to lay down any hard-and-fast rule governing the formation and conduct of the operations of a patrol. Each situation will have to be worked out by itself. The patrol should assume the general formation of a column of troops on the march; that is, it will

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**SUGGESTED FORMATIONS FOR PATROLS**
have an advance guard, a main body, flankers and a rear guard. These several elements may each be represented by only one man.

**CONDUCT OF THE PATROL**

In communicating with each other for ordinary purposes the members of the patrol use signals agreed upon before the start. For this purpose each man must constantly keep within sight and hearing distance of the leader. A patrol moves cautiously, taking advantage of all available cover, seeking in every way to see without being seen. It halts frequently to listen and make careful observations of its surroundings. Except at night a patrol should not move on roads. Villages and inhabited places should not as a rule be entered. During the daytime it seeks high ground from which it can scan the country and at night it seeks a position from which the sky line can be observed.

**ENCOUNTERING THE ENEMY**

If a small hostile patrol is encountered it is generally better to remain in concealment and let it pass than to attack. The noise of a fight may be heard by the enemy, the presence of the patrol therefore indicated, and the enemy will take further precautions to oppose its operations. If the patrol is suddenly attacked or surprised by a superior force, the patrol should at once scatter in all directions and the members make their way back to the last place designated as a meeting place
and then after reuniting continue the reconnaissance. When a patrol fights it does so resolutely. Courage and coolness may bring about success when adverse conditions are encountered.

RETURNING

A patrol can never be certain that the enemy's patrols are not operating in its rear. Hence in returning, it is necessary to observe the usual precautions. If the patrol has eluded the enemy, it is best to return over a route other than that over which the start was made. If a patrol, after having accomplished its mission, is being pursued, it is well, especially when near its own lines, to engage the pursuing troops so as to give warning of its approach to the outpost line. Under the conditions just mentioned, except the patrol is a great distance from its outpost line, it may be necessary as a last resort to have the patrol scatter and each man return individually.
CHAPTER IV

TARGET PRACTICE

Military shooting or target practice is very different from shotgun shooting, or even the kind of shooting required of a large-game hunter; therefore we should begin with the most elementary instruction and drills, if proficiency is to be obtained. Our "Small Arms Firing Regulations" says, "The sole purpose of rifle training for the soldier is to make of him a good shot under war conditions."

Proficient shots are made off the range and not on it. By this we mean that the preliminary instruction you will receive before you go on the range will be of more benefit to you than the actual firing for record. Indeed, firing on the range will only test your ability to put into use the many points covered by your preliminary instruction. Therefore, if you are to become a proficient shot, maintain your interest and enthusiasm at its highest pitch during the preliminary instruction.

Your preliminary instructions will probably become so tedious and tiresome that you will lose sight of their objects. Each preliminary instruction has its own and different purpose, and you will not receive the maximum benefit from them unless you realize this.

This chapter will first explain briefly the purpose of
each preliminary drill, and then give the essential things to be remembered when actually firing on the range.

PRELIMINARY INSTRUCTION

Your preliminary instructions and their purposes are as follows:

1. Nomenclature of the Rifle. The word nomenclature means the vocabulary of names or technical terms which are appropriate to any particular topic. In this case the topic is the rifle. This instruction will be a few lectures or talks by your company officers on the rifle. You should become familiar with the parts of the rifle indicated in the following illustration:

2. Sighting Drills.
Purpose.
(a) To explain the different kinds of sight.
(b) To show how to align the sights properly on the bull’s-eye.
(c) To discover and demonstrate errors in sighting.
(d) To teach uniformity in sighting.
There are two kinds of sights on the rear sight leaf, the open and peep sight. The open sight is the semi-circular notch a-b-c shown in the diagram below; the peep sight is the small hole "d" just below the open sight.

The sighting drills will visually illustrate the following kind of sights.

a—Normal Sight. This is the sight most frequently used. The following illustration is the normal sight when the open sight notch is used.

The figure i-k-l-m is the front sight
B-L-M-C the rear sight notch.
When the open sight is used the above diagram shows the correct alignments of the rear sight notch, front sight and the bull’s-eye. The following features should be noticed:

1st. The front sight (i-k-l-m) is exactly in the center of the rear sight notch (B-L-M-C), if it is in the right or left part of this notch the rifle will shoot to the right or left of the point aimed at.

2d. There is a thin strip of white seen between the top of the front sight and the bull’s-eye. (The Marine Corps and many army officers do not see this strip of white. The method of aiming given and illustrated in this book is the same as found in the Firing Regulations for the Army.)

3d. The top of the front sight should just touch an imaginary line connecting the shoulder at C with that at B. (This is most important.)

4th. The aim is taken at the bottom of the bull’s-eye and not at the top or center.

b—Fine Sight. The following illustration shows a fine sight which should never be used:
This sight causes the rifle to shoot too low because not enough front sight is seen. Correspondingly, if more front sight is seen than illustrated in the normal sights, the rifle shoots high.

c—Normal Sight. The following illustration shows the normal sight when the peep sight is used.

The above illustration shows the correct alignment of the peep sight, front sight, and the bull’s-eye. The following features should be noticed:

1st. The top of the front sight and not the bull’s-eye is focused in the center of the peep sight.

2d. There is a thin strip of white between the top of the front sight and the bottom of the bull’s-eye.


Purpose: To so educate the muscles of the arms and body that the gun, during the act of aiming, shall be held without restraint and during the operation of
firing shall not be deflected from the target by any convulsion or improper movement of the trigger finger or of the body, arms or hands. These drills must be taken daily, if they are to be of the maximum benefit. If you are enthusiastic about rifle shooting, and these drills are not give to you, ask your company commander to show them to you, as they can be executed to advantage at odd times.

4. Deflection and Elevation Correction Drills.

Purpose. To show you how to raise or lower your rear sight, change your windage to the right or left, and note the effect on the striking point of the bullet in each case. In general terms these drills teach you:

(1) What to do when you are firing too high or low. (Elevation Drill.)

(2) What to do when you are firing to the right or left of the target. (Deflection Drill.)

The assumption is in each case that the gun is properly aimed the instant it is fired.

Thoroughly to grasp every phase of the Elevation and Deflection Drills, it is best that you become familiarized with the dimensions of the following targets and the ranges at which each is used. It is not intended that you shall retain all these figures in your mind.
SLOW FIRE TARGETS

TARGET A

This target is used during slow fire at 200 and 300 yards.

TARGET B

This target is used during slow fire at 500 and 600 yards.
This target is always used with the battle sight at 200, 300, and 500 yards rapid fire. Battle sight is the position of the rear sight when the leaf is laid down, which is the habitual position of the rear sight leaf at drill. It is an open sight, and corresponds to an elevation of 547 yards.

WINDAGE

The rear sight is set on a movable base so that it can be moved to the right or left and the aiming point shifted accordingly in order to counteract the effect of the wind on the bullet.

General Rule. To shift the striking point of the bullet to the left move the rear sight to the left. And, of course, the reverse holds true when it is moved to the right.

A Specific Rule. One point of windage moves the
striking point of the bullet 4 inches for every 100 yards you are distant from the target. (One point of windage at 200 yards causes the bullet to strike 8 inches to the right or left of the line of aim; one point at 300 yards causes a 12-inch deflection of the bullet; one point at 500 yards a 20-inch deflection, and so on.)

**ELEVATION**

*General rule for changing the elevation after hitting the target:* A change of elevation either up or down, of 100 yards on your rear sight, will raise or lower your bullet in inches on the target equal to the square of your distance in yards from the target. I.e., a change of 100 yards in elevation on the rear sight leaf while firing at the 200-yard range raises or lowers the striking point of the bullet at the target 4 inches. A similar change while firing at the 300-yard range raises or lowers the striking point of the bullet 9 inches, at the 400-yard range it would be 16 inches, at the 500-yard range 25 inches, and so on.

