

**Manual for Noncommissioned Officers and Privates of Infantry  
of the Army of the United States, 1917 To be used by  
Engineer companies (dismounted) and Coast Artillery  
companies for Infantry instruction and training**

War Department

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MANUAL FOR NONCOMMISSIONED OFFICERS AND PRIVATES OF INFANTRY OF  
THE ARMY OF THE UNITED STATES

1917

To be used by Engineer companies (dismounted) and Coast Artillery  
companies for Infantry instruction and training.

WAR DEPARTMENT Document No. 574 OFFICE OF THE ADJUTANT GENERAL

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WAR DEPARTMENT,  
WASHINGTON, \_April\_14,\_1917.\_

The following Manual for Noncommissioned Officers and Privates of Infantry of the Army of the United States is approved and herewith published for the information and government of all concerned.

This manual will also be used by Engineer companies (dismounted) and Coast Artillery companies in connection with Infantry instruction and training prescribed by the War Department.

By ORDER OF THE SECRETARY OF WAR:

H. L. SCOTT,  
\_Major\_General,\_Chief\_of\_Staff.\_

OFFICIAL:

H. P. McCAIN.  
\_The\_Adjutant\_General.\_

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## CHAPTER I.

### MILITARY DISCIPLINE AND COURTESY.

#### SECTION 1. OATH OF ENLISTMENT.

Every soldier on enlisting in the Army takes upon himself the following obligation:

"I,-----, do solemnly swear (or affirm) that I will bear true faith and allegiance to the United States of America; that I will serve them honestly and faithfully against all their enemies whomsoever; and that I will obey the orders of the President of the United States, and the orders of the officers appointed over me according to the Rules and Articles of War." (109th Article of War.)

#### SECTION 2. OBEDIENCE.

The very first paragraph in the Army Regulations reads:

"All persons in the military service are required to obey strictly and to EXECUTE PROMPTLY the lawful orders of their superiors."

Obedience is the first and last duty of a soldier. It is the foundation upon which all military efficiency is built. Without it an army becomes a mob, while with it a mob ceases to be a mob and becomes possessed of much of the power of an organized force. It is a quality that is demanded of every person in the Army, from the highest to the lowest. Each enlisted man binds himself, by his enlistment oath, to obedience. Each officer, in accepting his commission, must take upon himself the same solemn obligation.

Obey strictly and execute promptly the lawful orders of your superiors. It is enough to know that the person giving the order, whether he be an officer, a noncommissioned officer, or a private acting as such, is your lawful superior. You may not like him, you may not respect him, but you must respect his position and authority, and reflect honor and credit upon yourself and your profession by yielding to all superiors that complete and unhesitating obedience which is the pleasure as well as the duty of every true soldier.

Orders must be STRICTLY carried out. It is not sufficient to comply with only that part which suits you or which involves no work or danger or hardship. Nor is it proper or permissible, when

you are ordered to do a thing in a certain way or to accomplish a work in a definitely prescribed manner, for you to obtain the same results by other methods.

Obedience must be PROMPT AND UNQUESTIONING. When any soldier (and this word includes officers as well as enlisted men) receives an order, it is not for him to consider whether the order is a good one or not, whether it would have been better had such an order never been given, or whether the duty might be better performed by some one else, or at some other time, or in some other manner. His duty is, first, to understand just what the order requires, and, second, to proceed at once to carry out the order to the best of his ability.

"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 more severe censure than an error in the choice of the means." (\_Preface,\_Field\_ \_Service\_Regulations.\_)

### SECTION 3. LOYALTY.

But even with implicit obedience you may yet fail to measure up to that high standard of duty which is at once the pride and glory of every true soldier. Not until you carry out the desires and wishes of your superiors in a hearty, willing, and cheerful manner are you meeting all the requirements of your profession. For an order is but the will of your superior, however it may be expressed. Loyalty means that you are for your organization and its officers and noncommissioned officers--not against them; that you always extend your most earnest and hearty support to those in authority. No soldier is a loyal soldier who is a knocker or a grumbler or a shirker. Just one man of this class in a company breeds discontent and dissatisfaction among many others. You should, therefore, not only guard against doing such things yourself but should discourage such actions among any of your comrades.

### SECTION 4. DISCIPLINE.

"1. All persons in the military service are required to obey strictly and to execute promptly the lawful orders of their superiors.

"2. Military authority will be exercised with firmness, kindness, and justice. Punishments must conform to law and follow offenses as promptly as circumstances will permit.

"3. Superiors are forbidden to injure those under their authority by tyrannical or capricious conduct or by abusive language. While maintaining discipline and the thorough and prompt performance of military duty, all officers, in dealing with enlisted men, will bear in mind the absolute necessity of so treating them as to preserve their self-respect. Officers will keep in as close touch as possible with the men under their command and will strive

to build up such relations of confidence and sympathy as will insure the free approach of their men to them for counsel and assistance. This relationship may be gained and maintained without relaxation of the bonds of discipline and with great benefit to the service as a whole.

"4. Courtesy among military men is indispensable to discipline; respect to superiors will not be confined to obedience on duty, but will be extended on all occasions.

"5. Deliberations or discussions among military men conveying praise or censure, or any mark of approbation, toward others in the military service, and all publications relating to private or personal transactions between officers are prohibited. Efforts to influence legislation affecting the Army or to procure personal favor or consideration should never be made except through regular military channels; the adoption of any other method by any officer or enlisted man will be noted in the military record of those concerned," (Army Regulations.)

"The discipline which makes the soldier of a free country reliable in battle is not to be gained by harsh or tyrannical treatment. On the contrary, such treatment is far more likely to destroy than to make an army. It is possible to impart instruction and give commands in such manner and in such tone of voice as to inspire in the soldier no feeling but an intense desire to obey, while the opposite manner and tone of voice can not fail to excite strong resentment and a desire to disobey. The one mode or the other of dealing with subordinates springs from a corresponding spirit in the breast of the commander. He who feels the respect which is due to others can not fail to inspire in them regard for himself, while he who feels, and hence manifests, disrespect toward others, especially his inferiors, can not fail to inspire hatred against himself," (Address of Maj. Gen. John M. Schofield to the United States Corps of Cadets, Aug. 11, 1879.)

When, by long-continued drill and subordination, you have learned your duties, and obedience becomes second nature, you have acquired discipline. It can not be acquired in a day or a month. It is a growth. It is the habit of obedience. To teach this habit of obedience is the main object of the close-order drill, and, if good results are to be expected, the greatest attention must be paid to even the smallest details. The company or squad must be formed promptly at the prescribed time--not a minute or even a second late. All must wear the exact uniform prescribed and in the exact manner prescribed. When at attention there must be no gazing about, no raising of hands, no chewing or spitting in ranks. The manual of arms and all movements must be executed absolutely as prescribed. A drill of this kind teaches discipline. A careless, sloppy drill breeds disobedience and insubordination. In other words, discipline simply means efficiency.

## SECTION 5. MILITARY COURTESY.

In all walks of life men who are gentlemanly and of good breeding are always respectful and courteous to those about them. It helps to make life move along more smoothly. In civil life this courtesy is shown by the custom of tipping the hat to ladies, shaking

hands with friends. and greeting persons with a nod or a friendly "Good morning," etc.

In the Army courtesy is just as necessary, and for the same reasons. It helps to keep the great machine moving without friction.

"Courtesy among military men is indispensable to discipline; respect to superiors will not be confined to obedience on duty, but will be extended on all occasions." (Par. 4, Army Regulations, 1913.)

One method of extending this courtesy is by saluting. When in ranks the question of what a private should do is simple--he obeys any command that is given. It is when out of ranks that a private must know how and when to salute.

## SECTION 6. SALUTING.

In the old days the free men of Europe were all allowed to carry weapons, and when they met each would hold up his right hand to show that he had no weapon in it and that they met as friends. Slaves or serfs, however, were not allowed to carry weapons, and slunk past the free men without making any sign. In this way the salute came to be the symbol or sign by which soldiers (free men) might recognize each other. The lower classes began to imitate the soldiers in this respect, although in a clumsy, apologetic way, and thence crept into civil life the custom of raising the hand or nodding as one passed an acquaintance. The soldiers, however, kept their individual salute, and purposely made it intricate and difficult to learn in order that it could be acquired only by the constant training all real soldiers received. To this day armies have preserved their salute, and when correctly done it is at once recognized and never mistaken for that of the civilian. All soldiers should be careful to execute the salute exactly as prescribed. The civilian or the imitation soldier who tries to imitate the military salute invariably makes some mistake which shows that he is not a real soldier; he gives it in an apologetic manner, he fails to stand or march at attention, his coat is unbuttoned or hat on awry, or he fails to look the person saluted in the eye. There is a wide difference in the method of rendering and meaning between the civilian salute as used by friends in passing, or by servants to their employers, and the MILITARY SALUTE, the symbol and sign of the military profession.

TO SALUTE WITH THE HAND, first assume the position of a soldier or march at attention. Look the officer you are to salute straight

in the eye. Then, when the proper distance separates you, raise the right hand smartly till the tip of the forefinger touches the lower part of the headdress or forehead above the right eye, thumb and fingers extended and joined, palm to the left, forearm inclined at about 45 deg., hand and wrist straight. Continue to look the officer you are saluting straight in the Eye and keep your hand in the position of salute until the officer acknowledges the salute or until he has passed. Then drop the hand smartly to the side. The salute is given with the right hand only.



TO SALUTE WITH THE RIFLE, bring the rifle to right shoulder arms if not already there. Carry the left hand smartly to the small of the stock, forearm horizontal, palm of the hand down, thumb and fingers extended and joined, forefinger touching the end of the cocking piece. Look the officer saluted in the eye. When the officer has acknowledged the salute or has passed, drop the left hand smartly to the side and turn the head and eyes to the front. The rifle salute may also be executed from the order or trail. See paragraph 94, Infantry Drill Regulations, and paragraph 111, Cavalry Drill Regulations, 1916.

TO SALUTE WITH THE SABER, bring the saber to order saber if not already there, raise and carry the saber to the front, base of the hilt as high as the chin and 6 inches in front of the neck, edge to the left, point 6 inches farther to the front than the hilt, thumb extended on the left of the grip, all fingers grasping the grip. Look the officer saluted in the eye. When the officer has acknowledged the salute or has passed, lower the saber, point in prolongation of the right foot and near the ground, edge to the left, hand by the side, thumb on left of grip, arm extended, and return to the order saber. If mounted, the hand is held behind the thigh, point a little to the right and front of the stirrup.

(For Cavalry.) TO SALUTE WITH THE SABER, bring the saber to carry saber if not already there, carry the saber to the front with arm half extended until the thumb is about 6 inches in front of the chin, the blade vertical, guard to the left, all four fingers grasping the grip, the thumb extending along the back in the groove, the fingers pressing the back of the grip against the heel of the hand. Look the officer saluted in the eye. When the officer has acknowledged the salute or has passed, bring the saber down with the blade against the hollow of the right shoulder, guard to the front, right hand at the hip, the third and fourth finger on the back of the grip and the elbow back.

The pistol is not carried in the hand but in the holster, therefore when armed with the pistol salute with the hand.

Always stand or march at attention before and during the salute. The hat should be on straight, coat completely buttoned up, and hands out of the pockets.

## SECTION 7. RULES GOVERNING SALUTING.

759. (1) Salutes shall be exchanged between officers and enlisted men not in a military formation, nor at drill, work, games, or mess, on every occasion of their meeting, passing near or being addressed, the officer junior in rank or the enlisted man saluting first.

(2) When an officer enters a room where there are several enlisted men the word "attention" is given by some one who perceives him, when all rise, uncover, and remain standing at attention until the officer leaves the room or directs otherwise. Enlisted men at meals stop eating and remain seated at attention.

(3) An enlisted man, if seated, rises on the approach of an officer, faces toward him, stands at attention, and salutes. Standing, he

faces an officer for the same purpose. If the parties remain in the same place or on the same ground, such compliments need not be repeated. Soldiers actually at work do not cease work to salute an officer unless addressed by him.

(4) Before addressing an officer an enlisted man makes the prescribed salute with the weapon with which he is armed, or, if unarmed, with the right hand. He also makes the same salute after receiving a reply.

(5) In uniform, covered or uncovered, but not in formation, officers and enlisted men salute military persons as follows: With arms in hand, the salute prescribed for that arm (sentinels on interior guard duty excepted); without arms, the right-hand salute.

(6) In civilian dress, covered or uncovered, officers and enlisted men salute military persons with the right-hand salute.

(7) Officers and enlisted men will render the prescribed salutes in a military manner, the officer junior in rank or the enlisted men saluting first. When several officers in company are saluted all entitled to the salute shall return it.

(8) Except in the field under campaign or simulated campaign conditions, a mounted officer (or soldier) dismounts before addressing a superior officer not mounted.

(9) A man in formation shall not salute when directly addressed, but shall come to attention if at rest or at ease.

(10) Saluting distance is that within which recognition is easy. In general, it does not exceed 30 paces.

(11) When an officer entitled to the salute passes in rear of a body of troops, it is brought to attention while he is opposite the post of the commander.

(12) In public conveyances, such as railway trains and street cars, and in public places, such as theaters, honors and personal salutes may be omitted when palpably inappropriate or apt to disturb or annoy civilians present.

(13) Soldiers at all times and in all situations pay the same compliments to officers of the Army, Navy, Marine Corps, and Volunteers, and to officers of the National Guard as to officers of their own regiment, corps, or arm of service.

(14) Sentinels on post doing interior guard duty conform to the foregoing principles, but salute by presenting arms when armed with the rifle. They will not salute if it interferes with the proper performance of their duties. Troops under arms will salute as prescribed in drill regulations.

760. (1) Commanders of detachments or other commands will salute officers of grades higher than the person commanding the unit, by first bringing the unit to attention and then saluting as required by subparagraph (5). paragraph 759. If the person saluted is of a junior or equal grade, the unit need not be at attention in the exchange of salutes.

(2) If two detachments or other commands meet, their commanders will exchange salutes, both commands being at attention.

761. Salutes and honors, as a rule, are not paid by troops actually engaged in drill, on the march, or in the field under campaign or simulated campaign condition. Troops on the service of security pay no compliments whatever.

762. If the command is in line at a halt (not in the field) and armed with the rifle, or with sabers drawn, it shall be brought to PRESENT ARMS or PRESENT SABERS before its commander salutes in the following cases: When the National Anthem is played, or when TO THE COLOR or TO THE STANDARD is sounded during ceremonies, or when a person is saluted who is its immediate or higher commander or a general officer, or when the national or regimental color is saluted.