The following illustrations are self-explanatory in regard to windage and elevation changes and should be diligently studied during preliminary instruction. The effect of windage changes (given in points) will be found at the bottom of each target, while the effect of elevation changes (given in yards) will be found to the left of each target.
The above system of indicating the windage and elevation on each target is used in the United States Marine Corps score book. Each man at Plattsburg, in 1916, was supplied with one of these score books. If used at the firing point they greatly simplify sight adjustments, besides containing other very useful information on shooting.
5. **Gallery Practice.** Purpose.

1. To note errors in the position of the man while he is in the act of firing and call his attention to them after he has fired.
2. To give instruction in squeezing the trigger properly.
3. To stimulate and maintain interest.
4. Offers a check on what the man has absorbed from the other preliminary drills.

Fire just as much on the gallery range as your company commander will permit. You cannot fire too much. Every shot you fire should teach you a lesson on some point connected with the art of shooting.

**SLOW FIRE**

Following satisfactory gallery practice scores the men go on the range for known distance practice. Here the army rifle is fired with service charges at known ranges; first, for instruction, if time permits, and then for record. To obtain satisfactory results the firer must perform correctly five essential things, namely:

1. Hold the rifle on the mark.
2. Aim properly.
3. Squeeze the trigger properly.
4. Call the shot.
5. Make the proper sight adjustment.

They will be briefly and separately discussed:

1. **Holding.** Unless the rifle is held steadily the bullet will not hit the desired mark. The firer must be
able to hold the rifle steadily in the three positions, kneeling, sitting, lying down. *Holding is a question of the proper body position, use of the sling, and practice.*

**Body Position.** The position of the firer must be comfortable. You may, at first, feel constrained or cramped in the different positions but by continued practice the muscles and joints will become so supple and pliable that you can easily assume the correct position. Each man who is trying for a high score should utilize all available time to this end. The following photographs illustrate the correct and incorrect positions:

No. 1. Notice the position of the elbows. They are advanced past the knees so that the flat muscles on the back of the arms, above the elbows, rest against the legs. Notice the position of the right thumb and aiming eye; also sling. To assume this position correctly, it is necessary that you lean well forward. Avoid the tendency of getting the feet too far apart.
No. 2. Notice the proper manner of working the bolt during rapid fire. Keep your gun at the shoulder while loading. Turn the gun to right and down a little. Don't make any unnecessary motions.

No. 1. Left elbow is resting on knee cap. No support to steady right arm. Eye too far from rear sight. Lip is against stock. (This causes sore lips.) Thumb around stock. Sling on outside of arm.
No. 1. Correct kneeling position. Notice that the back of the left arm (not elbow) is resting on knee. Notice that the firer is sitting well down on the right leg. This is essential.

No. 1. Incorrect kneeling position. Thumb is around small of stock. Eye too far from rear sight. The gun is turned (canted) to the right. The sharp point of the elbow is resting on the knee which has a tendency to make the position an unsteady one.

No. 2. The improper manner of loading the gun during rapid fire. He has lowered the gun from his shoulder to load it, which is "a time-killing" proposition.
No. 1. Notice the right eye. Notice that the left arm is well under the gun. Notice where the gun is pressed against the shoulder. Notice position of right thumb.

No. 2. Notice position of left arm. Notice the pressure of the sling against the left arm.

No. 3. Notice the correct position of the legs and feet. Notice that the toes are turned out.
No. 1. Gun is canted to the right. Sling is on the outside of the arm. Right thumb is across small of stock which is the cause of bruises and sore lips. Left elbow not well under. Eye too far from rear sight piece.

No. 2. Legs not straight. Gun canted to right. Left elbow not well under gun.

No. 3. Legs are in an improper position. Body is twisted to the left.
Sling. Your ability to hold the rifle steadily in any required position will be greatly increased by the proper adjustment and use of the sling. Indeed, you cannot hope to hold the rifle steadily unless the sling is properly used. The following photographs illustrate the correct way to get into the sling.

No. 1. Notice that the left arm is slipped in between the sling and the gun from the left side. It is then run through the sling from the right side of same. Notice how gun is held against leg. Notice that the muzzle of the gun is pointing up, not down. The bolt should be drawn back while you get into the sling. This is to avoid accidents. Notice that the sight leaf is down.
No. 2. Notice that the sling has been slipped up and over the large muscles of the upper arm. Also the left hand after being run through the sling is grasping the gun so that the sling is to the right.

By turning back now to the photographs illustrating the correct body positions you will see how the sling is used.

2. Aiming. An error of one one-hundredth of an inch in the amount of front sight seen, at the instant the gun is fired, will cause you to completely miss a man 500 yards away. Hence, the eye must be trained unless the firer has at all times a mental picture of how the sights and the bull’s-eye look when properly aligned. You should acquire this mental picture during your aiming exercises and by the time you go on the range you should have the eye so trained that you will focus it properly on your sights and the target without mental effort.

3. Trigger Squeeze. If you convulsively jerk the trigger to discharge the rifle, you disturb your hold and aim and the mark is missed; this is the recruit’s most common error. To properly squeeze trigger observe the following suggestions:
(a) As you place your rifle to the shoulder, take up the loose play in the trigger (called the creep).

(b) When the gun is properly aimed, don't endeavor at that particular moment to fire it but be content to apply additional pressure to the trigger and then hold this pressure until the gun is again steady and properly aimed when a little more pressure is added and so on until the gun is discharged. By using this system, the firer does not know the exact instant the gun is to go off and the common faults, namely, flinching and jerking the trigger are unconsciously avoided.

(c) Fill lungs full, that is take a deep breath, let a little out, and then stop breathing to fire.

4. Calling the Shot. If the aiming eye is open when the gun is discharged, the firer should know at what part of the target the gun was aimed at that instant, and he should announce this fact to his coach or in the absence of a coach make a mental note of it. If the bullet struck the target at the point where the gun was aimed the instant of discharge, no sight correction is necessary; on the other hand, if the bullet did not strike the target at the point where the gun was aimed the instant of discharge, the sights are probably improperly adjusted and should be changed as indicated in the following paragraph on sight adjustment.

5. Sight Adjustment. If, after firing two or more shots, you find that, in each case, there is a constant error between where the bullet hits the target and the place where you called the shot, your sights should be
TARGET PRACTICE

readjusted in accordance with your preliminary elevation and deflection drills. When you decide to change your sight adjustment don’t be timid and deal in half measures but apply a sufficient correction so that the rifle will hit where the shot is called. The inexperienced man has a tendency to change his sights after each shot. Avoid this tendency.

RAPID FIRE

In rapid fire the battle sight is always used; the firing is against time and at a field target (Target D), and from ranges 200, 300, and sometimes 500 yards.

The battle sight corresponds to an elevation of 547 yards, which makes it necessary for the firer at the 200 and 300 yard ranges to aim at a point about 2½ feet below the part of the target that it is desired to hit. Prior to record firing each man should determine these aiming points by slow fire, at ranges 200 and 300 yards, using the battle sight.

There is one golden rule that must be followed if you are to get a good score at rapid fire: You must use the minimum time possible in loading and the maximum time possible for aiming and squeezing the trigger. To be more specific, this means work your bolt quickly but aim and squeeze your trigger slowly.

HINTS ON RAPID FIRE

1. When you go to the firing point get two clips of cartridges, one to be used at the command load and the extra one is placed in the belt.
2. See that your cut-off is up.
3. When the target first appears drop quickly into the required position for firing. A great deal of time is usually lost by the firer squirming around trying to get into a comfortable position.
4. Don't hurry your first or last shot. These are the two shots that are usually bad.
5. If your second clip jams or breaks, turn the cut-off up, load and fire each cartridge separately.
6. Leave the gun at your shoulder while working the bolt.
7. Be careful to fire on your own target.
8. If a cartridge fails to fire, it is very probably because the bolt is not all the way down; therefore recock the gun (pull the firing pin back), make certain the bolt is down, and fire again.
9. As soon as the targets disappear cease firing, come to Inspection Arms, examine your rifle for unfired cartridges.

GENERAL HINTS AND CAUTIONS

1. Don't be afraid of the kick; it is more imaginary than real when the sling is properly used, your shoulder properly padded, and the gun properly held.
2. Rest your cheek, not your jaw bone, lightly against the small of the stock.
3. Rest your right thumb along the right side of the stock and not on top of it.
4. Blacken both front and rear sights, adjust and place your arm in the sling, and if possible set your sights while you are waiting your turn to go to the firing point.

5. Approach and leave the firing point with your bolt drawn back. This is to prevent accidents.

6. When not actually aiming, have your bolt drawn back.

7. Never attempt to force the bolt into the gun in case of a jam, but ask a coach to fix it for you.

8. Don’t allow the muzzle to touch the ground.

9. Don’t rub your eyes while at the firing point.

10. When not actually aiming, rest the eyes by shading them or looking at something green.

11. Clean the bore of your rifle before and after firing. After firing it should be cleaned daily, until a rag run through it will not be soiled.

12. Clean the rifle from the breech.

13. Zero of rifle. Every rifle, owing to slight inequalities of boring, sights, and the personal errors of the firer, shoots differently. When you have ascertained its (rifle) and your own peculiar errors and you know where to set your sights to counteract these constant errors, you have determined what is commonly termed the zero of your rifle. To illustrate, if you were shooting on a perfectly calm day (which is essential) at the target from the 500-yard range, and you found that you required one half a point left windage in order to hit
the bull's-eye when no wind is blowing, the zero of your rifle for that range would be one half a point left windage.

CARE OF THE RIFLE

Keep the metal part of your rifle covered with a thin coating of light oil; "3-in-1" oil is ordinarily used. This is especially important in damp weather.

Always clean the bore from the breech. This avoids injuring the muzzle. The pull through (a string found in the oiler and thong case) is only used in the field.

After the rifle is fired the bore is covered with an acid which, if left in the bore, will eat into the metal and pit it. To avoid this, swab out the barrel as soon as possible after firing with Hoppe's "Powder Solvent, No. 9" which can be purchased at the camp stores. If this powder solvent is not available, dissolve some soda in water and use it. When the barrel is clean, dry it out thoroughly by running several dry rags through it. Next run several rags, saturated in oil, through the barrel, this for the purpose of oiling the bore and preventing rust. This process of cleaning should be repeated for at least three successive days following the firing of the rifle.

The metal fouling, caused by the pealing off in the bore of the jacket of the bullet, can only be removed by an application of an ammonia solution which should not be used by an inexperienced man.
MISCELLANEOUS INFORMATION

The Bayonet. The bayonet is a cutting and thrusting weapon consisting of three principal parts, viz., the blade, the guard, and the grip. The weight of a bayonet is 1 pound.

Captain B. A. Dixon, retired, has compiled the following interesting data about our military rifle and ammunition:

"Name. United States Rifle (commonly known as the Springfield).

"Cost. $14.40 without the bayonet.

"Barrel. 24.006 inches in length. The muzzle is rounded to protect the rifling. Any injury here would allow gases to escape around the sides of the bullet and destroy its accuracy.

"On the top in rear of the front sight is stamped the Ordnance escutcheon, the initials of the place of manufacture, and the month and year.

"Caliber. .30-thirty hundredths of an inch. Caliber
is the interior diameter of the barrel measured between the lands.

"Grooves. The four spiral channels within the bore of the rifle sometimes called rifling. They are .004 inches deep and are three times as wide as the lands.

"Lands. The four raised spaces in the bore of the rifle between the grooves. These lands grip the bullet as it passes through the bore and rotate it to the right about the longer axis. This rotation serves to prevent tumbling and keeps the bullet accurately on its course. This spinning of the bullet also causes it to drift slightly to the right as it passes through the air. The same effect is produced by throwing a baseball with a twist.

"Twist. The spiral formed by the grooves in the barrel of the piece. The twist is uniform and to the right, one turn in ten inches.

"Length. The rifle without bayonet is 43.212 inches long. With bayonet it is 59.212 inches long.

"Manufacture. The United States Rifle is manufactured by the Government at Springfield Armory, Massachusetts, and Rock Island Arsenal, Illinois.

"Rear Sight Leaf. Graduated from 100 to 2850 yards. The odd range is on the right branch of the leaf, the even on the left. Note that the line corresponding to a range is below a numeral.

"Battle sight is the position of the rear sight in which the leaf is laid down. The slide should be drawn all the way back to secure full advantage of the windage. It corresponds to a range of 547 yards.
“Rounds. The rifle will hold six cartridges. Five are carried in the magazine and one in the chamber.

“Stock. Made of walnut wood.

“Oiler and Thong Case. Furnished for every alternate rifle and is carried in butt of the stock. In one section is a supply of oil, in the other a thong and brush for cleaning the bore. In cleaning by this method draw the brush or rag from the muzzle toward the breech.

“Weight. 8.69 pounds without bayonet. Bayonet weighs 1 pound.

“AMMUNITION

“Cost. About three and one-half cents per cartridge.

“Bullet. Has a core of lead and tin composition enclosed in a jacket of cupro-nickel. The jacket being tough enables the lands in the bore to grip the bullet without rupturing and to rotate it while passing through the barrel. A lead bullet unjacketed would strip and pass through without rotating. It weighs 150 grains and is pointed to offer less resistance to the air.

“Case. Made of brass. The government ammunition is manufactured at Frankford Arsenal, Pennsylvania.

“Powder. Pyrocellulose. The grains are cylindrical, single, perforated, and graphited. Normal charge is 47-50 grains. Pressure developed in the chamber is 51,000 pounds per square inch.

“Penetration. This bullet will penetrate the following materials to depth stated at range of 100 yards:
Moist sand, 14.02 inches; loam, 17.46 inches; oak, 31.18 inches; brick wall, 5.5 inches; steel plate, .4 inch. Dry sand is the best stop. The bullet will penetrate 6.88 inches of it at 100 yards and 13.12 inches at 500 yards.

"Range. Maximum range, 4891.6 yards, about 23/4 miles) with the muzzle elevated 45 degrees. The time of flight 38.058 seconds.

"Velocity. About 2700 feet per second at 70 degrees F.

"Weight. A complete cartridge weighs 395.5 grains depending on amount of water. It is waterproof."

**ESTIMATING DISTANCE**

Suppose you are out hunting, and that you see a big buck on a distant hill. Suppose that it is exactly 600 yards distant from you, that you are an expert shot, and that you set your sights at 400 yards and fire. Will you hit the deer or not? You must know how to guess accurately the distance to a deer, or a man, or anything else, if you propose to have any reasonable hope of hitting it.

The art of estimating distances with the eye can be improved by practice. When you are in ranks, observe continually your surroundings. Call attention to and make estimates of the distances to all the prominent objects in view. Others near you will become interested, and the interest will soon spread to the entire company. It will be necessary for the objects to be pointed out to those interested. This in itself is a difficult thing to do. To be able quickly to see distant objects that are being
pointed out is a military accomplishment which all soldiers should possess and which comes only with practice.

METHODS OF ESTIMATING DISTANCES BY THE EYE

1. Decide that the object cannot be more than a certain distance away, or less than a certain distance. Keep the estimate within the closest possible limits and take the mean of the two estimates as the range. For instance, that deer cannot be over 800 yards away and not less than 400 yards. Your estimated distance is 600 yards.

2. Select a point which you think is the middle point of the distance, estimate the distance to this middle point, and double your estimate to get your range. Do the same thing with half the distance, if the object is very far away.

3. Estimate the distance along a parallel line, such as a telephone line or a railroad having on it a well-defined length with which you are familiar.

4. Take the mean of several estimates made by several well-instructed men. This method is used in battle, but is not applicable to instruction or during tests.