763. At parades and other ceremonies, under arms, the command shall render the prescribed salute and shall remain in the position of salute while the National Anthem is being played; also at retreat and during ceremonies when TO THE COLOR is played, if no band is present. If not under arms, the organizations shall be brought to attention at the first note of the National Anthem, TO THE COLOR or TO THE STANDARD, and the salute rendered by the officer or noncommissioned officer in command as prescribed in regulations, as amended herein.

764. 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 shall stand at attention facing toward the music (except at retreat, when they shall face toward the flag). If in uniform, covered or uncovered, or in civilian clothes, uncovered, they shall, salute at the first note of the anthem, retaining the position of salute until the last note of the anthem. 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.

765. Officers and enlisted men passing the uncased color will render honors as follows: If in uniform, they will salute as required by subparagraph (5), paragraph 759; if in civilian dress and covered, they will uncover, holding the headdress opposite the left shoulder with the right hand; if uncovered, they will salute with the right-hand salute." (\_Infantry\_Drill\_Regulations,\_1911.\_)

The national flag belonging to dismounted organizations is called a color; to mounted organizations, a standard. An uncased color is one that is not in its waterproof cover.

Privates do not salute noncommissioned officers. Prisoners are not permitted to salute; they merely come to attention if not actually at work. The playing of the National Anthem as a part of a medley is prohibited in the military service.

## SECTION 8. COURTESIES IN CONVERSATION.

In speaking to an officer, always stand at attention and use the word "Sir." Examples:

"Sir, Private Brown, Company B, reports as orderly."

"Sir, the first sergeant directed me to report to the captain."

(Question by an officer:) "To what company do you belong?"

(Answer:) "Company H, sir."

(Question by an officer:) "Has first call for drill sounded?"

(Answer:) "No, sir;" or "Yes, sir.; it sounded about five minutes ago."

(Question by an officer:) "Can you tell me, please, where Major Smith's tent is?"

(Answer:) "Yes, sir; I'll take you to it."

Use the third person in speaking to an officer. Examples:

"Does the Lieutenant wish," etc.

"Did the Captain send for me?"

In delivering a message from one officer to another, always use the form similar to the following: "Lieutenant A presents his compliments to Captain B and states," etc. This form is not used when the person sending or receiving the message is an enlisted man.

In all official conversation refer to other soldiers by their titles, thus: Sergeant B, Private C.

[Illustration]

## CHAPTER II.

### ARMS, UNIFORMS, AND EQUIPMENT.

## SECTION 1. THE RIFLE.

The rifle now used by the Army of the United States is the United States magazine rifle, model of 1903, caliber .30.

It is 43.212 inches long and weighs 8.69 pounds.

The bayonet weighs 1 pound and the blade is 16 inches long.

The rifle is sighted for ranges up to 2,850 yards.

The maximum range, when elevated at an angle of 45 degrees, is 4,891 yards (389 yards less than 3 miles).

The smooth bore of the rifle is 0.30 inch in diameter. It is then rifled 0.004 inch deep, making the diameter from the bottom of one groove to the bottom of the opposite groove 0.308 inch. The rifling makes one complete turn in each 10 inches of the barrel.

The accompanying plate shows the names of the principal parts of the rifle.

The only parts of a rifle that an enlisted man is permitted to take apart are the bolt mechanism and the magazine mechanism. Learn how to do this from your squad leader, for you must know how in order to keep your rifle clean. Never remove the hand guard or the trigger guard, nor take the sights apart unless you have special permission from a commissioned officer.

The cartridge used for the rifle is called the .30-caliber model 1906 cartridge. There are four types of cartridges.

The BALL CARTRIDGE consists of the brass case or shell, the primer, the charge of smokeless powder, and the bullet. The bullet has a sharp point, is composed of a lead core and a jacket of cupro nickel, and weighs 150 grains. The bullet of this cartridge, when fired from the rifle, starts with an initial velocity at the muzzle of 2,700 feet per second.

The BLANK CARTRIDGE contains a paper cup instead of a bullet. It is dangerous up to 100 feet. Firing with blank cartridges at a represented enemy at ranges less than 100 yards is prohibited.

The GUARD CARTRIDGE has a smaller charge of powder than the ball cartridge, and five cannellures encircle the body of the shell at about the middle to distinguish it from the ball cartridge. It is intended for use on guard or in riot duty, and gives good results up to 200 yards. The range of 100 yards requires a sight elevation of 450 yards, and the range of 200 yards requires all elevation of 650 yards.

The DUMMY CARTRIDGE is tin plated and the shell is provided with six longitudinal corrugations and three circular holes. The primer contains no percussion composition. It is intended for drill purposes to accustom the soldier to the operation of loading the rifle.

All cartridges are secured five in a clip to enable five cartridges

to be inserted into the magazine at one motion. Sixty ball cartridges in 12 clips are packed in a cloth bandoleer to facilitate issue and carrying. When full the bandoleer weighs about 3.88 pounds. Bandoleers are packed 20 in a box, or 1,200 rounds in all. The full box weighs 99 pounds.

## SECTION 2. CARE OF THE RIFLE.

Every part of the rifle must be kept free from rust, dust, and dirt. A dirty or rusty rifle is a sure sign that the soldier does not realize the value of his weapon, and that his training is incomplete. The rifle you are armed with is the most accurate in the world. If it gets dirty or rusty it will deteriorate in its accuracy and working efficiency, and no subsequent care will restore it to its original condition. The most important part of the rifle to keep clean is the bore. If, after firing, the bore is left dirty over night, it will be badly rusted in the morning, therefore your rifle must be cleaned not later than the evening of the day on which it was fired. The fouling of the blank cartridge is as dangerous to the bore as the fouling of the ball cartridge.

Never attempt to polish any part that is blued. If rust appears, remove, by rubbing with oil. Never use emery paper, pomade, or any preparation that cuts or scratches, to clean any part of the rifle.

To beautify and preserve the stock rub with raw linseed oil. The use of any other preparation on the stock is strictly forbidden.

Always handle your rifle with care. Don't throw it around as though it were a club. Don't stand it up against anything so that it rests against the front sight. Don't leave a stopper or a rag in the bore: it will cause rust to form at that point. It may also cause the gun barrel to burst if a shot is fired before removing it.

Guard the sights and muzzle carefully from any blow that might injure them. The front sight cover should always be on the rifle except when rifle is being fired. This is especially necessary to protect the front sight while rifle is being carried in scabbard by a mounted man.

In coming to the "order arms," lower the piece gently to the ground.

When there is a cartridge in the chamber the piece is always carried locked. In this position the safety lock should be kept turned fully to the right, since if it be turned to the left nearly to the "ready" position and the trigger be pulled, the rifle will be discharged when the safety lock is turned to the "ready" position at any time later on.

Cartridges can not be loaded from the magazine unless the bolt is drawn fully to the rear. When the bolt is closed, or only partly open, the cut-off may be turned up or down as desired, but if the bolt is drawn fully to the rear, the magazine can not be cut off unless the top cartridge or the follower be pressed down slightly and the bolt be pushed forward so that the cut-off

may be turned "off."

In the case of a misfire, don't open the bolt immediately, as it may be a hangfire. Misfires are often due to the fact that the bolt handle was not fully pressed down. Sometimes in pulling the trigger the soldier raises the bolt handle without knowing it.

Unless otherwise ordered, arms will be unloaded before being taken to quarters or tents, or as soon as the men using them are relieved from duty.

Keep the working parts oiled.

In every company there should be at least one copy of the Manual of the Ordnance Department entitled "Description and Rules for the Management of the U. S. Magazine Rifle." This manual gives the name and a cut of every part of the rifle, explains its use, shows how to take the rifle apart and care for the same, and also gives much other valuable and interesting information.

### SECTION 3. CLEANING THE RIFLE.

"Cleaning the rifle,--(a) The proper care of the bore requires conscientious, careful work, but it pays well in the attainment of reduced labor of cleaning, prolonged accuracy life of the barrel, and better results in target practice. Briefly stated, the care of the bore consists in removing the fouling, resulting from firing, to obtain a chemically clean surface, and in coating this surface with a film of oil to prevent rusting. The fouling which results from firing is of two kinds--one, the products of combustion of the powder; the other, cupro-nickel scraped off (under the abrading action of irregularities or grit in the bore). Powder fouling, because of its acid reaction, is highly corrosive; that is, it will induce rust and must be removed. Metal fouling of itself is inactive, but may cover powder fouling and prevent the action of cleaning agents until removed, and when accumulated in noticeable quantities it reduces the accuracy of the rifle.

(b) Powder fouling may be readily removed by scrubbing with hot soda solution, but this solution has no effect on the metal fouling of cupro-nickel. It is necessary, therefore, to remove all metal fouling before assurance can be had that all powder fouling, has been removed and that the bore may be safely oiled. Normally, after firing a barrel in good condition the metal fouling is so slight as to be hardly perceptible. It is merely a smear of infinitesimal thickness, easily removed by solvents of cupro-nickel. However, due to pitting, the presence of dust, other abrasives, or to accumulation, metal fouling may occur in clearly visible flakes or patches of much greater thickness, much more difficult to remove.

(c) In cleaning the bore after firing it is well to proceed as follows: Swab out the bore with soda solution (subparagraph j) to remove powder fouling. A convenient method is to insert the muzzle of the rifle into the can containing the soda solution and, with the cleaning rod inserted from the breech, pump the

barrel full a few times. Remove and dry with a couple of patches. Examine the bore to see that there are in evidence no patches of metal fouling which, if present, can be readily detected by the naked eye, then swab out with the swabbing solution--a dilute metal-fouling solution (subparagraph j). The amount of swabbing required with the swabbing solution can be determined only by experience, assisted by the color of the patches. Swabbing should be continued, however, as long as the wiping patch is discolored by a bluish-green stain. Normally a couple of minutes' work is sufficient. Dry thoroughly and oil.

(d) The proper method of oiling a barrel is as follows: Wipe the cleaning roll dry; select a clean patch and thoroughly saturate it with sperm oil or warmed cosmic, being sure that the cosmic has penetrated the patch; scrub the bore with the patch, finally drawing the patch smoothly from the muzzle to the breech, allowing the cleaning rod to turn with the rifling. The bore will be found now to be smooth and bright so that any subsequent rust and sweating can be easily detected by inspection.

(e) If patches of metal fouling are seen upon visual inspection of the bore the standard metal fouling solution prepared as hereinafter prescribed must be used. After scrubbing out with the soda solution, plug the bore from the breech with a cork at the front end of the chamber or where the rifling begins. Slip a 2-inch section of rubber hose over the muzzle down to the sight and fill with the standard solution to at least one-half inch above the muzzle of the barrel. Let it stand for 30 minutes, pour out the standard solution, remove hose and breech plug, and swab out thoroughly with soda solution to neutralize and remove all trace of ammonia and powder fouling. Wipe the barrel clean, dry, and oil. With few exceptions, one application is sufficient, but if all fouling is not removed, as determined by careful visual inspection of the bore and of the wiping patches, repeat as described above.

(f) After properly cleaning with either the swabbing solution or the standard solution, as has just been described, the bore should be clean and safe to oil and put away, but as a measure of safety a patch should always be run through the bore on the next day and the bore and wiping patch examined to insure that cleaning has been properly accomplished. The bore should then be oiled, as described above.

(g) If the swabbing solution or the standard metal-fouling solution is not available, the barrel should be scrubbed, as already described, with the soda solution, dried, and oiled with a light oil. At the end of 24 hours it should again be cleaned, when it will usually be found to have "sweated"; that is, rust having formed under the smear of metal fouling where powder fouling was present, the surface is puffed up. Usually a second cleaning is sufficient, but to insure safety it should be again examined at the end of a few days, before final oiling. The swabbing solution should always be used, if available, for it must be remembered that each puff when the bore "sweats" is an incipient rust pit.

(h) A clean dry surface having been obtained, to prevent rust it is necessary to coat every portion of this surface with a film of neutral oil. If the protection required is but temporary



and the arm is to be cleaned or fired in a few days, sperm oil may be used. This is easily applied and easily removed, but has not sufficient body to hold its surface for more than a few days. If rifles are to be prepared for storage or shipment, a heavier oil, such as cosmic, must be used.

(i) In preparing arms for storage or shipment they should be cleaned with particular care, using the metal-fouling solution as described above. Care should be taken, insured by careful inspection on succeeding day or days, that the cleaning is properly done and all traces of ammonia solution removed. The bore is then ready to be coated with cosmic. At ordinary temperatures cosmic is not fluid. In order, therefore, to insure that every part of the surface is coated with a film of oil the cosmic should be warmed. Apply the cosmic first with a brush; then, with the breech plugged, fill the barrel to the muzzle, pour out the surplus, remove the breechblock, and allow to drain. It is believed that more rifles are ruined by improper preparation for storage than from any other cause. If the bore is not clean when oiled--that is, if powder fouling is present or rust has started--a half inch of cosmic on the outside will not stop its action, and the barrel will be ruined. Remember that the surface must be perfectly cleaned before the heavy oil is applied. If the instructions as given above are carefully followed, arms may be stored for years without harm.

(j) Preparation of solutions:

Soda solution--This should be a saturated solution of sal soda (bicarbonate of soda). A strength of at least 20 per cent is necessary. The spoon referred to in the following directions is the model 1910 spoon issued in the mess outfit.

Sal soda, one-fourth pound, or four (4) heaping spoonfuls.

Water, 1 pint or cup, model of 1910, to upper rivets.

The sal soda will dissolve more readily in hot water.

Swabbing solution--Ammonium persulphate, 60 grains, one-half spoonful smoothed off.

Ammonia, 28 per cent, 6 ounces, or three-eighths of a pint, or 12 spoonfuls.

Water, 4 ounces, or one-fourth pint, or 8 spoonfuls.

Dissolve the ammonium persulphate in the water and add the ammonia. Keep in tightly corked bottle; pour out only what is necessary at the time, and keep the bottle corked.

Standard metal fouling solution--Ammonium persulphate, 1 ounce, or 2 medium heaping spoonfuls.

Ammonium carbonate, 200 grains, or 1 heaping spoonful.

Ammonia, 28 per cent, 6 ounces, or three-eighths pint, or 12 spoonfuls.

Water, 4 ounces, or one-fourth pint, or 8 spoonfuls.