1. Preliminary Instruction

To estimate distances by the eye with accuracy, it is first necessary that you become familiar with the appearance of the most convenient unit of length, namely 100 yards. Stake off a distance of 100 yards. Subdivide this 100 yards into four 25-yard divisions.
off the entire distance several times, and you will soon become familiar with the appearance of 100 yards. Next, take a distance more than 100 yards and compare it mentally with your unit of measure (100 yards) and make your estimate. Verify this estimate by pacing the distance. Do this once a day for several months, and you may become highly skilled in the art of estimating distances.

2. Preliminary Instruction

If you know how a soldier, or group of soldiers, looks at the different ranges, it will often assist you in quickly making an accurate estimate of the distance. In order to acquire skill in estimating distances by this method one must have special exercises designated to demonstrate the clearness with which details of clothing, movement of the limbs, etc., can be observed at the different ranges. Have a squad march away from you to a distance of 1,200 yards. Then have it approach you and halt every 100 yards. Each time the squad halts make a mental note of the distance, and then observe carefully its appearance, the clearness with which you can see the clothing, movements of the limbs, etc.

Appearance of Objects

Become familiar with the effect which the varying conditions of light, background, etc., have upon the apparent distance of the object. Don't be content to memorize the following data, but go after the underlying reason in each case.
Objects seem nearer than they actually are:
1. When the object is seen in a bright light.
2. When the color of the object contrasts sharply with the color of the background.
3. When looking over water, snow, or a uniform surface like a wheat field.
4. When looking from a height downward.
5. In clear atmosphere of high altitudes, as in Arizona and New Mexico.

Objects seem more distant than they actually are:
1. When looking over a depression in the ground (across a canyon).
2. When there is a poor light (very cloudy day) or a fog.
3. When only a part of the object can be seen.
4. When looking from low ground upward toward higher ground.

ESTIMATING DISTANCES BY SOUND

Sound travels at the rate of about 366 yards a second. Therefore, multiply the number of seconds intervening between the flash of the gun and the report of the same by 366, and the product will be the distance in yards to the gun.

RANGE-FINDING INSTRUMENT

Each company is equipped with a range-finding instrument. All company officers and sergeants should be proficient in using it. The accuracy of this instru-
ment will greatly depend upon the skill of the user, and the visibility of the objective.

**TRIAL SHOTS OR VOLEYS**

“If the ground is so dry and dusty that the fall of the bullets is visible through a glass or with the naked eye, a method of determining the distance is afforded by using a number of trial shots or volleys. The method of using trial volleys is as follows: The sights are raised for the estimated range and one volley is fired. If this appears to hit but little short of the mark, an increase of elevation of 100 yards will be used for the next volley. When the object is enclosed between two volleys, a mean of the elevation will be adopted as the correct range. The range may be obtained from a near-by battery or machine gun. This is the best method when available.”—*Small Arms Firing Manual*. 

**ESTIMATING DISTANCE TEST**

This test is usually held after the record firing on the range has been completed. No distance used in this test will be less than 547 yards (battle sight range) or more than 1200 yards, which is considered the extreme range for effective fire of individuals or a small command. Should a soldier fail three times to make the necessary percentage in these tests, his rifle qualification will be reduced one grade. For the specific conditions governing this test, see *Small Arms Firing Manual*. 

**RANGE FINDERS**

Five or six enlisted men, selected by the company
This shows the path of the bullet (Line of Trajectory) of the 1917 Rifle (Enfield).

The Line of Aim, we see, connects the eye, the rear sight, the front sight and the bottom part of the target. It is a straight line.

We see that the Line of Trajectory crosses the Line of Aim at two points. The distance between these points is 452 yards. Therefore, 452 yards is the Battle Sight Range for the 1917 Rifle.

To hit the target squarely when it is 200 yards away, the Line of Aim must be under it, as shown in the diagram.
THE 1917 RIFLE (ENFIELD)
commander from those most skilled, will be designated as “Range Finders.” These men are practised in estimating distance throughout the year. Their practice will be on varied ground and at distances up to 2000 yards. These men assist the company commander when the company is on the defensive, in estimating the distances to the prominent objects in view before the action commences; and at other times when the company commander needs their assistance.
CHAPTER V

TENT PITCHING

On the hike the camp will be laid out daily in advance by a staff officer. The company being halted and in line, the company commander gives the order: **FORM FOR SHELTER TENTS.**

The first sergeant and right guide fall in on the right of the company. The blank files in the squads have to be filled by men from the file closers, and the remaining guides and file closers form on the left flank or at such places as may be designated by the company commander. The company commander next gives the order: 1. **Take interval,** 2. **To the left,** 3. **MARCH,** 4. **Company,** 5. **HALT.**

At the second command (**to the left**) the rear rank men march backward four steps of fifteen inches each and then halt.

At the command **MARCH,** all face to the left and the leading man of each rank steps off. The remaining men step off in succession, each following the preceding man at four paces. The rear rank men march abreast of their file leaders.

The company commander gives the command **HALT** when all have gained their intervals. At this command all halt and face to the front, dressing to the right.
The more quickly you dress and establish the line of tents, the more quickly you will be relieved of those heavy packs. This is the time to brace up and give the company commander your support by giving him your attention. If you cover in file accurately as you take interval you will often be accurately aligned upon halting.

The next command is: **PITCH TENTS.** At this command each man steps off obliquely to the right with the right foot (about thirty inches) and lays his rifle on the ground, butt to the rear and near the toe of the right foot, muzzle to the front, barrel to the left. He then steps back to his original position. During this process of “grounding” the rifle, the front rank man must keep his left foot strictly in its position. Each front rank man then draws his bayonet from the scabbard and sticks it in the ground by the outside of his right heel. Now in order to insure the bayonet being properly aligned, thus producing a straight line of tents, the company officers (first and second lieutenants), sometimes are required to align the line of bayonets while the men are unslinging and opening their equipment. The equipment is then unslung and laid on the ground. The packs are opened and the shelter half and pins removed therefrom. Each man spreads his shelter half, small triangle to the rear, on the ground that the tent is to occupy, the rear-rank man’s shelter half being on the right. Then the front- and rear-rank men button the halves together, the rear-rank man’s half on top.
The guy loops at each end of the lower half are then passed through the button holes provided in the lower and upper halves; next the whipped end of the guy rope is passed through both guy loops and secured; this is done at both ends of the tent, the rear-rank man working at the rear and the front-rank man at the front.

Each front-rank man then inserts the muzzle of his rifle under the front end of the tent and holds the rifle upright, sling to the front, heel of the butt on the ground beside the bayonet. The rear-rank man comes to the front of the tent and pins down the two front corners on the line of bayonets, stretching the sides of the tent taut. He then inserts a pin in the loop of the front guy rope and drives it in the ground at such a distance in front of the rifle as to hold the rope taut. Then both men proceeding to the rear of the tent, each pins down a corner, stretching the sides and rear of the tent taut before driving the pin in. The rear-rank man next inserts an intrenching tool or a bayonet, in its scabbard, under the rear end of the tent, the front rank man pegging down the end of the guy rope. The rest of the pins are then driven by both men, the rear-rank man working on the right.

The front flaps of the tent are not fastened down, but thrown back on the tent.

In pitching the tent, it is absolutely necessary that the front- and rear-rank men work together. Team work is essential.

When the camp site is small, it is necessary that each
Arrangement of Field Equipment in Shelter Tent

Elevation
company pitch its tents in two lines facing each other.

The following illustration shows the arrangement of the articles of the equipment when they are laid out for inspection. During the inspection, each man stands at attention in front of the corner pin of his own shelter half on a line with the front guy rope pin, unless ordered to the contrary.

For clearness, straps, etc., are omitted. Suspenders remain fastened to belt. All pockets, covers, etc., are opened.
CHAPTER VI

SIGNALS AND CODES

1. GENERAL SERVICE CODE. (INTERNATIONAL MORSE CODE.)

Used for visual (except semaphore) and sound signaling, radio telegraphy, on cables using siphon recorders, in communication with the Navy, and in intra-field artillery buzzer communication.