Powder the persulphate and carbonate together, dissolve in the water and add the ammonia; mix thoroughly and allow to stand for one hour before using. It should be kept in a strong bottle, tightly corked. The solution should not be used more than twice, and used solution should not be mixed with unused solution, but should be bottled separately, The solution, when mixed, should be used within 30 days! Care should be exercised in mixing and using this solution to prevent injury to the rifle. An experienced noncommissioned officer should mix the solution and superintend its use.

Neither of these ammonia solutions have any appreciable action on steel when not exposed to the air, but if allowed to evaporate on steel they attack it rapidly. Care should, therefore, be taken

that none spills on the mechanism and that the barrel is washed out promptly with soda solution. The first application of soda solution removes the greater portion of the powder fouling and permits a more effective and economical use of the ammonia solution. These ammonia solutions are expensive and should be used economically.

(k) It is a fact recognized by all that a highly polished steel surface rusts much less easily than one which is roughened: also that a barrel which is pitted fouls much more rapidly than one which is smooth. Every effort, therefore, should be made to prevent the formation of pits, which are merely enlarged rust spots, and which not only affect the accuracy of the arm but increase the labor of cleaning.

(l) The chambers of rifles are frequently neglected because they are not readily inspected. Care should be taken to see that they are cleaned as thoroughly as the bore. A roughened chamber delays greatly the rapidity of fire, and not infrequently causes shells to stick.

(m) A cleaning rack should be provided for every barrack. Rifles should always be cleaned from the breach, thus avoiding possible injury to the rifling at the muzzle, which would affect the shooting adversely. If the bore for a length of 6 inches at the muzzle is perfect, a minor injury near the chamber will have little effect on the accuracy of the rifle. The rifle should be cleaned as soon as the firing for the day is completed. The fouling is easier to remove then, and if left longer it will corrode the barrel.

(n) The principles as outlined above apply equally well for the care of the barrel of the automatic pistol. Special attention should be paid to cleaning the chamber of the pistol, using the soda solution. It has been found that the chamber pits readily if it is not carefully cleaned, with the result that the operation of the pistol is made less certain." ( \_Par.\_134,\_Small\_Arms\_ \_Firing\_Manual,\_1913.\_)

#### SECTION 4. UNIFORMS.

Uniforms and clothing issued to enlisted men must not be sold,

pawned, loaned, given away, lost or damaged through neglect or carelessness. Any soldier who violates this rule may be tried by a military court and punished.

All uniforms and articles of clothing issued to enlisted men, whether or not charged on their clothing allowance, remain the property of the United States and do not become the property of the soldier either before or after discharge from the service. Under the law a soldier honorably discharged from the Army of the United States is authorized to wear his uniform from the place of his discharge to his home within three months after the date of such discharge. To wear the uniform after three months from the date of such discharge renders such person liable to fine or imprisonment, or both.

The dress uniform (the blue uniform) consists of the dress cap, dress coat, dress trousers, and russet-leather shoes. The straight, standing, military, white linen collar, showing no opening in front, is always worn with this uniform, with not to exceed one-half inch showing above the collar of the coat. Turn-down, piccadilly, or roll collars are not authorized.

When under arms, white gloves and the garrison belt (or russet-leather belt and cartridge box) are worn.

The full-dress uniform is the same as the dress uniform, with the breast cord added.

The service uniform is either cotton (summer) or woolen (winter) olive drab.

For duty in the field it consists of the service hat, with cord sewed on, service coat or sweater, service breeches, olive-drab flannel shirt, leggings, russet-leather shoes, and identification tag. In cold weather olive-drab woolen gloves are worn; at other times, no gloves.

When not in the field, the service cap is worn instead of the campaign hat. Under arms, white gloves and the garrison belt (or russet-leather belt and cartridge box) are worn.

Wear the exact uniform prescribed by your commanding officer, whether you are on duty or off duty.

Never wear a mixed uniform, as, for instance, a part of the service uniform with the blue uniform.

Never wear any part of the uniform with civilian clothes. It is very unsoldierly, for example, to wear a civilian overcoat over the uniform or to wear the uniform overcoat over a civilian suit.

Keep the uniform clean and neat and in good repair.

Grease spots and dust and dirt should be removed as soon as possible.

Rips and tears should be promptly mended.

Missing buttons and cap and collar ornaments should be promptly

replaced.

There is but one correct and soldierly way to wear the cap. Never wear it on the back or side of the head.

The service hat should be worn in the regulation shape, peaked, with four indentations, and with hat cord sewed on. Do not cover it with pen or pencil mark.

Never appear outside your room or tent with your coat or olive-drab shirt unbuttoned or collar of coat unhooked. Chevrons, service stripes, and campaign medals and badges are a part of the uniform and must be worn as prescribed.

When coats are not worn with the service uniform olive-drab shirts are prescribed.

Suspenders must never be worn exposed to view.

Never appear in breeches without leggings.

Leather leggings should be kept polished. Canvas leggings should be scrubbed when dirty.

Russet-leather (tan) shoes should be kept clean and polished. The overcoat when worn must be buttoned throughout and the collar hooked. When the belt is worn it will be worn outside the overcoat.

## SECTION 5. THE SERVICE KIT.

The service kit is composed of two parts--(a) the field kit, which includes everything the soldier wears or carries with him in the field, and (b) the surplus kit.

The field kit consists of--

- (a) The clothing worn on the person.
- (b) Arms and equipment, consisting of--

### FOR EACH ENLISTED MAN.[1]

- 1 first-aid packet.
- 1 pouch for first-aid packet.
- 1 canteen.
- 1 canteen cover.
- 1 can, bacon.
- 1 can, condiment.
- 1 pack carrier (except individually mounted men).
- 1 haversack (except individually mounted men).
- 1 meat can.
- 1 cup.
- 1 knife.
- 1 fork.
- 1 spoon.
- 1 shelter tent half.
- 1 shelter tent pole (when issued).
- 5 shelter tent pins.
- 1 identification tag with tape.

[Footnote 1: New model equipment, 1910. The old model equipment is the same except omit canteen cover, bacon and condiment cans, and pack carrier, and add 1 cartridge-belt suspenders, 1 canteen strap, and 1 blanket-roll straps, set.]

FOR EACH ENLISTED MAN ARMED WITH THE RIFLE.

- 1 United States magazine rifle, caliber .30.
- 1 bayonet.
- 1 bayonet scabbard.
- 1 gun sling.
- 1 rifle cartridge belt.

FOR EACH EACH ENLISTED MAN ARMED WITH THE PISTOL.

- 1 pistol, caliber .45.
- 1 pistol holster.
- 1 magazine pocket, double, web.
- 2 extra magazines.
- 1 pistol belt (except for men armed also with the rifle).

FOR EACH ENLISTED MAN, INDIVIDUALLY MOUNTED, IN ADDITION TO THE ABOVE.

- 1 rifle scabbard (if armed with rifle).
- 1 spurs, pair.
- 1 spur straps, pair.
- 1 set of horse equipment.

(c) Extra clothing and articles to be carried on the soldier or on the packed saddle.

- 1 blanket.
- 1 comb.
- 1 drawers, pair,
- 1 poncho (dismounted men),
- 1 slicker (mounted men).
- 1 soak, cake.
- 2 stockings, pair.
- 1 toothbrush.
- 1 towel.
- 1 undershirt.
- 1 housewife (for one man of each squad).

(d) Ammunition, consisting of--

- 90 rounds ball cartridges, caliber .30 (old model belt).
- 100 rounds ball cartridges, caliber .30 (new model belt).

(e) Rations, consisting of--

- 1 or 2 reserve rations (bacon, hard bread, coffee, sugar, and salt).

(f) Intrenching tools, consisting of--

- 2 pick mattocks, per squad.
- 1 bolo or hand axe, per squad.

4 shovels, intrenching, per squad.  
1 wire cutter, per squad.

## SECTION 6. THE SURPLUS KIT.

The surplus kit for each man consists of--

1 breeches, pair.  
1 drawers, pair.  
1 shirt, olive drab.  
1 shoes, russet leather, pair.  
2 stockings, pair.  
1 undershirt.  
1 shoe laces, extra, pair.

Each surplus kit bag contains 1 jointed cleaning rod and case.

Squad leaders are responsible that surplus kit bags are kept in order and fully packed in the field.[2] Men are allowed access to them for the purpose of making substitutions.

[Footnote 2: In campaign or simulated campaign, when an organization is restricted to its prescribed field-train transportation, surplus kits, overcoats, and sweaters are stored on the line of communications or other designated place with the permanent camp equipment of the organization.]

The surplus kits are packed in surplus kit bags, one for each squad, one for sergeants, and one for cooks and buglers.

The kit of each man will be packed as follows:

Stockings to be rolled tightly, one pair in the toe of each shoe; shoes placed together, heels at opposite ends, soles outward, wrapped tightly in underwear, and bundle securely tied around the middle by the extra pair of the shoe laces, each bundle to be tagged with the company number of the owner. These individual kits will be packed in the surplus kit bag in two layers of four kits each, the breeches and olive drab shirts to be neatly folded and packed on the top and sides of the layers, the jointed cleaning rod and case, provided for each squad, being attached by the thongs on the inside of the bag.

When overcoats or sweaters are not prescribed to be worn on the person they will be collected into bundles of convenient size and secured by burlap or other suitable material, or will be boxed. They will be marked ready for equipment to be forwarded when required.

## SECTION 7. ASSEMBLING INFANTRY EQUIPMENT.[3]

[Footnote 3: Since these instructions were written 1 drawers and 1 undershirt have been added to the field kit. Place them in pack when carried, otherwise in haversack.]

TO ASSEMBLE THE FULL EQUIPMENT.

WITH RATIONS.

Place the assembled equipment on the ground, suspender side of haversack down, pockets of cartridge belt up, haversack spread out, inside flap and pack carrier extended their full length to the rear.

Place three cartons of hard bread in the center of the haversack body, the lower one on the line of attachment of the inside flap; lay the remaining carton of hard bread, the condiment can and the bacon can on the top of these, the condiment can and the bacon can at the bottom, top of the bacon can to the front; the socks and toilet articles are rolled, towel on the outside, into a bundle of the same approximate dimensions as a carton of hard bread, and are placed in front of the two rows thus formed.

The inside flap of the haversack is folded over these articles, the end of the flap being turned in so that the flap, thus shortened, extends about 2 inches beyond the top of the upper row; the sides of the haversack are folded over the sides of the rows; the upper binding straps are passed through the loops on the outside of the inside flap, each strap through the loop opposite the point of its attachment to the haversack body, and fastened by means of the buckle on the opposite side, the strap being passed through the opening in the buckle next to its attachment, over the center bar, and back through the opening of the buckle away from its attachment; the strap is pulled tight to make the fastening secure; the outer flap of the haversack is folded over and fastened by means of the lower haversack binding strap and the buckle on the inside of the outer flap; the strap is pulled tight, drawing the outer flap snugly over the filled haversack.

The haversack is now packed and the carrier is ready for the reception of the pack.

If one reserve ration and one emergency ration are carried in lieu of two reserve rations, the haversack is packed in the manner described above, except that two cartons of hard bread and the bacon can form the bottom layer, the bacon can on the bottom; the condiment can, the emergency ration, and the toilet articles form the top layer.

If one emergency ration is carried in addition to the two reserve rations, it is packed on top of the top layer.

**TO MAKE THE PACK:** Spread the shelter half on the ground and fold in the triangular ends, forming an approximate square from the half, the guy on the inside; fold the poncho once across its shortest dimension, then twice across its longest dimension, and lay it in the center of the shelter half; fold the blanket as described for the poncho and place it on the latter; place the shelter tent pins in the folds of the blanket, in the center and across the shortest dimension; fold the edges of the shelter half snugly over the blanket and poncho and, beginning on either of the short sides, roll tightly and compactly. This forms the pack.

**TO ASSEMBLE THE PACK:** Place the pack in the pack carrier and grasp the lower suspension rings, one in each hand; place the

right knee against the bottom of the roll; pull the carrier down and force the pack up close against the bottom of the packed haversack; without removing the knee, pass the lower carrier binding strap over the pack and secure it by means of the opposite buckle; in a similar manner secure the lower haversack binding strap and then the upper carrier binding strap.

Engage the snap hook on the pack suspenders in the lower suspension rings.

The equipment is now assembled and packed as prescribed for the full equipment.

TO ASSEMBLE THE FULL EQUIPMENT.

WITHOUT RATIONS.

Place the assembled equipment on the ground as heretofore described; fold up the inside flap of the haversack so that its end will be on a line with the top of the haversack body; fold up the lower haversack strap in the same manner.

TO MAKE UP THE PACK: Fold the poncho, blanket, and shelter half, and make up the pack as heretofore prescribed, except that the condiment and bacon can (the former inside the latter) and the toilet articles and socks are rolled in the pack. In this case the pack is rolled, beginning on either of the long sides instead of the short sides, as heretofore described.

TO ASSEMBLE THE PACK: Place the pack on the haversack and pack carrier, its upper end on a line with the upper edge of the haversack body; bind it to the haversack and carrier by means of the haversack and pack binding straps; fold down the outer flap on the haversack and secure it by means of the free end of the middle haversack binding strap and the buckle provided on the underside of the flap; engage the snap hooks of the pack suspenders in the lower suspension rings.

The equipment is now packed and assembled.

TO ADJUST THE EQUIPMENT TO THE SOLDIER: Put on the equipment, slipping the arms one at a time through the pack suspenders as through the sleeves of a coat; by means of the adjusting buckles on the belt suspenders raise or lower the belt until it rests well down over the hip bones on the sides and below the pit of the abdomen in front; raise or lower it in rear until the adjusting strap lies smoothly across the small of the back; by means of the adjusting buckles on the pack suspenders, raise or lower the load on the back until the top of the haversack is on a level with the top of the shoulders, the pack suspenders, from their point of attachment to the haversack to the line of tangency with the shoulder, being horizontal. The latter is absolutely essential to the proper adjustment of the load.

The position of the belt is the same whether filled or empty.

TO ASSEMBLE THE FULL EQUIPMENT LESS THE PACK.

WITH RATIONS.