<table>
<thead>
<tr>
<th>Letter</th>
<th>Morse Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>-</td>
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<tr>
<td>B</td>
<td>- - -</td>
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<tr>
<td>C</td>
<td>- -</td>
</tr>
<tr>
<td>D</td>
<td>-</td>
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<tr>
<td>E</td>
<td></td>
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<tr>
<td>F</td>
<td>- -</td>
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<td>G</td>
<td>- -</td>
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<tr>
<td>H</td>
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<td>I</td>
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<td>J</td>
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<td>K</td>
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<tr>
<td>Y</td>
<td>- - -</td>
</tr>
<tr>
<td>Z</td>
<td>- - - -</td>
</tr>
</tbody>
</table>

NUMERALS

1 - - - - -
2 - - - -
3 - - - - -
4 - - - - -
207
PUNCTUATION

Period
Comma
Interrogation
Hyphen or dash
Parentheses (before and after the words)
Quotation mark (beginning and ending)
Exclamation
Apostrophe
Semicolon
Colon
Bar indicating fraction
Underline (before and after the word or words it is wished to underline)
Double dash (between preamble and address, between address and body of message, between body of message and signature, and immediately before a fraction)
Cross
Note.—Numerals and punctuations must be spelled out in the ardois, as they require more than four elements, which is the limit of the ardois keyboard.

The position is with the flag or other appliance held vertically, the signalman directly facing station with which it is desired to communicate. The "dot" is to the right of sender, embracing an arc of 90°, starting with the vertical and returning to it. The "dash" is a similar motion to left. "Front" is downward directly in front and instantly returned to vertical; it indicates a pause or conclusion.

CONVENTIONAL FLAG SIGNALS

For communication between the firing line and the reserve or commander in rear, the subjoined signals (Signal Corps codes) are prescribed and should be memorized. In transmission, their concealment from the enemy's view should be insured. In the absence of signal flags, the head dress or other substitute may be used.
<table>
<thead>
<tr>
<th>Letter of Alphabet</th>
<th>If signaled from the rear to the firing line</th>
<th>If signaled from the firing line to the rear</th>
</tr>
</thead>
<tbody>
<tr>
<td>A M</td>
<td>Ammunition going forward</td>
<td>Ammunition required</td>
</tr>
<tr>
<td>C C C</td>
<td>Charge (mandatory at all times)</td>
<td>Am about to charge if no instructions to the contrary</td>
</tr>
<tr>
<td>C F</td>
<td>Cease firing</td>
<td>Cease firing</td>
</tr>
<tr>
<td>D T</td>
<td>Double time or &quot;rush&quot;</td>
<td>Double time or &quot;rush&quot; or hurry</td>
</tr>
<tr>
<td>F</td>
<td>Commence firing</td>
<td>Commence firing</td>
</tr>
<tr>
<td>F L</td>
<td>Artillery fire is causing us losses</td>
<td>Artillery fire is causing us losses</td>
</tr>
<tr>
<td>G</td>
<td>Move forward</td>
<td>Preparing to move forward</td>
</tr>
<tr>
<td>H H H</td>
<td>Halt</td>
<td>Halt</td>
</tr>
<tr>
<td>K</td>
<td>Negative</td>
<td>Negative</td>
</tr>
<tr>
<td>L T</td>
<td>Left</td>
<td>Left</td>
</tr>
<tr>
<td>O</td>
<td>What is the (R. N., etc.?)</td>
<td>What is the (R. N., etc.?)</td>
</tr>
<tr>
<td>(Ardois and semaphore only)</td>
<td>Interrogatory</td>
<td>Interrogatory</td>
</tr>
<tr>
<td>(All methods but ardois and semaphore)</td>
<td>Interrogatory</td>
<td>Interrogatory</td>
</tr>
<tr>
<td>P</td>
<td>Affirmative</td>
<td>Affirmative</td>
</tr>
<tr>
<td>R</td>
<td>Acknowledgment</td>
<td>Acknowledgment</td>
</tr>
<tr>
<td>R N</td>
<td>Range</td>
<td>Range</td>
</tr>
<tr>
<td>R T</td>
<td>Right</td>
<td>Right</td>
</tr>
<tr>
<td>S S S</td>
<td>Support going forward</td>
<td>Support needed</td>
</tr>
<tr>
<td>T</td>
<td>Target</td>
<td>Target</td>
</tr>
<tr>
<td>SIGNALS AND CODES</td>
<td>301</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>-----</td>
<td></td>
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<tr>
<td><img src="image-url" alt="Semaphore Diagram" /></td>
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<tr>
<td><img src="image-url" alt="Semaphore Diagram" /></td>
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</tr>
</tbody>
</table>
ARM SIGNALS

The following arm signals are prescribed. In making signals either arm may be used. Officers who receive signals on the firing line “repeat back” at once to prevent misunderstanding.

**Forward, MARCH.** Carry the hand to the shoulder; straighten and hold the arm horizontally, thrusting it in the direction of march.

This signal is also used to execute quick time from double time.

**HALT.** Carry the hand to the shoulder. Thrust the hand upward and hold the arm vertically.

**Double time, MARCH.** Carry the hand to the shoulder; rapidly thrust the hand upward the full extent of the arm several times.

**Squads right, MARCH.** Raise the arm laterally until horizontal; carry it to a vertical position above the head and swing it several times between the vertical and horizontal positions.
Squads left, MARCH. Raise the arm laterally until horizontal; carry it downward to the side and swing it several times between the downward and horizontal positions.

Squads right about, MARCH (if in close order); or, To the rear, MARCH (if in skirmish line). Extend the arm vertically above the head; carry it laterally downward to the side, and swing it several times between the vertical and downward positions.

Change direction or Column right (left), MARCH. The hand on the side toward which the change of direction is to be made is carried across the body to the opposite shoulder, forearm horizontal; then swing in a horizontal plane, arm extended, pointing in the new direction.
As skirmishers, **MARCH.** Raise both arms laterally until horizontal.

As skirmishers, **guide center,** **MARCH.** Raise both arms laterally until horizontal; swing both simultaneously upward until vertical, and return to the horizontal; repeat several times.

As skirmishers, guide right (left), **MARCH.** Raise both arms laterally until horizontal; hold the arm on the side of the guide steadily in the horizontal position; swing the other upward until vertical, and return it to the horizontal; repeat several times.
Assemble,  MARCH.
Raise the arm vertically to its full extent and describe horizontal circles.

Range or Change Elevation. To announce range, extend the arm toward the leaders or men for whom the signal is intended, fist closed; by keeping the fist closed battle sight is indicated;

by opening and closing the fist, expose thumb and fingers to a number equal to the hundreds of yards;

to add 50 yards describe a short horizontal line with forefinger.
To change elevation, indicate the amount of increase or decrease by fingers as above; point upward to indicate increase and downward to indicate decrease.

What range are you using? or What is the range? Extend the arms toward the person addressed, one hand open, palm to the front, resting on the other hand, fist closed.

Are you ready? or I am ready. Raise the hand, fingers extended and joined, palm toward the person addressed.

Commence firing. Move the arm extended in full length, hand palm down, several times through a horizontal arc in front of the body.

Fire faster. Execute rapidly the signal “Commence firing.”

Fire slower. Execute slowly the signal “Commence firing.”
Swing the cone of fire to the right, or left. Extend the arm in full length to the front, palm to the right (left); swing the arm to right (left), and point in the direction of the new target.

Fix bayonet. Simulate the movement of the right hand in “Fix bayonet.”

Suspend firing. Raise and hold the forearm steadily in a horizontal position in front of the forehead, palm of the hand to the front.

Cease firing. Raise the forearm as in suspend firing and swing it up and down several times in front of the face.

Platoon. Extend the arm horizontally toward the platoon leader; describe small circles with the hand.

Squad. Extend the arm horizontally toward the platoon leader; swing the hand up and down from the wrist.