Detach the carrier from the haversack; place the rest of the equipment on the ground as heretofore described; place the four cartons of hard bread, the bacon can, the condiment can, and the toilet articles in one row in the middle of the haversack body, the toilet articles at the top, the bacon can at the bottom, top to the front, the row extending from top to bottom of the haversack; fold the inside flap over the row thus formed; fold the sides of the haversack up and over; pass the three haversack binding straps through the loops on the inside flap and secure by means of the buckles on the opposite side of the haversack; pass the lower haversack binding strap through the small buttonhole in the lower edge of the haversack, fold the outer flap of the haversack over the whole, and secure by means of the buckle on its underside and the lower haversack binding strap.

Pass the haversack suspension rings through the contiguous buttonholes in the lower edge of the haversack and engage the snap hooks on the ends of the pack suspenders.

If one reserve ration and one emergency ration are carried in lieu of two reserve rations, the haversack is packed in the manner described above, except that one emergency ration is substituted for two of the cartons of hard bread.

If one emergency ration is carried in addition to the two reserve rations, it is packed on top of the layer.

TO ASSEMBLE THE FULL EQUIPMENT LESS THE PACK.

WITHOUT RATIONS.

Detach the carrier from the haversack; place the rest of the equipment on the ground, as heretofore described; fold up the inside flap of the haversack until its upper end is on a line with the top of the haversack body; fold the sides of the haversack over, pass the three haversack binding straps through the loops on the inside flap and secure by means of the buckles on the opposite side of the haversack; pass the lower haversack binding strap through the small buttonhole in the lower edge of the haversack; place the condiment and bacon can (the former inside the latter) and the toilet articles and socks in the bottom of the pouch thus formed; fold the outer flap of the haversack over the whole and secure by means of the buckle on its underside and the lower haversack binding strap.

Pass the haversack suspension rings through the contiguous buttonholes in the lower edge of the haversack and engage the snap hooks on the ends of the pack suspenders.

TO ADJUST THE EQUIPMENT TO THE SOLDIER: Put on the equipment as prescribed for the full equipment. Adjust the cartridge belt as prescribed for the full equipment. Adjust the pack suspenders so that the top of the haversack is on a level with the top of the shoulders.

TO DISCARD THE PACK WITHOUT REMOVING THE EQUIPMENT FROM THE BODY.

Unsnap the pack suspenders from the suspension rings and snap

them into the eyelets on top of the belt and in rear of the real pockets of the right and left pocket sections; support the bottom of the pack with the left hand and with the right hand grasp the coupling strap at its middle and withdraw first one end, then the other; press down gently on the pack with both hands and remove it. When the pack has been removed, lace the coupling strap into the buttonholes along the upper edge of the carrier. Adjust the pack suspenders.

#### OLD MODEL EQUIPMENT.

To roll the blanket roll.--\_See\_ chapter V, section 8, paragraph 747.

### CHAPTER III.

#### RATIONS AND FORAGE.

##### SECTION 1. THE RATION.

A ration is the allowance of food for one man for one day.

In the field there are three kinds of rations issued, as follows:

The garrison ration is intended to be issued in kind whenever possible. The approximate net weight of this ration is 4.5 pounds.

The reserve ration is the simplest efficient ration, and constitutes the reserve carried for field service. It consists of--

	Ounces.	
Bacon	12	
Hard bread	16	
Coffee, roasted and ground		1.12
Sugar	2.4	
Salt	.16	
	-----	
Approximate net weight	pounds	2

The field ration is the ration prescribed in orders by the commander of the field forces. It consists of the reserve ration, in whole or in part, supplemented by articles requisitioned or purchased locally or shipped from the rear.

In campaign a command carries as a part of its normal equipment the following rations:

- (a) On each man: At least two days' reserve rations.
- (b) In the ration section of the field train, for each man:  
Two days' field and one day's reserve rations.
- (c) In the supply train: Two days' field rations.

In addition to the foregoing, commanders will require each man on the march to carry the unconsumed portion of the day's ration

issued the night before for the noonday meal. Reserve rations are consumed only in case of extreme necessity, when other supplies are not available. They are not to be consumed or renewed without an express order from the officer in command of the troops who is responsible for the provision of supplies, namely, the division commander or other independent-detachment commander. Every officer within the limits of his command is held responsible for the enforcement of this regulation. Reserve rations consumed must be replaced at the first opportunity.

## SECTION 2. INDIVIDUAL COOKING.

Sometimes rations for several days are issued to the soldier at one time, and in such cases you should be very careful to so use the rations that they will last you the entire period. If you stuff yourself one day, or waste your rations, you will have to starve later on.

Generally the cooking for the company will be done by the company cook, but sometimes every soldier will have to prepare his own meals, using only his field mess kit for the purpose.

The best fire for individual cooking is a small, clear one, or, better yet, a few brisk coals. To make such a fire, first gather a number of sticks about 1 inch in diameter. These should be dry. Dead limbs adhering to a tree are dryer than those picked up from the ground. Split some of these and shave them up into kindling. Dig a trench in the ground, laid with the wind, about a foot long, 4 inches wide, and 6 inches deep. Start the fire in this trench gradually, piling on the heavier wood as the fire grows. When the trench is full of burning wood, allow it a few minutes to burn down to the coals and stop blazing high. Then rest the meat can and cup over the trench and start cooking. Either may be supported, if necessary, with green sticks. If you can not scrape a trench in the soil, build one up out of rocks or with two parallel logs.

The following recipes have been furnished from the office of the Quartermaster General, United States Army:

Coffee.--Fill the cup two-thirds full of water and bring to a boil. Add one heaping spoonful of coffee and stir well, adding one spoonful of sugar if desired. Boil five minutes and then set it to the side of the fire to simmer for about 10 minutes. Then, to clear the coffee, throw in a spoonful or two of cold water. This coffee is of medium strength and is within the limit of the ration if made but twice a day.

Cocoa.--Take two-thirds of a cupful of water, bring to a boil, add one heaping spoonful of cocoa, and stir until dissolved. Add one spoonful of sugar, if desired, and boil for five minutes.

Chocolate.--Take two-thirds of a cupful of water, bring to a boil, add a piece of chocolate about the size of a hickory nut, breaking or cutting it into small pieces and stirring until dissolved. Add one spoonful of sugar, if desired, and boil for five minutes.

Tea.--Take two-thirds of a cupful of water, bring to a boll, add one-half of a level spoonful of tea, and then let it stand or "draw" for three minutes. If allowed to stand longer the tea will get bitter, unless separated from the ten leaves.

## MEATS.

Bacon.--Cut slices about five to the inch, three of which should generally be sufficient for one man for one meal. Place in a meat can with about one-half inch of cold water. Let come to a boll and then pour the water off. Fry over a brisk fire, turning the bacon once and quickly browning it. Remove the bacon to lid of meat can, leaving the grease for frying potatoes, onions, rice, flapjacks, etc., according to recipe.

Fresh meat (to fry).--To fry, a small amount of grease (one to two spoonfuls) is necessary. Put grease in the meat can and let come to a smoking temperature, then drop in the steak and, if about one-half inch thick, let fry for about one minute before turning, depending upon whether it is desired it shall be rare, medium, or well done. Then turn and fry briskly as before. Salt and pepper to taste.

Applies to beef, veal, pork, mutton, venison, etc.

Fresh meat (to broil).--Cut in slices about one inch thick, from half as large as the hand to four times that size. Sharpen a stick or branch of convenient length--say, from two to four feet long--and weave the point of the stick through the steak several times, so that it may be readily turned over a few brisk coals or on the windward side of a small fire. Allow to brown nicely, turning frequently. Salt and pepper to taste. Meat with considerable fat is preferred, though any meat may be broiled in this manner.

Fresh meat (to stew).--Cut into chunks from one-half inch to one inch cubes. Fill cup about one-third full of meat and cover with about one inch of water. Let boil or simmer about one hour, or until tender. Add such fibrous vegetables as carrots, turnips, or cabbage, cut into small chunks, soon after the meat is put on to boil, and potatoes, onions, or other tender vegetables when the meat is about half done. Amount of vegetables to be added, about the same as meat, depending upon supply and taste. Salt and pepper to taste. Applies to all fresh meats and fowls. The proportion of meat and vegetables used varies with their abundance, and fixed quantities can not be adhered to. Fresh fish can be handled as above, except that it is cooked much quicker, and potatoes and onions and canned corn are the only vegetables generally used with it, thus making a chowder. A slice of bacon would greatly improve the flavor. May be conveniently cooked in meat can or cup.

## VEGETABLES.

Potatoes (fried).--Take two medium-sized potatoes or one large one (about one-half pound), peel and cut into slices about one-fourth inch thick and scatter well in the meat can in which the grease remains after trying the bacon. Add sufficient water to half cover the potatoes, cover with the lid to keep the moisture

in, and let come to a boil for about 15 to 20 minutes. Remove the cover and dry as desired. Salt and pepper to taste. During the cooking the bacon already prepared may be kept on the cover, which is most conveniently placed bottom side up over the cooking vegetables.

\_Onions\_ (fried).--Same as potatoes.

\_Potatoes\_ (boiled).--Peel two medium-sized potatoes (about one-half pound) or one large one, and cut in coarse chunks of about the same size--say 1-1/2 inch cubes. Place in meat can and three-fourths fill with water. Cover with lid and let boil or simmer for 15 or 20 minutes. They are done when easily penetrated with a sharp stick. Pour off the water and let dry out for one or two minutes over hot ashes or light coals.

\_Potatoes\_ (baked).--Take two medium-sized potatoes (about, one-half pound) or one large one cut in half. Lay in a bed of light coals and cover with same and smother with ashes. Do not disturb for 30 or 40 minutes, when they should be done.

\_Canned tomatoes\_.--One 2-pound can is generally sufficient for five men.

\_Stew\_.--Pour into the meat can one man's allowance of tomatoes and add about two large hardtacks broken into small pieces and let come to a boil. Add salt and pepper to taste, or add a pinch of salt and one-fourth spoonful of sugar.

\_Or\_. having tried the bacon, pour the tomatoes into the meat can, the grease remaining, and add, if desired, two broken hardtacks. Set over a brisk fire and let come to a boil.

\_Or\_. heat the tomatoes just as they come from the can, adding two pinches of salt and one-half spoonful of sugar, if desired.

\_Or\_. especially in hot weather, eaten cold with hard bread, they are very palatable.

\_Rice\_.--Take about two-thirds of a cupful of water, bring to a boil, add four heaping spoonfuls of rice, and boil until the grains are soft enough to be easily mashed between the fingers (about 20 minutes). Add two pinches of salt and, after stirring, pour off the water and empty rice out on meat can. Bacon grease or sugar may be added.

\_Corn meal, fine hominy, oatmeal\_.--Take about one-third of a cupful of water, bring to a boil, add 4 heaping spoonfuls of the meal or hominy, and boil about 20 minutes. Then add about two pinches of salt and stir well.

\_Dried beans and peas\_.--Put 4 heaping spoonfuls in about two-thirds of a cupful of water and boil until soft. This generally takes from three to four hours. Add one pinch of salt. About half an hour before the beans are done add one slice of bacon.

HOT BREADS.

Flapjacks.--Take 6 spoonfuls of flour and one-third spoonful of baking powder and mix thoroughly (or dry mix in a large pan before issue, at the rate of 25 pounds of flour and 3 half cans of baking powder for 100 men). Add sufficient cold water to make a batter that will drip freely from the spoon, adding a pinch of salt. Pour into the meat can, which should contain the grease from fried bacon or a spoonful of butter or fat, and place over medium hot coals sufficient to bake, so that in from 5 to 7 minutes the flapjack may be turned by a quick toss of the pan. Fry from 5 to 7 minutes longer, or until by examination it is found to be done.

Hoecake.--Hoecake is made exactly the same as flapjacks by substituting corn meal for flour.

Emergency rations.--Detailed instructions as to the manner of preparing the emergency ration are found on the label of each can. Remember that even a very limited amount of bacon or hard bread, or both, consumed with the emergency ration makes it far more palatable, and generally extends the period during which it can be consumed with relish. For this reason it would be better to husband the supply of hard bread and bacon for use with the emergency ration when it becomes evident that the latter must be consumed rather than to retain the emergency ration to the last extremity and force its exclusive use for a longer period than two or three days.

### SECTION 3. THE FORAGE RATION.

" 1077, Army Regulations.--The forage ration for a horse is 14 pounds of hay and 12 pounds of oats, corn, or barley, and 3-1/3 pounds of straw (or hay) for bedding; for a Field Artillery horse of the heavy-draft type, weighing 1,300 pounds or over, 17 pounds of hay and 14 pounds of oats, corn, or barley, and 3-1/3 pounds of straw (or hay) for bedding; for a mule, 14 pounds of hay and 9 pounds of oats, corn, or barley, and 3-1/3 pounds of straw (or hay) for bedding. To each animal 3 pounds of bran may be issued in lieu of that quantity of grain.

"The commanding officer may, in his discretion, vary the proportions of the components of the ration (1 pound of grain, 1-1/2 pounds of hay, and 2 pounds of straw being taken as equivalents), and in the field may substitute other recognized articles of forage obtained locally, the variation or the substitution not to exceed the money value of the components of the ration at the contract rates in effect at the time of change.

" 1078, Army Regulations.--Where grazing is practicable, or when little work is required of the animals, commanding officers will reduce the forage ration. When, on the other hand, conditions demand it, they are authorized to increase the ration, not in excess, however, of savings made."

In the field the authorized allowances must often be reduced and supplemented by grazing and other kinds of food, such as green forage, beans, peas, rice, palay, wheat, and rye. Wheat and rye should be crushed and fed sparingly (about one-fourth of the allowance). For unshelled corn, add about one-quarter

weight.

On the march the grain ration is the only forage carried. It consists of 12 pounds of grain for each horse and 9 pounds of grain for each mule. Recourse must be had to grazing if it is not possible to procure long forage in the country traversed.

In campaign a command carries as a part of its normal equipment the following forage:

(a) For each draft animal: On each vehicle a reserve of one day's grain ration for its draft animals.

(b) On animals and vehicles: A portion of their grain ration issued the night before, for a noonday feed.

(c) In the ration section of the field train, for each animal, two day's grain rations.

(d) In supply train of an Infantry division two days' grain rations, and of a Cavalry division one days' grain ration.

## CHAPTER IV.

### PERSONAL HYGIENE AND CARE OF THE FEET.

#### PERSONAL HYGIENE.

History shows that in almost every war many more men die of disease than from wounds received in battle. Much of this disease is preventable and is due either to the ignorance or carelessness of the person who has the disease or of other persons about him. It is a terrible truth that one man who violates any of the great rules of health may be the means of killing many more of his comrades than are killed by the bullets of the enemy.