Rush. Same as double time.
Use of the platoon and squad signals. The signals platoon and squad are intended primarily for communication between the captain and his platoon leaders. The signal platoon or squad indicates that the platoon commander is to cause the signal which follows to be executed by platoon or squad.

You will observe that in no case is the right hand or the left hand specified. The officer may either face the company or have his back toward it.
CHAPTER VII
FIRST AID TO THE INJURED

In the army, as in civilian life, you are very often your brother’s keeper, as well as your own. Doctors cannot accompany a scout, a patrol, or the firing line. They are seldom present when a man falls overboard. When a soldier on the firing line is wounded, he may remain for several hours where he falls. He, or his comrade, bandages the wound. Suppose you are wounded, bitten by a snake, etc., what would you do? You may have to give a practical answer to these questions at some time during your life.

This chapter tells you what to do and what not to do in case of the most frequent disabling accidents that may befall a soldier or a civilian. Ask your mother, father, older brothers, and sisters to read it. Part of it is for them.

FIRST-AID PACKET

Each soldier carries on his belt a first-aid packet. This packet contains two perfectly pure bandages and a couple of safety pins. It should be air tight. Examine yours every week and if the seal is defective, ask your captain for a new packet.
Cautions

1. Act quickly but quietly. Be calm and quiet. Don’t lose your head.
2. Make the injured party sit or lie down.
3. See the injury clearly before treating it. Send for a doctor if the wound is serious.
4. Do not remove more clothing than is necessary to examine the injury. Always rip, or, if you cannot rip, cut the clothes from the injured part. Don’t pull the clothes off.
5. Give alcoholic stimulants cautiously and slowly, and only when the patient feels weak or drowsy. Hot coffee or tea will often suffice when obtainable.
6. Keep from the patient all persons not actually needed to assist you.
7. Do not touch a wound with your fingers. If the wound is dirty, remove the dirt as well as possible, with the first-aid bandage.
8. Don’t pour into the wound any water from your canteen for the purpose of washing it out or washing the blood from around the wound. Water often contains germs and the skin around the wound may be dirty. If water is poured into the wound it carries or washes into the same these germs and dirt, and the wound will become infected.
9. Heat and moisture increases the activity of the germ of infection. Therefore keep the wound cool and dry.
10. If the blood is scarlet in color and appears in
spurts, send at once for a doctor and then take the necessary measures (apply a tourniquet) to stop the flow of blood.

11. If the patient loses consciousness, it will probably be because insufficient blood is reaching the brain. Lower your patient's head and give all your attention to stopping the bleeding.

**BULLET WOUND**

If you receive a bullet wound, don't get excited or lose your head. A bullet wound in the muscle or soft parts of the body causes little pain and, if properly dressed, heals in about two to three weeks. Protect the openings where the bullet entered and came out with the bandages found in the first-aid packet. *Don't touch the wound with your fingers.* Remove sufficient clothing to see the wounds. Then, and not before, open the first-aid packet and carefully unfold (open) the compress (pad found in the middle of each bandage), and place it over the wound and wrap the ends of the bandage fairly tight around the limb and fasten with the safety pin. If one compress is not large enough to cover the entire wound, use the second bandage. This bandaging will stop ordinary bleeding. Such a dressing may be all that is needed for several days. It is better to leave a wound undressed than to dress it carelessly or ignorantly, so that the dressing must be removed.

**STOPPING BLEEDING**

If the blood is dark blue and the stream is continuous,
a vein has been punctured which, in itself, is not ordinarily dangerous. The bandaging of such a wound will usually stop the flow of blood. Bandage firmly. Remember all wounds bleed a little, but that, as a rule, this bleeding will stop in a few minutes if the patient remains quiet.

If the blood is bright red and appears in spurts, an artery has been punctured, and the flow of blood must be stopped or the patient will bleed to death. To do this, apply a pressure to the artery at some point between the wound and the heart. Press the artery against the bone. This can usually be done for a short time with the fingers. However it will usually be necessary to use an improvised tourniquet. Tie the bandage of the first-aid packet around the limb so that the compress (pad) will press the artery against the bone. Slip under the compress and over the artery a small stone. Pass a stick under the bandage and turn the stick around slowly until the slack is taken up and the bleeding stops. Then tie the stick as shown in the illustration.

After the tourniquet has been in place for an hour, loosen it and if no blood flows allow it to remain loose. If it again
bleeds tighten it quickly and loosen again at the end of an hour.

The following illustrations show the usual places where tourniquets are applied or where pressure can be applied to the arteries with the thumb:

WOUND IN SHOULDER  WOUND IN ARM

WOUND IN HEAD  WOUND IN LEG

BROKEN BONE (FRACTURE)

The next injury you must know is a broken bone.
You will usually know when an arm or leg bone is broken by the way the arm or leg is held, for the wounded man loses control over the limb. Suppose your comrade breaks his leg or arm. What would you do? Straighten the limb gently, pulling upon the end of it quietly and firmly so that the two ends of the broken bone will not overlap. Next, retain the limb in its straightened position by such splints and other material as the boot of a carbine, a piece of board, a piece of tin gutter. Pad the material you use. Tie it to the broken limb as shown in the following illustrations. Never place a bandage over the fracture. See Illustrations.

BROKEN ARM

BROKEN LEG

BROKEN LEG

DROWNING

Being under water for over four or five minutes is
generally fatal, but, unless you know the body has been submerged a long time, make an attempt to restore life. Don’t get disheartened and give up, if you see no signs of life after a few minutes’ work. Work on the body for at least an hour.

Your comrade’s lifeless body has just been pulled out of the water. What do you do? You are alone.

1. Don’t waste time in removing his clothes.
2. Reach your finger in his mouth and straighten out his tongue.
3. Lay him on his stomach; then straddle him; reach both arms under his stomach; raise his hips two feet from the ground and jostle him. This drains the water from the stomach and lungs.
4. Lay him on his stomach; turn his head to one side so his nose and mouth do not touch the ground; extend his arms beyond his head (see illustration);
locate his lowest (12th) rib; place hand, finger, and thumb closed (see illustration) on body so that the little finger curls over the 12th rib; hold your arms and wrists straight and lean forward slowly so the weight of the upper part of your body will be brought to bear gradually upon your comrade’s ribs (see illustration); let this pressure continue for about three seconds; then remove it suddenly by removing the hands. Apply this pressure at the rate of from 12 to 15 times a minute.

5. Do not attempt to give him any kind of liquids while he is unconscious.

6. Apply warm blankets as soon as possible.

7. Never say “He is dead”—Work on his body for at least an hour.
SUNSTROKE—(THE SKIN IS HOT)

A sunstroke is accompanied by the following symptoms: headache, dizziness, sense of oppression, nausea, colored vision, and often the patient becomes insensible. The muscles are relaxed, face flushed, skin hot, pulse rapid, and the temperature rises. The breathing is labored.

Treatment: Reduce the temperature as rapidly as possible, with ice or cold water; get the patient in the shade. Loosen clothing.

HEAT EXHAUSTION—(THE SKIN IS COOL)

Symptoms: Nausea, a staggering gait, pulse is weak, and the patient may quickly become unconscious. The skin is cool. This condition is dangerous.

Treatment: Rub the limbs vigorously. Give stimulants; apply heat.

BURNS

Do not pull the clothing from the burnt part, but rip or cut it off. Do not break the blisters or prick them even if large.

Treatment: Protect it quickly with a mixture of equal parts of linseed or olive oil and water.

FREEZING AND FROSTBITE

Symptom: The part frozen appears white or bluish and is cold.
Treatment: Raise the temperature of the frozen member slowly by rubbing it with snow or ice and water, in a cool place. Don’t go near a fire.

FAINTING

Symptom: Loss of consciousness. It is usually the result of severe bleeding or exhaustion from fatigue. This condition is rarely dangerous.

Treatment: Lay the patient on his back, head a little lower than rest of body, arms by side, feet extended. Rub the limbs. Sprinkle water on the face and give stimulants if necessary.