It is therefore most important that every soldier should learn how to take care of his health when in the field and that he should also insist that his comrades do not violate any of the rules prescribed for this purpose.

A great many diseases are due to germs, which are either little animals or little plants so very small that they can only be seen by aid of the microscope. All diseases caused by germs are "catching." All other diseases are not "catching."

There are only five ways of catching disease:

(a) Getting certain germs on the body by touching some one or something which has them on it. Thus, one may catch venereal diseases, smallpox, measles, scarlet fever, chicken pox, mumps, bolls, body lice, ringworm, barber's itch, dhopie itch, and some other diseases. Wounds are infected in this manner.

(b) Breathing in certain germs which float in the air. In this

way one may catch pneumonia, consumption, influenza, diphtheria, whooping cough, tonsillitis, spinal meningitis, measles, and certain other diseases.

(c) Taking certain germs in through the mouth in eating or drinking. Dysentery, cholera, typhoid fever, diarrhea, and intestinal worms may be caught in this manner,

(d) Having certain germs injected into the body by the bites of insects, such as mosquitoes, fleas, and bedbugs. Malaria, yellow fever, dengue fever, and bubonic plague may be caught in this way.

(e) Inheriting the germ from one's parents.

Persons may have these germs sometimes without apparently being sick with any disease. Such persons and persons who are sick with the diseases are a great source of danger to others about them. Germs which multiply in such persons are found in their urine and excretions from the bowels; in discharges from ulcers and abscesses; in the spit or particles coughed or sneezed into the air; in the perspiration or scales from the skin; and in the blood sucked up by biting insects.

Those who have taken care of their health and who have not become weakened by bad habits, exposure, and fatigue are not only less liable to catch disease, but are more apt to recover when taken sick.

Knowing all these things, the soldier can understand the reasons for the following rules and how important it is that they should be carried out by each and every person:

Stay away from persons having "catching" diseases.

If you have any disease, don't try to cure it yourself, but go to the surgeon. Insist that other soldiers do likewise.

Typhoid fever is one of the most dangerous and common camp diseases. Modern medicine has, however, discovered an effective preventative for this disease in the typhoid prophylactic, which renders the person immune from typhoid fever. The treatment consists in injecting into the arm a preventative serum. The injection is given three times at 10-day intervals.

Association with lewd women is dangerous. It may result in disabling you for life. It is the cause of a disease (syphilis) which may be transmitted by a parent to his children. Soldiers with venereal diseases should not use basins or toilet articles used by others, as the germs of these diseases if gotten into the eye very often cause blindness. Likewise, if they use the same drinking cup used by others they may give others the disease. They should promptly report their trouble to the surgeon, that they may receive the best medical advice and attention.

Should a soldier expose himself to infection by having intercourse with an unknown woman, he should report as soon as possible afterwards to the regimental infirmary for prophylactic treatment, which, if taken within a few hours after intercourse, will prevent



to a large degree the liability of contracting any disease.

Cooked germs are dead and therefore harmless. Water, even when clear, may be alive with deadly germs. Therefore, when the conditions are such that the commanding officer orders all drinking water to be boiled, be careful to live up to this order.

Use the latrines and don't go elsewhere to relieve yourself. In open latrines cover your deposit with dirt, as it breeds flies and may also be full of germs.

Flies carry germs from one place to another. Therefore see that your food and mess kit are protected from them.

All slops and scraps of food scattered about camp soon produce bad odors and draw flies. Therefore do your part toward keeping the camp free from disease by carefully depositing such refuse in the pits or cans used for this purpose.

Urinate only in the latrines, or in the cans set out for this purpose, never on the ground around camp, because it not only causes bad smells but urine sometimes contains the germs of "catching" diseases.

Soapy water thrown on the ground soon produces bad odors. Therefore in camps of several days' duration this water should be thrown in covered pits or in cans used for this purpose.

As certain mosquitoes can transmit malaria and yellow fever, use your mosquito bar for this reason as well as for personal comfort.

Keep your mouth clean by brushing your teeth once or twice a day. It helps to prevent the teeth from decaying. Decayed teeth cause toothache. They also lead one to swallow food without properly chewing it, and this leads to stomach troubles of various kinds. Food left around and between the teeth is bad for the teeth and forms good breeding places for germs.

Keep the skin clean. Through the pores of the skin the body gets rid of much waste and poisonous matter. Therefore remove this and keep the pores open by bathing once every day, if possible. If water is scarce, rub the body over with a wet towel. If no water is at hand, take a dry rub. Wash carefully the armpits, between the legs, and under the foreskin, as this will prevent chafing.

The skin protects the sensitive parts underneath from injury and helps to keep out germs. Therefore when blisters are formed don't tear off the skin. Insert a needle under the skin a little distance back from the blister and push it through to the opposite side. Press out the liquid through the holes thus formed. Heat the needle red hot first, with a match or candle, to kill the germs.

When the skin is broken (in cuts and wounds) keep the opening covered with a bandage to keep out germs and dirt; otherwise the sore may fester. Pus is always caused by germs.

Keep your hair short. Long hair and a long beard in the field generally means a dirty head and a dirty face and favors skin diseases, lice, and dandruff.

Don't let any part of the body become chilled, as this very often is the direct cause of diarrhea, dysentery, pneumonia, rheumatism, and other diseases.

Wet clothes may be worn while marching or exercising without bad results; but there is great danger if one rests in wet clothing, as the body may become chilled.

Don't sit or lie or sleep directly on damp ground, as this is sure to chill the body.

When hot or perspiring or when wearing damp clothes, don't remain where a breeze can strike you. You are sure to become chilled.

Every day, if possible, hang your blanket and clothing out to air in the sun; shake or beat them with a small stick. Germs and vermin don't like this treatment, but damp, musty clothing suits them very well. Wash your shirts, underwear, and socks frequently. The danger of blood poisoning from a wound is greatly increased if the bullet passes through dirty clothes.

Ditch your tent as soon as you can, particularly a shelter tent, even if you camp for one night only. Otherwise a little rain may ruin a whole night's rest.

Always prepare your bed before dark. Level off the ground and scrape out a little hollow for your hips. Get some straw or dry grass if possible. Green grass or branches from trees are better than nothing. Sleep on your poncho. This keeps the dampness from coming up from the ground and chilling the body. Every minute spent in making a good bed means about an hour's good rest later on.

Avoid the food and drink found for sale in the cheap stands about camp. The quality is generally bad, and it is often prepared in filthy places by very dirty persons.

The use of intoxicating liquor is particularly dangerous in the field. Its excessive use, even at long intervals, breaks down one's system. Drinking men are more apt to get sick and less liable to get well than are their more sober comrades. If alcohol is taken at all, it is best after the work of the day is over. It should never be taken when the body is exposed to severe cold, as it diminishes the resistance of the body. Hot tea or coffee is much preferable under these circumstances.

## CARE OF THE FEET.

A soldier can not march with sore feet, and marching is the main part of an infantryman's daily duty in the field. All soldiers should be familiar with the proper methods of caring for the feet. Sore feet are generally due to carelessness, neglect, or ignorance on the part of the soldier.

The most important factor in the care of the feet and the marching ability of the soldier is the shoe. Civilian shoes, particularly light, patent leather, or low shoes, are sure to cause injury and in time will ruin a man's foot. Only the marching shoe issued by the Quartermaster Corps should be worn, and they must be properly fitted to the individual. It will not suffice to order a marching shoe of the same size as one's ordinary civilian shoes, for it must be remembered that a soldier may have to march many miles daily over rough roads and carrying a heavy pack. The pack itself causes the foot to spread out to a larger size, and the rough roads give so much exercise to the muscles of the feet that they swell greatly through the increased blood supply. (For directions as to measuring the foot for the marching shoe see General Order No. 26, War Department, 1912, a copy of which should be on hand in each company.)

Do not start out on a march wearing new shoes. This is a frequent cause of sore feet. New shoes should be properly broken in before beginning a march by wearing them for several hours daily for a week before the march, and they should be adapted to the contours of the feet by stretching them with shoe stretchers with adjustable knobs to take the pressure off painful corns and bunions. Such stretchers are issued by the Quartermaster Corps, and there should be one or more pair in every company of infantry. Should this be impracticable, then the following is suggested:

The soldier stands in his new shoes in about 2-1/2 inches of water for about five minutes until the leather is thoroughly pliable and moist; he should then walk for about an hour on a level surface, letting the shoes dry on his feet, to the irregularities of which the leather is thus molded in the same way as it was previously molded over the shoe last. On taking the shoes off a very little neat's-foot oil should be rubbed into the leather to prevent its hardening and cracking.

If it is desired to waterproof shoes at any time, a considerable amount of neat's-foot oil should be rubbed into the leather. Waterproof leather causes the feet of some men to perspire unduly and keeps them constantly soft.

Light woolen or heavy woolen socks will habitually be worn for marching. Cotton socks will not be worn unless specifically ordered by the surgeon. The socks will be large enough to permit free movement of the toes, but not so loose as to permit of wrinkling. Darned socks, or socks with holes in them, will not be worn in marching.

Until the feet have hardened they should be dusted with foot powder, which can be obtained at the regimental infirmary, before each day's march. Clean socks should be worn daily.

As soon as possible after reaching camp after a day of marching the feet should be washed with soap and water, and the soldier should put on a dry pair of socks and his extra pair of shoes from his surplus kit. If the skin is tender, or the feet perspire, wash with warm salt water or alum water, but do not soak the feet a long time, as this, although very comforting at the time, tends to keep them soft. Should blisters appear on the feet, prick and evacuate them by pricking at the lower edge with a pin which

has been passed through the flame of a match and cover them with zinc oxide plaster applied hot. This plaster can be obtained on request at the regimental infirmary. If serious abrasions appear on the feet, or corns, bunions, and ingrowing nails cause trouble, have your name placed on sick report and apply to the surgeon for treatment. Cut the toe nails square (fairly close in the middle, but leaving the sides somewhat longer), as this prevents ingrowing nails.

## CHAPTER V.

### EXTRACTS FROM INFANTRY DRILL REGULATIONS.

UNITED STATES ARMY, 1911.

[Corrected to April 15, 1917.]

#### SECTION 1. DEFINITIONS.

**ALIGNMENT:** A straight line upon which several elements are formed, or are to be formed; or the dressing of several elements upon a straight line.

**BASE:** The element on which a movement is regulated.

**BATTLE SIGHT:** The position of the rear sight when the leaf is laid down.

**CENTER:** The middle point or element of a command.

**COLUMN:** A formation in which the elements are placed one behind another.

**DEPLOY:** To extend the front. In general to change from column to line, or from close order to extended order.

**DEPTH:** The space from head to rear of any formation, including the leading and rear elements. The depth of a man is assumed to be 12 inches.

**DISTANCE:** Space between elements in the direction of depth. Distance is measured from the back of the man in front to the breast of the man in rear. The distance between ranks is 40 inches in both line and column.

**ELEMENT:** A file, squad, platoon, company, or larger body, forming part of a still larger body.

**FILE:** Two men, the front-rank man and the corresponding man of the rear rank. The front-rank man is the FILE LEADER. A file which has no rear-rank man is a BLANK file. The term FILE applies also to a single man in a single-rank formation.

**FILE CLOSERS:** Such officers and noncommissioned officers of a company as are posted in rear of the line. For convenience, all

men posted in the line of file closers.

FLANK: The right or left of a command in line or in column: also the element on the right or left of the line.

FORMATION: Arrangement of the elements of a command. The placing of all fractions in their order in line, in column, or for battle.

FRONT: The space, in width, occupied by an element, either in line or in column. The front of a man is assumed to be 22 inches. Front also denotes the direction of the enemy.

GUIDE: An officer, noncommissioned officer, or private upon whom the command or elements thereof regulates its march.

HEAD: The leading element of a column.

INTERVAL: Space between elements of the same line. The interval between men in ranks is 4 inches, and is measured from elbow to elbow. Between companies, squads, etc., it is measured from the left elbow of the left man or guide of the group on the right to the right elbow of the right man or guide of the group on the left.

LEFT: The left extremity or element of a body of troops.

LINE: A formation in which the different elements are abreast of each other.

ORDER, CLOSE: The formation in which the units, in double rank, are arranged in line or in column with normal intervals and distances.

ORDER, EXTENDED: The formation in which the units are separated by intervals greater than in close order.

PACE: Thirty inches; the length of the full step in quick time.

POINT OF REST: The point at which a formation begins. Specifically, the point toward which units are aligned in successive movements.

RANK: A line of men placed side by side.

RIGHT: The right extremity or element of a body of troops.

PART I.--DRILL.

SECTION 2.--INTRODUCTION.

1.[4] Success in battle is the ultimate object of all military training; success may be looked for only when the training is intelligent and thorough.

[Footnote 4: The numbers refer to paragraphs in the Infantry Drill Regulations, 1911.]

2. Commanding officers are accountable for the proper training

of their respective organizations within the limits prescribed by regulations and orders.

The excellence of an organization is judged by its field efficiency. The field efficiency of an organization depends primarily upon its effectiveness as a whole. Thoroughness and uniformity in the training of the units of an organization are indispensable to the efficiency of the whole; it is by such means alone that the requisite teamwork may be developed.

3. Simple movements and elastic formations are essential to correct training for battle.

4. The Drill Regulations are furnished as a guide. They provide the principles for training and for increasing the probability of success in battle.

In the interpretation of the regulations, the spirit must be sought. Quibbling over the minutiae of form is indicative of failure to grasp the spirit.

5. The principles of combat are considered in Part II of these regulations. They are treated in the various schools included in Part I only to the extent necessary to indicate the functions of the various commanders and the division of responsibility between them. The amplification necessary to a proper understanding of their application is to be sought in Part II.

6. The following important distinctions must be observed:

(a) Drills executed AT ATTENTION and the ceremonies are DISCIPLINARY EXERCISES designed to teach precise and soldierly movement, and to inculcate that prompt and subconscious obedience which is essential to proper military control. To this end smartness and precision should be exacted in the execution of every detail. Such drills should be frequent, but short.

(b) The purpose of EXTENDED ORDER DRILL is to teach the mechanism of deployment, of the firings, and, in general, of the employment of troops in combat. Such drills are in the nature of disciplinary exercises and should be frequent, thorough, and exact in order to habituate men to the firm control of their leaders. Extended order drill is executed at ease. The company is the largest unit which executes extended order drill.

(c) FIELD EXERCISES are for instruction in the duties incident to campaign. Assumed situations are employed. Each exercise should conclude with a discussion, on the ground, of the exercise and principles involved.

(d) The COMBAT EXERCISE, a form of field exercise of the company, battalion, and larger units, consists of the APPLICATION OF TACTICAL PRINCIPLES to assumed situations, employing in the execution the appropriate formations and movements of close and extended order.

Combat exercises must simulate, as far as possible, the battle conditions assumed. In order to familiarize both officers and men with such conditions, companies and battalions will frequently

be consolidated to provide war-strength organizations. Officers and noncommissioned officers not required to complete the full quota of the units participating are assigned as observers or umpires.

The firing line can rarely be controlled by the voice alone; thorough training to insure the proper use of prescribed signals is necessary.

The exercise should be followed by a brief drill at attention in order to restore smartness and control.

7. In field exercises the enemy is said to be IMAGINARY when his position and force are merely assumed; OUTLINED when his position and force are indicated by a few men; REPRESENTED when a body of troop acts as such.

#### General Rules for Drills and Formations.

8. When the PREPARATORY commands consists of more than one part its elements are arranged as follows:

(1) For movements to be executed successively by the subdivisions or elements of an organization: (a) Description of the movement; (b) how executed, or on what element executed.

(2) For movements to be executed simultaneously by the subdivisions of an organization: (a) The designation of the subdivisions; (b) the movement to be executed.

9. Movements that may be executed toward either flank are explained as toward but one flank, it being necessary to substitute the word "left" for "right," and the reverse, to have the explanation of the corresponding movement toward the other flank. The commands are given for the execution of the movements toward either flank. The substitute word of the command is placed within parentheses.

10. Any movement may be executed either from the halt or when marching, unless otherwise prescribed. If at a halt, the command for movements involving marching need not be prefaced by forward, as 1. Column\_right\_(left), 2. MARCH.

11. Any movement not specially excepted may be executed in double time.

If at a halt, or if marching in quick time, the command double time precedes the command of execution.

12. In successive movements executed in double time the leading or base unit marches in QUICK TIME when not otherwise prescribed; the other units march in DOUBLE TIME to their places in the formation ordered and then conform to the gait of the leading or base unit. If marching in double time, the command DOUBLE TIME is omitted. The leading or base unit marches in QUICK TIME; the other units continue at DOUBLE TIME to their places in the formation ordered and then conform to the gait of the leading or base unit.

13. To hasten the execution of a movement begun in quick time,

the command: 1. *\_Double\_time\_*, 2. MARCH, is given. The leading or base unit continues to march in quick time, or remains at a halt if already halted; the other units complete the execution of the movement in double time and then conform to the gait of the leading or base unit.

14. To stay the execution of a movement when marching, for the correction of errors, the command: 1. *\_In\_place\_*, 2. HALT, is given. All halt and stand fast, without changing the position of the pieces. To resume the movement the command: 1. *\_Resume\_*, 2. MARCH, is given.

15. To revoke a preparatory command, or, being at a halt to begin anew a movement improperly begun, the command, AS YOU WERE, is given, at which the movement ceases and the former position is resumed.

16. Unless otherwise announced, the guide of a company or subdivision of a company in line is right; of a battalion in line or line of subdivisions or of a deployed line, center; of a rank in column of squads, toward the side of the guide of the company.

To march with guide other than as prescribed above, or to change the guide: Guide (right, left, or center).

In successive formations into line, the guide is toward the point of rest; in platoons or larger subdivisions it is so announced.

The announcement of the guide, when given in connection with a movement, follows the command of execution for that movement. Exception: 1. *\_As\_skirmishers,\_guide\_right\_(left\_or\_center)\_*, 2. MARCH.

17. The TURN ON THE FIXED PIVOT by subdivisions is used in all formations from line into column and the reverse.

The TURN ON THE MOVING PIVOT is used by subdivisions of a column in executing changes of direction.

18. Partial changes of direction may be executed:

By interpolating in the preparatory command the word HALF, as COLUMN HALF RIGHT (LEFT), or RIGHT (LEFT) HALF TURN. A change of direction of 45 deg. is executed.

By the command: INCLINE TO THE RIGHT (LEFT). The guide, or guiding element, moves in the indicated direction and the remainder of the command conforms. This movement effects slight changes of direction.

19. The designations LINE OF PLATOON, LINE OF COMPANIES, LINE OF BATTALIONS, etc., refer to the formations in which the platoons, companies, battalions, etc., each in column of squads, are in line.

20. Full distance in column of subdivisions is such that in forming line to the right or left the subdivisions will have their proper intervals.



In column of subdivisions the guide of the leading subdivision is charged with the step and direction; the guides in rear preserve the trace, step, and distance.

21. In close order, all details, detachments, and other bodies of troops are habitually formed in double rank.

To insure uniformity of interval between files when falling in, and in alignments, each man places the palm of the left hand upon the hip, fingers pointing downward. In the first case the hand is dropped by the side when the next man on the left has his interval; in the second case, at the command front.

22. The posts of officers, noncommissioned officers, special units (such as band or machine-gun company), etc., in the various formations of the company, battalion, or regiment, are shown in plates.

In all changes from one formation to another involving a change of post on the part of any of these, posts are promptly taken by the most convenient route as soon as practicable after the command of execution for the movement; officers and noncommissioned officers who have prescribed duties in connection with the movement ordered, take their new posts when such duties are completed.

As instructors, officers and noncommissioned officers go wherever their presence is necessary. As file closers it is their duty to rectify mistakes and insure steadiness and promptness in the ranks.

23. Except at ceremonies, the special units have no fixed places. They take places as directed; in the absence of directions, they conform as nearly as practicable to the plates, and in subsequent movements maintain their relative positions with respect to the flank or end of the command on which they were originally posted.

24. General, field, and staff officers are habitually mounted. The staff of an officer forms in single rank 3 paces in rear of him, the right or the rank extending 1 pace to the right of a point directly in rear of him. Members of the staff are arranged in order from right to left as follows: General staff officers, adjutant, aids, other staff officers, arranged in each classification in order of rank, the senior on the right. The flag of the general officer and the orderlies are 3 paces in rear of the staff, the flag on the right. When necessary to reduce the front of the staff and orderlies, each line executes twos right or fours right, as explained in the Cavalry Drill Regulations, and follows the commander.

When not otherwise prescribed, staff officers draw and return saber with their chief.

25. In making the about, an officer, mounted, habitually turns to the left.

When the commander faces to give commands, the staff, flag, and orderlies do not change position.

26. When making or receiving official reports, or on meeting out

of doors all officers will salute.

Military courtesy requires the junior to salute first, but when the salute is introductory to a report made at a military ceremony or formation, to the representative of a common superior (as, for example, to the adjutant, officer of the day, etc.), the officer making the report, whatever his rank, will salute first. The officer to whom the report is made will acknowledge by saluting that he has received and understood the report.

27. For ceremonies, all mounted enlisted men of a regiment or smaller unit, except those belonging to the machine-gun organizations, are consolidated into a detachment. The senior present commands if no officer is in charge. The detachment is formed as a platoon or squad of Cavalry in line or column of fours. Noncommissioned staff officers are on the right or in the leading ranks.

28. For ceremonies, such of the noncommissioned staff officers as are dismounted are formed 5 paces in rear of the color in order of rank from right to left. In column of squads they march as file closers.

29. Other than for ceremonies, noncommissioned staff officers and orderlies accompany their immediate chiefs unless otherwise directed. If mounted, the noncommissioned staff officers are ordinarily posted on the right or at the head of the orderlies.

30. In all formations and movements a noncommissioned officer commanding a platoon or company carries his piece as the men do, if he is so armed, and takes the same post as an officer in like situation. When the command is formed in line for ceremonies a noncommissioned officer commanding a company takes post on the right of the right guide after the company has been aligned.

### SECTION 3. ORDERS, COMMANDS, AND SIGNALS.

31. COMMANDS only are employed in drill at attention. Otherwise either a COMMAND, SIGNAL, or ORDER is employed, as best suits the occasion, or one may be used in conjunction with another.

32. Signals should be freely used in instruction, in order that officers and men may readily know them. In making firm signals the saber, rifle, or headdress may be held in the hand.

33. Officers and men fix their attention at the first word of command, the first note of the bugle or whistle, or the first motion of the signal. A signal includes both the preparatory command and the command of execution: the movement commences as soon as the signal is understood, unless otherwise prescribed.

34. Except in movements executed AT ATTENTION, commanders or leaders of subdivisions repeat orders, commands, or signals whenever such repetition is deemed necessary to insure prompt and correct execution.

Officers, battalion noncommissioned staff officers, platoon leaders, guides, and musicians are equipped with whistles.

The major and his staff will use a whistle of distinctive tone; the captain and company musicians a second and distinctive whistle; the platoon leaders and guides a third distinctive whistle.

35. Prescribed signals are limited to such as are essential as a substitute for the voice under conditions which render the voice inadequate.

Before or during an engagement special signals may be agreed upon to facilitate the solution of such special difficulties as the particular situation is likely to develop, but it must be remembered that simplicity and certainty are indispensable qualities of a signal.

#### ORDERS.

36. In these regulations an ORDER embraces instructions or directions given orally or in writing in terms suited to the particular occasion and not prescribed herein.

ORDERS are employed only when the COMMANDS prescribed herein do not sufficiently indicate the will of the commander.

ORDERS are more fully described in paragraphs 378 to 383, inclusive.

#### COMMANDS.

37. In these regulations a command is the will of the commander expressed in the phraseology prescribed herein.

38. There are two kinds of commands:

The PREPARATORY command, such as *\_forward\_*, indicates the movement that is to be executed.

The command of EXECUTION, such as MARCH, HALT, or ARMS, causes the execution.

Preparatory commands are distinguished by *\_italics\_*, those of execution by CAPITALS.

Where it is not mentioned in the text who gives the commands prescribed, they are to be given by the commander of the unit concerned.

The PREPARATORY command should be given at such an interval of time before the command of EXECUTION as to admit of being properly understood; the command of EXECUTION should be given at the instant the movement is to commence.

The tone of command is animated, distinct, and of a loudness proportioned to the number of men for whom it is intended.

Each PREPARATORY command is enunciated distinctly, with a rising inflection at the end, and in such manner that the command of EXECUTION may be more energetic.

The command of EXECUTION is firm in tone and brief.

39. Majors and commanders of units larger than a battalion repeat such commands of their superiors as are to be executed by their units, facing their units for that purpose. The battalion is the largest unit that executes a movement at the command of execution of its commander.

40. When giving commands to troops it is usually best to face toward them.

Indifference in giving commands must be avoided, as it leads to laxity in execution. Commands should be given with spirit at all times.

#### BUGLE SIGNALS.

41. The authorized bugle signals are published in Part V of these regulations.

The following bugle signals may be used off the battle field, when not likely to convey information to the enemy:

ATTENTION: Troops are brought to attention.

ATTENTION TO ORDERS: Troops fix their attention.

FORWARD, MARCH: Used also to execute quick time from double time.

DOUBLE TIME, MARCH.

TO THE REAR, MARCH: In close order, execute SQUADS RIGHT ABOUT.

HALT.

ASSEMBLE, MARCH.

The following bugle signals may be used on the battlefield:

FIX BAYONETS.

CHARGE.

ASSEMBLE, MARCH.

These signals are used only when intended for the entire firing line; hence they can be authorized only by the commander of a unit (for example, a regiment or brigade) which occupies a distinct section of the battle field. Exception: FIX BAYONET. (see par. 318.)

The following bugle signals are used in exceptional cases on the battle field. Their principal uses are in field exercises and practice firing.

COMMENCE FIRING: Officers charged with fire direction and control open fire as soon as practicable. When given to a firing line,

the signal is equivalent to fire at will.

**CEASE FIRING:** All parts of the line execute **CEASE FIRING** at once. These signals are not used by units smaller than a regiment, except when such unit is independent or detached from its regiment.

#### WHISTLE SIGNALS.

**42. ATTENTION TO ORDERS.** A **SHORT BLAST** of the whistle. This signal is used on the march or in combat when necessary to fix the attention of troops, or of their commanders or leaders, preparatory to giving commands, orders, or signals.

When the firing line is firing, each squad leader suspends firing and fixes his attention at a **SHORT BLAST** of his platoon leader's whistle. The platoon leader's subsequent commands or signals are repeated and enforced by the squad leader. If a squad leader's attention is attracted by a whistle other than that of his platoon leader, or if there are no orders or commands to convey to his squad, he resumes firing at once.

**SUSPEND FIRING.** A **LONG BLAST** of the whistle.

All other whistle signals are prohibited.

#### ARM SIGNALS.

**43.** 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 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 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."

TO 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" (par. 95).--(\_C.\_I.\_D.\_R.,\_No.\_14,\_May\_18,\_1916.\_)

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. (See par. 44.)

SQUAD. Extend the arm horizontally toward the platoon leader; swing the hand up and down from the wrist. (See par. 44.)

RUSH. Same as double time.

44. 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.

#### FLAG SIGNALS.

45. The signal flags described below are carried by the company musicians in the field.

In a regiment in which it is impracticable to make the permanent battalion division alphabetically, the flags of a battalion are as shown; flags are assigned to the companies alphabetically, within their respective battalions, in the order given below.

First battalion:

- Company A. Red field, white square.
- Company B. Red field, blue square.
- Company C. Red field, white diagonals.
- Company D. Red field, blue diagonals.

Second battalion:

- Company E. White field, red square.
- Company F. White field, blue square.
- Company G. White field, red diagonals.
- Company H. White field, blue diagonals.

Third battalion:

- Company I. Blue field, red square.
- Company K. Blue field, white square.
- Company L. Blue field, red diagonals.
- Company M. Blue field, white diagonals.

46. In addition to their use in visual signaling, these flags serve to mark the assembly point of the company when disorganized by combat, and to mark the location of the company in bivouac and elsewhere, when such use is desirable.

47. (1) For communication between the firing line and the reserve or commander in the 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 headdress or other substitute may be used.

-----+-----+-----  
Letter of | If signaled from the rear | If signaled from the  
alphabet | to the firing line. | firing line to the rear.  
-----+-----+-----

A M |Ammunition going forward. |Ammunition required.  
C C C |Charge (mandatory at all |Am about to charge if  
| times). | no instructions to the  
| | contrary.  
C F |Cease firing. |Cease firing.