POISONING

Treatment: Send for a doctor at once. Empty the stomach and bowels. Give two tablespoons full of mustard and warm water or a tablespoon full of salt in a glass of water to produce vomiting. Then give a purgative. Tickle throat with finger or feather in case mustard or salt are not procurable. After the poison has been evacuated, give stimulants and apply heat and rubbing externally.

SNAKE BITE

In snake bites the poison acts quickly.

Treatment: Apply a tourniquet between the wound and the heart so as to stop the circulation and prevent
the system from absorbing the poison. Get out your knife and make a couple of cross cuts through the wound so it will bleed freely. Then suck the poison from the wound and spit the poison out. If your lips are lacerated there is danger in this method but it is your duty to take this chance in order to save your comrade's life. After sucking out the wound, heat your knife and burn it out.

STOMACH WOUNDS

Send for a doctor. Lie perfectly quiet. Don't lose your head and don't attempt to crawl to help or to stir around. Place a clean piece of cloth over the wound and keep it constantly wet with a solution of salt water. If the wound is in the stomach, it is better to lie perfectly quiet on the battle field for a day or two until found than to crawl to assistance.

CHAFING

Treatment: Keep parts dry, use talcum powder, and keep parts separated by a layer of absorbent cotton.

EXTINGUISHING BURNING CLOTHES

Treatment: Lie down on the floor and roll up as tightly as possible in a rug blanket, etc., leaving only the head out. If nothing can be obtained in which to wrap yourself, lie down and roll over slowly and at the same time beat out the fire with your hands. Flames
shoot upward. In order to get them away from the head, lie down. Don’t run, it only fans the flames.

If another person’s clothing catches fire, throw him to the ground and smother the fire as just described.

GAS

Most of the gas used on the battlefield to-day is deadly. When a gas shell explodes there are two kinds of men: Quick men and Dead men. The quick men put on their gas masks, which contain chemicals that neutralize the poisonous air.

Treatment: When a man is slightly gassed don’t allow him to move around or to remove his mask. Have him lie down and rest. Loosen his clothes around his neck and chest so he can breathe freely. Keep him warm. When the gas has been removed from the trench, take off his mask and give spirits of ammonia.
APPENDIX

TABLES OF ORGANIZATION
(For Reference Only)

INFANTRY COMPANY
Commissioned Officers

Captain ...................... 1
1st Lieutenant ............. 1
2d Lieutenant ............. 1
Total ....................... 3

Enlisted Strength
1st Sergeant .............. 1
Mess Sergeant ........... 1
Supply Sergeant ........ 1
Sergeants ................. 8
Corporals .................. 17
Cooks ....................... 3
Buglers ..................... 2
Mechanics ................ 2
Privates, 1st class ...... 28
Privates ................... 87
Total ..................... 150

INFANTRY BATTALION

Four companies of infantry. (There are three battalions in a regiment of infantry.)
INFANTRY DRILL REGULATIONS, 1911

FOR USE WITH THE

UNITED STATES RIFLE, MODEL 1917 (ENFIELD).

For troops armed with the United States rifle, Model 1917 (Enfield), the alternative paragraphs published herewith will govern.

BY ORDER OF THE SECRETARY OF WAR:

HUGH L. SCOTT,
Major General, Chief of Staff.

OFFICIAL:

The following rules govern the carrying of the piece:

First. The piece is not carried with cartridges in either the chamber or the magazine except when specially ordered. When so loaded, or supposed to be loaded, it is habitually carried locked; that is, with the safety lock turned to the “Safe.” At all other times it is carried unlocked, with the trigger pulled.

Second. Whenever troops are formed under arms, pieces are immediately inspected at the commands: 1. INSPECTION, 2. ARMS, 3. ORDER (Right shoulder, port), 4. ARMS.

A similar inspection is made immediately before dismissal.

If cartridges are found in the chamber or magazine they are removed and placed in the belt.

Third. The bayonet is not fixed except in bayonet exercise, on guard, or for combat.

Fourth. Fall in is executed with the piece at order arms. Fall out, rest, and at ease are executed as without arms. On resuming attention the position of order arms is taken.

Fifth. If at the order, unless otherwise prescribed, the piece is brought to the right shoulder at the command MARCH, the three motions corresponding with the first three steps. Movements may be executed at the trail by prefacing the preparatory command with the words at trail; as 1. AT TRAIL, FORWARD, 2. MARCH. The trail is taken at the command MARCH.

When the facings, alignments, open and close ranks, taking interval or distance, and assemblings are executed from the order, raise the piece to the trail while in motion and resume the order on halting.

Sixth. The piece is brought to the order on halting. The execution of the order begins when the halt is completed.

Seventh. A disengaged hand in double time is held as when without arms.

Being at order arms: 1. UNFIX, 2. BAYONET.

If the bayonet scabbard is carried on the belt: Execute parade rest;
grasp the handle of the bayonet firmly with the right hand, pressing the spring with the forefinger of the left hand; raise the bayonet until the handle is about 12 inches above the muzzle of the piece; drop the point to the left, back of the hand toward the body, and, glancing at the scabbard, return the bayonet, the blade passing between the left arm and the body; regrasp the piece with the right hand and resume the order.

If the bayonet scabbard is carried on the haversack: Take the bayonet from the rifle with the left hand and return it to the scabbard in the most convenient manner.

If marching or lying down, the bayonet is fixed and unfixed in the most expeditious and convenient manner and the piece returned to the original position.

Fix and unfix bayonet are executed with promptness and regularity, but not in cadence.

Being at inspection arms; 1. ORDER (Right shoulder, port), 2. ARMS.
At the preparatory command press the follower down with the fingers of the left hand, then push the bolt forward just enough to engage the follower, raise the fingers of the left hand, push the bolt forward, turn the handle down, pull the trigger, and resume port arms. At the command ARMS, complete the movement ordered.

TO LOAD

Being in line or skirmish line at halt: 1. WITH DUMMY (Blank or ball) CARTRIDGES, 2. LOAD.

At the command load each front rank man or skirmisher faces half right and carries the right foot to the right, about 1 foot, to such position as will insure the greatest firmness and steadiness of the body; raises or lowers the piece and drops it into the left hand at the balance, left thumb extended along the stock and the muzzle at the height of the breast. With the right hand he turns and draws the bolt back, takes a loaded clip and inserts the ends in the clip slots, places the thumb on the powder space of the top cartridge, the fingers extending around the piece and tips resting on the magazine floor plate; forces the cartridges into the magazine by pressing down with the thumb; without removing the clip, thrusts the bolt home, turning down the handle; turns the safety lock to the “Safe” and carries the hand to the small of the stock. Each rear rank man moves to the right front, takes a similar position opposite the interval to the right of his front rank man, muzzle of the piece extending beyond the front rank, and loads.

A skirmish line may load while moving, the pieces being held as nearly as practicable in the position of load.

If kneeling or sitting, the position of the piece is similar; if kneeling, the left forearm rests on the left thigh; if sitting, the elbows are supported by the knees. If lying down, the left hand steadies and supports the piece at the balance, the toe of the butt resting on the ground, the muzzle off the ground.
For reference, these positions (standing, kneeling, and lying down) are designated as that of load.

For purposes of simulated firing, 1. SIMULATE, 2. LOAD, raise the bolt handle in the preceding paragraph, draw the bolt back until the cocking piece engages, then close the bolt, and turn the bolt handle down.

The recruits are first taught to simulate loading and firing; after a few lessons dummy cartridges are used. Later, blank cartridges may be used.

TO UNLOAD

Unload: Take the position of load, turn the safety; lock up and move the bolt alternately backward and forward until all the cartridges are ejected. After the last cartridge is ejected the chamber is closed by pressing the follower down with the fingers of the left hand, to engage it under the bolt, and then thrusting the bolt home. The trigger is pulled. The cartridges are then picked up, cleaned, and returned to the belt and the piece is brought to the order.

To continue the firing: 1. AIM, 2. SQUAD, 3. FIRE.