D T	Double time or "rush".	Double time or "rush".
F	Commence firing.	Commence firing.
F B	Fix bayonets.	Fix bayonets.
F L	Artillery fire is causing	Artillery fire is causing
	us losses.	us losses.
G	Move forward	Preparing to move forward.
H H H	Halt.	Halt.
K	Negative	Negative.
L T	Left.	Left.
O	What is the (R. N.,	What is the (R. N.,
	(Ardois and   etc.?) Interrogatory.	etc.?) Interrogatory.
Semaphore		
only.)		
O	do	Do.
(All methods		
but ardois &		
semaphore.)		
P	Affirmative	Affirmative.
R	Acknowledgment.	Acknowledgment.
R N	Range.	Range.
R T	Right.	Right.
S S S	Support going forward.	Support needed.
S U F	Suspend firing.	Suspend firing.
T	Target.	Target.

-----+-----+-----

## (2) THE TWO-ARM SEMAPHORE CODE.

(See illustrations in chapter XII.)

## SECTION 4. SCHOOL OF THE SOLDIER.

48. The instructor explains briefly each movement, first executing it himself if practicable. He requires the recruits to take the proper positions unassisted and does not touch them for the purpose of correcting them, except when they are unable to correct themselves. He avoids keeping them too long at the same movement, although each should be understood before passing to another. He exacts by degrees the desired precision and uniformity.

49. In order that all may advance as rapidly as their abilities permit, the recruits are grouped according to proficiency as instruction progresses. Those who lack aptitude and quickness are separated from the others and placed under experienced drill masters.

## INSTRUCTION WITHOUT ARMS.

50. For preliminary instruction a number of recruits, usually not exceeding three or four, are formed as a squad in single rank.

## POSITION OF THE SOLDIER, OR ATTENTION.

51. Heels on the same line and as near each other as the conformation of the man permits.



Feet turned out equally and forming an angle of about 45 deg..

Knees straight, without stiffness.

Hips level and drawn back slightly; body erect and resting equally on hips; chest lifted and arched; shoulders square and falling equally.

Arms and hands hanging naturally, thumb along the seam of the trousers.

Head erect and squarely to the front, chin drawn in so that the axis of the head and neck is vertical; eyes straight to the front.

Weight of the body resting equally upon the heels and balls of the feet.

#### THE RESTS.

52. 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.

53. 1. Parade, 2. REST. Carry the right foot 6 inches straight to the rear, left knee slightly bent; clasp the hands, without constraint, in front of the center of the body, fingers joined, left hand uppermost, left thumb clasped by the thumb and forefinger of the right hand; preserve silence and steadiness of position.

54. To resume the attention: 1. Squad, 2. ATTENTION.

The men take the position of the soldier.

#### EYES RIGHT OR LEFT.

55. 1. Eyes, 2. RIGHT (LEFT), 3. FRONT.

At the command right, turn the head to the right oblique, eyes fixed on the line of eye of the men in, or supposed to be in, the same rank. At the command front, turn the head and eyes to the front.

#### FACINGS.

56. 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 deg..

"To face in marching" and advance, turn on the ball of either foot and step off with the other foot in the new line of direction; to face in marching without gaining ground in the new direction, turn on the ball of either foot and mark time.

57. 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.

#### SALUTE WITH THE HAND.

58. 1. Hand, 2. SALUTE.

Raise the right hand smartly till the tip of the forefinger touches the lower part of the headdress or forehead above the right eye, thumb and fingers extended and joined, palm to the left, forearm inclined at about 45 deg., hand and wrist straight; at the same time look toward the person saluted. (TWO) Drop the arm smartly by the side.

For rules governing salutes, see "Honors and Salutes," paragraphs 758-765.

#### STEPS AND MARCHINGS.

59. All steps and marchings executed from a halt, except right step, begin with the left foot.

60. 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.

61. 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.

62. 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.

63. 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.

64. 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.

65. 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 described above.

## THE HALF STEP.

66. 1. Half\_step, 2. MARCH.

Take steps of 15 inches in quick time, 18 inches in double time.

67. FORWARD, HALF STEP, HALT, and MARK TIME may be executed one from the other in quick or double time.

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

## SIDE STEP.

68. 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.

69. 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.

70. 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.

71. Being in march: 1. By\_the\_right\_(left)\_flank\_, 2. MARCH.

At the command MARCH, given as the right foot strikes the ground, advance and plant the left foot, then face to the right in marching and step off in the new direction with the right foot.

## TO MARCH TO THE REAR.

72. 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.

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.

73. 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 charge on the right foot is similarly executed, the command MARCH being given as the left foot strikes the ground.

## MANUAL OF ARMS.

74. As soon as practicable the recruit is taught the use, nomenclature (Pl. 1), and care of his rifle; when fair progress has been made in the instruction without arms, he is taught the manual of arms; instruction without arms and that with arms alternate.

75. 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.

76. 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.

77. POSITION OF ORDER ARMS STANDING: The butt rests evenly on

the ground, barrel to the rear, toe of the butt on a line with toe of, and touching, the right shoe, arms and hands hanging naturally, right hand holding the piece between the thumb and fingers.

78. Being at order arms: 1. Present, 2. 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 the left hand at the balance, forearm horizontal and resting against the body. (TWO) Grasp the small of the stock with the right hand.

79. Being at order arms: 1. Port, 2. 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 the 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 piece in a vertical plane parallel to the front.

80. Being at present arms: 1. Port, 2. ARMS.

Carry the piece diagonally across the body and take the position of port arms.

81. Being at port arms: 1. Present, 2. ARMS.

Carry the piece to a vertical position in front of the center of the body and take the position of present arms.

82. Being at present or port arms: 1. Order, 2. 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 next to the last position in coming to the order, (TWO) Complete the order.

83. Being at order arms: 1. Right shoulder, 2. ARMS.

With the right hand raise and throw the piece diagonally across the body; carry the right hand quickly to the butt, embracing it, the heel between the first two fingers. (TWO) Without changing the grasp of the right hand, place the piece on the right shoulder, barrel up and inclined at an angle of about 45 from the horizontal, trigger guard in the hollow of the 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, tip of the forefinger touching the cocking piece, wrist straight and elbow down. (THREE) Drop the left hand by the side.

84. Being at right shoulder arms: 1. Order, 2. ARMS.

Press the butt down quickly and throw the piece diagonally across the body, the right hand retaining the grasp of the butt. (TWO), (THREE) Execute order arms as described from port arms.

85. Being at port arms: 1. Right shoulder, 2. ARMS.

Change the right hand to the butt. (TWO), (THREE) As in right shoulder arms from order arms.

86. Being at right shoulder arms: 1. Port, 2. ARMS.

Press the butt down quickly and throw the piece diagonally across the body, the right hand retaining its grasp of the butt. (TWO)  
Change the right hand to the small of the stock.

87. Being at right shoulder arms: 1. Present, 2. ARMS.

Execute port arms. (THREE) Execute present arms.

88. Being at present arms: 1. Right shoulder, 2. ARMS.

Execute port arms. (TWO), (THREE), (FOUR) Execute right shoulder arms as from port arms.

89. Being at port arms: 1. Left shoulder, 2. ARMS.

Carry the piece with the right hand and place it on the left shoulder, barrel up, trigger guard in the hollow of the shoulder; at the same time grasp the butt with the left hand, heel between first and second fingers, thumb and fingers closed on the stock. (TWO) Drop the right hand by the side.

Being at left shoulder arms: 1. Port, 2. ARMS.

Grasp the piece with the right hand at the small of the stock. (TWO) Carry the piece to the right with the right hand, regrasp it with the left, and take the position of port arms.

LEFT SHOULDER ARMS may be ordered directly from the order, right shoulder or present, or the reverse. At the command ARMS execute PORT ARMS and continue in cadence to the position ordered.

90. Being at order arms: 1. Parade, 2. REST.

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

Being at parade rest: 1. Squad, 2. ATTENTION.

Resume the order, the left hand quitting the piece opposite the right hip.

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

Raise the piece, right arm slightly bent, and incline the muzzle forward so that the barrel makes an angle of about 30 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.

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

Lower the piece with the right hand and resume the order.

#### RIFLE SALUTE.

93. Being at right shoulder arms: 1. Rifle, 2. 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. (TWO) Drop left hand by the side; turn head and eyes to the front.

94. Being at order or trail arms: 1. Rifle, 2. 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. (TWO) Drop the left hand by the side; turn the head and eyes to the front.

For rules governing salutes, see "Honors and Salutes."

#### THE BAYONET.

95. 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.

96. 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; 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.

97. CHARGE BAYONET. Whether executed at halt or in motion, the bayonet is held toward the opponent as in the position of guard in the Manual for Bayonet Exercise.

Exercises for instruction in bayonet combat are prescribed in the Manual for Bayonet Exercise.

#### THE INSPECTION.

98. Being at order firms: 1. \_Inspection\_, 2. ARMS.

At the second command take the position of port arms. (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.

99. Being at inspection arms: 1. \_Order\_(Right\_shoulder,\_port)\_, 2. ARMS.

At the preparatory command 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.

100. Being at halt: 1. \_Inspection\_, 2. ARMS, 3. \_Port\_, 4. ARMS, 5. DISMISSED.

#### SECTION 5. SCHOOL OF THE SQUAD.

101. Soldiers are grouped into squads for purposes of instruction, discipline, control, and order.

102. The squad proper consists of a corporal and seven privates.

The movements in the School of the Squad are designed to make the squad a fixed unit find to facilitate the control and movement of the company. If the number of men grouped is more than 3 and less than 12, they are formed as a squad of 4 files, the excess above 8 being posted as file closers. If the number grouped is greater than 11, 2 or more squads are formed and the group is termed a platoon.

For the instruction of recruits, these rules may be modified.

103. The corporal is the squad leader, and when absent is replaced by a designated private. If no private is designated, the senior in length of service acts as leader.

The corporal, when in ranks, is posted as the left man in the

front rank of the squad.

When the corporal leaves the ranks to lead his squad, his rear rank man steps into the front rank, and the file remains blank until the corporal returns to his place in ranks, when his rear rank man steps back into the rear rank.

104. In battle officers and sergeants endeavor to preserve the integrity of squads; they designate new leaders to replace those disabled, organize new squads when necessary, and see that every man is placed in a squad.

Men are taught the necessity of remaining with the squad to which they belong and, in case it be broken up or they become separated therefrom, to attach themselves to the nearest squad and platoon leaders, whether these be of their own or of another organization.

105. The squad executes the HALT, REST, FACINGS, STEPS, and MARCHINGS and the MANUAL OF ARMS as explained in the School of the Soldier.

#### TO FORM THE SQUAD.

106. 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; each man turns his head and eyes to the front as he counts.

Pieces are then inspected.

#### ALIGNMENTS.

107. 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 line executes EYES RIGHT, and, taking steps of 2 or 3 inches, places himself so that his right arm rests lightly against the arm of the man on his right, and so that his eyes and shoulders are in line with those of the men on his right; the rear rank men cover in file.

The instructor verifies the alignment of both ranks from the right flank and orders up or back such men as may be in 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.

In the first drills the basis of the alignment is established on, or parallel to, the front of the squad; afterwards, in oblique directions.

Whenever the position of the base file or files necessitates a considerable movement by the squad, such movement will be executed by marching to the front or oblique, to the flank or backward, as the case may be, without other command, and at the trail.

108. To preserve the alignment when marching: GUIDE RIGHT (LEFT).

The men preserve their intervals from the side of the guide, yielding to pressure from that side and resisting pressure from the opposite direction; they recover intervals, if lost, by gradually opening out or closing in; they recover alignment by slightly lengthening or shortening the step; the rear-rank men cover their file leaders at 40 inches.

In double rank, the front-rank man on the right, or designated flank, conducts the march; when marching faced to the flank, the leading man of the front rank is the guide.

#### TO TAKE INTERVALS AND DISTANCES.

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

At the second command the rear-rank men march backward 4 steps and halt; at the command march all face to the right and the leading man of each rank steps off; the other men step off in succession, each following the preceding man at 4 paces, rear-rank men marching abreast of their file leaders.

At the command halt, given when all have their intervals, all halt and face to the front.

110. Being at intervals, to assemble the squad: 1. Assemble, to the right (left), 2. MARCH.

The front-rank man on the right stands fast, the rear-rank man on the right closes to 40 inches. The other men face to the right, close by the shortest line, and face to the front.

111. Being in line at a halt and having counted off: 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 4 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.

112. 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.

TO STACK AND TAKE ARMS.

113. 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.

114. 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.

115. 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.

## THE OBLIQUE MARCH.

116. 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.

117. 1. Right(Left)oblique, 2. MARCH.

Each man steps off in a direction 45 deg. 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 HALF STEP or MARK TIME while obliquing, the oblique march is resumed by the commands: 1. Oblique, 2. MARCH.

## TO TURN ON MOVING PIVOT.

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

The movement is executed by each rank successively and on the same ground. At the second command, the pivot man of the front rank faces to the right in marching and takes the half step; the other men of the rank oblique 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. All glance toward the marching flank while at half step and take the full step without command as the last man arrives on the line.

RIGHT (LEFT) HALF TURN is executed in a similar manner. The pivot man makes a half change of direction to the right and the other men make quarter changes in obliquing.

## TO TURN ON FIXED PIVOT.

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

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 other number of the rear rank moves straight to the front four paces and places himself abreast

of the man on his right. Men on the new line glance toward the marching flank while marking time and, as the last man arrives on the line, both ranks execute FORWARD, MARCH, without command.

120. Being in line, to turn and halt: 1. *\_Squad\_right\_(left)\_*, 2. MARCH, 3. *\_Squad\_*, 4. HALT.

The third command is given immediately after the second. The turn is executed as prescribed in the preceding paragraph except that all men, on arriving on the new line, mark time until the fourth command is given, when all halt. The fourth command should be given as the last man arrives on the line.

121. Being in line, to turn about and march: 1. *\_Squad\_right\_(left)\_about\_*, 2. MARCH.

At the second command, the front rank twice executes SQUAD RIGHT, initiating the SECOND SQUAD right when the man on the marching flank has arrived abreast of the rank. In the rear rank the third man from the right, followed by the second and first in column, moves straight to the front until on the prolongation of the line to be occupied by the rear rank; changes direction to the right; moves in the new direction until in rear of his front-rank man, when all face to the right in marching, mark time, and glance toward the marching flank. The fourth man marches on the left of the third to his new position; as he arrives on the line, both ranks execute FORWARD, MARCH, without command.