Each command is executed as previously explained. Load is executed by drawing back and thrusting home the bolt with the right hand, leaving the safety lock at the “Ready.”

Cease firing: Firing stops; pieces are loaded and locked; the sights are laid down and the piece is brought to the order. Cease firing is used for long pauses to prepare for changes of position or to steady the men.

COMPANY INSPECTION

Being in line at a halt: 1. OPEN RANKS, 2. MARCH.

At the command march the front rank executes right dress; the rear rank and the file closers march backward 4 steps, halt, and execute right dress; the lieutenants pass around their respective flanks and take post, facing to the front, 3 paces in front of the center of their respective platoons. The captain aligns the front rank, rear rank, and file closers, takes post 3 paces in front of the right guide, facing to the left, and commands:

3. FRONT, 4. PREPARE FOR INSPECTION.

At the second command the lieutenants carry saber; the captain returns saber and inspects them, after which they face about, order saber, and stand at ease; upon the completion of the inspection they carry saber, face about, and order saber. The captain may direct the lieutenants to accompany or assist him, in which case they return saber and, at the close of the inspection, resume their posts in front of the company, draw and carry saber.

Having inspected the lieutenants, the captain proceeds to the right of the company. Each man, as the captain approaches him, executes inspection arms.

The captain takes the piece, grasping it with his right hand just below the lower band, the man dropping his hands; the captain inspects the piece, and, with the hand and piece in the same position as in receiving it, hands
it back to the man, who takes it with the left hand at the balance and executes order arms.

As the captain returns the piece the next man executes inspection arms, and so on through the company.

Should the piece be inspected without handling, each man executes order arms as soon as the captain passes to the next man.

The inspection is from right to left in front, and from left to right in rear of each rank and of the line of file closers.

When approached by the captain the first sergeant executes inspection saber. Enlisted men armed with the pistol execute inspection pistol by drawing the pistol from the holster and holding it diagonally across the body, barrel up, and 6 inches in front of the neck, muzzle pointing up and to the left. The pistol is returned to the holster as soon as the captain passes.

Upon completion of the inspection the captain takes post facing to the left in front of the right guide and on line with the lieutenants and commands: 1. CLOSE RANKS, 2. MARCH.

At the command march the lieutenants resume their posts in line; the rear rank closes to 40 inches, each man covering his file leader; the file closers close to 2 paces from the rear rank.
INFORMATION FOR SCHOOLS AND COLLEGES ARMED WITH RIFLES, MODEL 1898.

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF STAFF,
Washington, December 2, 1911.

The Infantry Drill Regulations, 1911, have been prepared for the use of troops armed with the United States magazine rifle, model 1903. For the guidance of organizations armed with the United States magazine rifle, model 1898, the following alternative paragraphs are published and will be considered as substitute paragraphs for the corresponding paragraphs in the text.

By order of the Secretary of War:

LEONARD WOOD,
Major General, Chief of Staff.

RULES GOVERNING THE CARRYING OF THE PIECE.

Third. The cut-off is kept turned down, except when using the magazine.

* * * * * * *

Being at order arms: 1. Unfix, BAYONET.

If the bayonet scabbard is carried on the belt: Take the position of parade rest, grasp the handle of the bayonet firmly with the right hand, press the spring with the forefinger of the left hand, raise the bayonet until the handle is about 6 inches above the muzzle of the piece, drop the point to the left, back of hand toward the body, and, glancing at the scabbard, return the bayonet, the blade passing between the left arm and body; regrasp the piece with the right hand and resume the order.

If the bayonet scabbard is carried on the haversack: Take the bayonet from the rifle with the left hand and return it to the scabbard in the most convenient manner.

If marching or lying down, the bayonet is fixed and unfixed in the most expeditious and convenient manner and the piece returned to the original position.

Fix and unfix bayonet are executed with promptness and regularity, but not in cadence.

Being at order arms: 1. Inspection, 2. ARMS.

At the second command, take the position of port arms (TWO). With the right hand open the magazine gate, turn the bolt handle up, draw the bolt back and glance at the magazine and chamber. Having found them empty, or having emptied them, raise the head and eyes to the front.

Being at inspection arms: 1. Order (Right shoulder, port), 2. ARMS.
APPENDIX

At the preparatory command, push the bolt forward, turn the handle down, close the magazine gate, pull the trigger, and resume port arms. At the command arms, complete the movement ordered.

Pieces being loaded and in the position of load, to execute other movements with the pieces loaded: 1. Lock, 2. PIECES.

At the command Pieces turn the safety lock fully to the right.

The safety lock is said to be at the "ready" when turned to the left, and at the "safe" when turned to the right.

The cut-off is said to be "on" when turned up and "off" when turned down.

Being in line or skirmish line at halt: 1. With dummy (blank or ball) cartridges, 2. LOAD.

At the command load each front-rank man or skirmisher faces half right and carries the right foot to the right, about one foot, to such position as will insure the greatest firmness and steadiness of the body; raises or lowers the piece and drops it into the left hand at the balance, left thumb extended along the stock, muzzle at the height of the breast. With the right hand he turns and draws the bolt back, takes a cartridge between the thumb and first two fingers and places it in the receiver; places palm of the hand against the back of the bolt handle; thrusts the bolt home with a quick motion, turning down the handle, and carries the hand to the small of the stock. Each rear-rank man moves to the right front, takes a similar position opposite the interval to the right of his front-rank man, muzzle of the piece extending beyond the front rank, and loads.

A skirmish line may load while moving, the pieces being held as nearly as practicable in the position of load.

If kneeling or sitting the position of the piece is similar; if kneeling the left forearm rests on the left thigh; if sitting the elbows are supported by the knees. If lying down the left hand steadies and supports the piece at the balance, the toe of the butt resting on the ground, the muzzle off the ground.

For reference, these positions (standing, kneeling, and lying down) are designated as that of load.

FILL MAGAZINE.

Take the position of load, if not already there, open the gate of the magazine with the right thumb, take five cartridges from the box or belt, and place them, with the bullets to the front, in the magazine, turning the barrel slightly to the left to facilitate the insertion of the cartridges; close the gate and carry the right hand to the small of the stock.

To load from the magazine the command From magazine will be given preceding that of LOAD; the cut-off will be turned up on coming to the position of load.

To resume loading from the belt the command From belt will be given preceding the command LOAD; the cut-off will be turned down on coming to the position of load.

The commands from magazine and from belt, indicating the change in the manner of loading, will not be repeated in subsequent commands.
The words *from belt* apply to cartridge box as well as belt.

In loading from the magazine care should be taken to push the bolt fully forward and turn the handle down before drawing the bolt back, as otherwise the extractor will not catch the cartridge in the chamber, and jamming will occur with the cartridge following.

To fire from the magazine, the command *MAGAZINE FIRE* may be given at any time. The cut-off is turned up and an increased rate of fire is executed. After the magazine is exhausted the cut-off is turned down and the firing continued, loading from the belt.

*Magazine fire* is employed only when, in the opinion of the platoon leader or company commander, the *maximum* rate of fire becomes necessary.

**UNLOAD.**

All take the position of load, turn the *cut-off* up, if not already there, turn the safety lock to the left, and alternately open and close the chamber until all the cartridges are ejected. After the last cartridge is ejected the chamber is closed and the trigger pulled. The cartridges are then picked up, cleaned, and returned to the box or belt, and the piece brought to the order.

**CLIP FIRE.**

Turn the cut-off up; *fire at will* (reloading from the magazine) until the cartridges in the piece are exhausted; turn the cut-off down; fill magazine; reload and take the position of *suspend firing*.

**CEASE FIRING.**

Firing stops; pieces not already there are brought to the position of load, the cut-off turned down if firing from magazine, the cartridge is drawn or the empty shell is ejected, the trigger is pulled, sights are laid down, and the piece is brought to the order.

*Cease firing* is used for long pauses to prepare for changes of position or to steady the men.
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