122. Being in line, to turn about and halt: 1. *\_Squad\_right\_(left)\_about\_*, 2. MARCH, 3. *\_Squad\_*, 4. HALT.

The third command is given immediately after the second. The turn is executed as prescribed in the preceding paragraph except that all men, on arriving on the new line, mark time until the fourth command is given, when all halt. The fourth command should be given as the last man arrives on the line.

#### TO FOLLOW THE CORPORAL.

123. Being assembled or deployed, to march the squad without unnecessary commands, the corporal places himself in front of it and commands FOLLOW ME.

If in line or skirmish line. No. 2 of the front rank follows in the trace 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.

#### TO DEPLOY AS SKIRMISHERS.

124. Being in any formation, assembled: 1. *\_As\_skirmishers\_*, 2. MARCH.

The corporal places himself in front of the squall, 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.

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.

125. 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.

#### TO INCREASE OR DIMINISH INTERVALS.

126. 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 toward or away from the guide.

#### THE ASSEMBLY.

127. 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.

#### KNEELING AND LYING DOWN.

128. 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 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 band.

129. 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 deg. 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.

130. If kneeling or lying down: 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.

131. If lying down: KNEEL.

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

132. 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 maybe taken in lieu of the position kneeling.

#### LOADINGS AND FIRINGS.

133. 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.

134. 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.

135. 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.

136. 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.

137. 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.

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

TO LOAD.

139. 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" find 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.

140. For instruction in loading: 1. Simulate, 2. LOAD.

Executed as above described, except that the cut-off remains "off" and the handling of cartridges is simulated.

The recruits are first taught to SIMULATE loading and firing; after a few lessons dummy cartridges may be used. Later, blank cartridges may be used.

141. The rifle may be used as a single loader by turning the magazine "off." The magazine may be filled in whole or in part while "off" or "on" by pressing cartridges singly down and back until they are in the proper place. The use of the rifle as a single loader is, however, to be regarded as exceptional.

TO UNLOAD.

142. UNLOAD.

Take the position of load, turn the safety lock up and move bolt alternately back and forward until all the cartridges are ejected. After the last cartridge is ejected the chamber is closed by first thrusting the bolt slightly forward to free it from the stud holding it in place when the chamber is open, pressing the follower down and back 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 SET THE SIGHT.

143. RANGE, ELEVEN HUNDRED (EIGHT-FIFTY, etc.), or BATTLE SIGHT.

The sight is set at the elevation indicated. The instructor explains and verifies sight settings,

TO FIRE BY VOLLEY.

144. 1. READY, 2. AIM, 3. Squad, 4. FIRE.

At the command READY turn the safety lock to the "ready"; at the command AIM raise the piece with both hands and support the butt firmly against the hollow of the right shoulder, right thumb clasp the stock, barrel horizontal, left elbow well under the piece, right elbow as high as the shoulder; incline the head slightly forward and a little to the right, cheek against the stock, left eye closed, right eye looking through the notch of the rear sight so as to perceive the object aimed at, second joint of forefinger resting lightly against the front of the trigger and taking up the slack; top of front sight is carefully raised into, and held in, the line of sight.

Each rear-rank man aims through the interval to the right of his file leader and leans slightly forward to advance the muzzle of his piece beyond the front rank.

In aiming kneeling, the left elbow rests on the left knee, point of elbow in front of kneecap.

In aiming sitting, the elbows are supported by the knees.

In aiming lying down, raise the piece with both hands; rest on both elbows and press the butt firmly against the right shoulder.

At the command FIRE press the finger against the trigger; fire without deranging the aim and without lowering or turning the piece; lower the piece to the position of LOAD and load.

145. To continue the firing: 1. AIM, 2. Squad, 3. FIRE.

Each command is executed as previously explained. LOAD (from magazine) is executed by drawing back and thrusting home the bolt with the right hand, leaving the safety lock at the "ready."

TO FIRE AT WILL.

#### 146. FIRE AT WILL.

Each man, independently of the others, comes to the READY, aims carefully and deliberately at the aiming point or target, FIRES, LOADS, and continues the firing until ordered to SUSPEND or CEASE FIRING.

147. To increase (decrease) the rate of fire in progress the instructor shouts: FASTER (SLOWER).

Men are trained to fire at the rate of about three shots per minute at effective ranges and five or six at close ranges, devoting the minimum of time to loading and the maximum to deliberate aiming. To illustrate the necessity for deliberation, and to habituate men to combat conditions, small and comparatively indistinct targets are designated.

#### TO FIRE BY CLIP.

#### 148. CLIP FIRE.

Executed in the same manner as FIRE AT WILL, except that each man, after having exhausted the cartridges then in the piece, SUSPENDS FIRING.

#### TO SUSPEND FIRING.

149. The instructor blows a LONG BLAST of the whistle and repeats same, if necessary, or commands: SUSPEND FIRING.

Firing stops; pieces are held, loaded and locked, in a position of readiness for instant resumption of firing, rear sights unchanged. The men continue to observe the target or aiming point, or the place at which the target disappeared, or at which it is expected to reappear.

This whistle signal may be used as a preliminary to CEASE FIRING.

#### TO CEASE FIRING.

#### 150. CEASE FIRING.

Firing stops; pieces not already there are brought to the position of load; those not loaded are loaded; sights are laid, pieces are locked and brought to the order.

CEASE FIRING is used for long pauses, to prepare for changes of position, or to steady the men.

151. Commands for suspending or ceasing fire may be given at any time after the preparatory command for firing whether the firing has actually commenced or not.

#### THE USE OF COVER.

152. The recruit should be given careful instruction in the individual use of cover.

It should be impressed upon him that, in taking advantage of natural cover, he must be able to fire easily and effectively upon the enemy; if advancing on an enemy, he must do so steadily and as rapidly as possible; he must conceal himself as much as possible while firing and while advancing. While setting his sight he should be under cover or lying prone.

153. To teach him to fire easily and effectively, at the same time concealing himself from the view of the enemy, he is practiced in simulated firing in the prone, sitting, kneeling, and crouching positions, from behind hillocks, trees, heaps of earth or rocks, from depressions, gullies, ditches, doorways, or windows. He is taught to fire around the right side of his concealment whenever possible, or, when this is not possible, to rise enough to fire over the top of his concealment,

When these details are understood, he is required to select cover with reference to an assumed enemy and to place himself behind it in proper position for firing.

154. The evil of remaining too long in one place, however good the concealment, should be explained. He should be taught to advance from cover to cover, selecting cover in advance before leaving his concealment.

It should be impressed upon him that a man running rapidly toward all enemy furnishes a poor target. He should be trained in springing from a prone position behind concealment, running at top speed to cover and throwing himself behind it. He should also be practiced in advancing from cover to cover by crawling, or by lying on the left side, rifle grasped in the right hand, and pushing himself forward with the right leg.

155. He should be taught that, when fired on while acting independently, he should drop to the ground, seek cover, and then endeavor to locate his enemy.

156. The instruction of the recruit in the use of cover is continued in the combat exercises of the company, but he must then be taught that the proper advance of the platoon or company and the effectiveness of its fire is of greater importance than the question of cover for individuals. He should also be taught that he may not move about or shift his position in the firing line except the better to see the target.

#### OBSERVATION.

157. The ability to use his eyes accurately is of great importance to the soldier. The recruit should be trained in observing his surrounding from positions and when on the march.

He should be practiced in pointing out and naming military features of the ground; in distinguishing between living beings; in counting distant groups of objects or beings; in recognizing colors and

forms.

158. In the training of men in the mechanism of the firing line, they should be practiced in repeating to one another target and aiming point designations and in quickly locating and pointing out a designated target. They should be taught to distinguish, from a prone position, distant objects, particularly troops, both with the naked eye and with field glasses. Similarly, they should be trained in estimating distances.

## SECTION 6. SCHOOL OF THE COMPANY.

159. 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.

160. 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 Nos. 4 of the front rank. 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.

161. 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.

162. 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 apply 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.

The designation "So-and-so's" squad or platoon may also be used.

163. 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 assigned 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.

During battle, these assignments are not changed; vacancies are filled by noncommissioned officers of the platoon or by the nearest available officers or noncommissioned officers arriving with reinforcing troops.

[Illustration]

164. 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.

The quartermaster sergeant, when present, is assigned according to his rank as a sergeant.

Enlisted men below the grade of sergeant, armed with the rifle, are in ranks unless serving as guides; when not so armed, they are posted in the line of file closers.

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

165. The company executes the HALT, RESTS, FACINGS, STEPS and MARCHINGS, MANUAL OF ARMS, LOADINGS and FIRINGS, TAKES INTERVALS and DISTANCES and ASSEMBLES, INCREASES and DIMINISHES INTERVALS, resumes ATTENTION, OBLIQUES, resumes the direct march, preserves alignments, KNEELS, LIES DOWN, RISES, STACKS, and TAKES ARMS, as explained in the Schools of the Soldier and the Squad, substituting in the commands COMPANY for SQUAD.

The same rule applies to platoons, detachments, details, etc., substituting their designation for SQUAD in the commands. In the same manner these execute the movements prescribed for the COMPANY, whenever possible, substituting their designation for COMPANY in the commands.

166. A company so depleted as to make division into platoons impracticable is led by the captain as a single platoon, but retains the designation of company. The lieutenants and first sergeant assist in fire control; the other sergeants place themselves in the filing line as skirmishers.

CLOSE ORDER.

RULES.

167. The guides of the right and left, or leading and rear, platoons, are the right and left, or leading and rear, guides, respectively, of the company when it is in line or in column of squads. Other guides are in the line of file closers.

In platoon movements the post of the platoon guide is at the head of the platoon, if the platoon is in column, and on the guiding flank if in line. When a platoon has two guides their original assignment to flanks of the platoon does not change.

168. The guides of a column of squads place themselves on the flank opposite the file closers. To change the guides and file closers to the other flank, the captain commands: 1. File closers on left (right) flank; 2. MARCH. The file closers dart through the column; the captain and guides change.

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

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

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.

170. 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.

171. In movements executed simultaneously by platoons (as PLATOONS RIGHT or PLATOONS, COLUMN RIGHT), platoon leaders repeat the preparatory command (PLATOON RIGHT, etc.), applicable to their respective platoons. The command of execution is given by the captain only.

#### TO FORM THE COMPANY.

172. 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 can not 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. The company, if not under arms, is formed in like manner omitting reference to arms.

173. For the instruction of platoon leaders and guides, the company, when small, may be formed in single rank. In this formation close order movements only are executed. The single rank executes all movements as explained for the front rank of a company.

#### TO DISMISS THE COMPANY.

174. Being in line at a halt, the captain directs the first sergeant: DISMISS THE COMPANY. The officers fallout; 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.

#### ALIGNMENTS.

175. 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.

#### MOVEMENTS ON THE FIXED PIVOT.

176. Being in line, to tune the company: 1. Company right (left), 2. MARCH, 3. Company, 4. HALT; or, 3. Forward, 4. MARCH.

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 halt upon arriving on the line, aligns himself to the right, and executes FRONT without command.

177. 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.

178. 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 rank.

#### MOVEMENTS ON THE MOVING PIVOT.

179. 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.

180. 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: 1. Forward, 2. MARCH, on completion of the turn. Rear platoons march squarely up to the turning point of the leading platoon and turn at command of their leaders.

181. 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.

182. 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.

183. Being in line, to form column of squads and change direction: 1. Squads right (left), column right (left), 2. MARCH; or, 1. Right (Left) by squads, 2. MARCH.

In the first case the right squad initiates the COLUMN RIGHT as soon as it has completed the SQUAD RIGHT.

In the second case, 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 step; the right squad conforms.

184. Being in line, to form line of platoons: 1. Squads right (left), platoons column right (left), 2. 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.

185. 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 or platoons be 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.

186. 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 the 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.

#### ON RIGHT (LEFT) INTO LINE.

187. 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.

At the first command the leader of the leading unit commands: RIGHT TURN. The leaders of the other units command: FORWARD, if

at a halt. At the second command the leading unit turns to the right on moving pivot. The command HALT is given when the leading unit has advanced the desired distance in the new direction; it halts; its leader then commands: RIGHT DRESS.

The units in rear continue to march straight to the front; each, when opposite the right of its place in line, executes right turn at the command of its leader; each is halted on the line at the command of its leader, who then commands: RIGHT DRESS. All dress on the first unit in line.

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

#### FRONT INTO LINE.

188. 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.

At the first command the leaders of the units in rear of the leading one command: RIGHT OBLIQUE. If at a halt, the leader of the leading unit commands: FORWARD. At the second command the leading unit moves straight forward; the rear units oblique as indicated. The command HALT is given when the leading unit has advanced the desired distance; it halts; its leader then commands: LEFT DRESS. Each of the rear units, when opposite its place in line, resumes the original direction at the command of its leader; each is halted on the line at the command of its leader, who then commands: LEFT DRESS. All dress on the first unit in line.

189. 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. In forming the company in line, the dress is on the left squad of the left platoon. 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.

#### AT EASE AND ROUTE STEP.

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

191. 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.

192. 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.

193. Marching at route step or fit 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.

TO DIMINISH THE FRONT OF A COLUMN OF SQUADS.

194. Being in column of squads: 1. Right\_(Left)\_by\_twos\_, 2. MARCH.

At the command MARCH all files except the two right files of the leading squad execute IN PLACE HALT; the two left files of the leading squad oblique to the right when disengaged and follow the right files at the shortest practicable distance. The remaining squads follow successively in like manner.

195. 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.

196. 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. The remainder of the squad, or two, obliquely 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 to restore the files to their normal relative positions in the two or squad.

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

198. 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.

EXTENDED ORDER.

## RULES FOR DEPLOYMENT.

199. 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 CENTER without command, unless otherwise ordered.

200. 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.

201. 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.

202. 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; the squad deploys and halts abreast of him.

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

203. Deployed lines preserve a general alignment toward the guide. Within their respective fronts, individuals or units march so as best to secure cover 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.

204. The company in skirmish line ADVANCES, HALTS, MOVES BY THE FLANK, or TO THE REAR, OBLIQUES, resumes the DIRECT MARCH, passes from QUICK to DOUBLE TIME and the reverse by the same commands and in a similar manner as in close order; if at a halt, the movement BY THE FLANK or TO THE REAR is executed by the same commands as when marching. COMPANY RIGHT (LEFT, HALF RIGHT, HALF LEFT) is executed as explained for the front rank, skirmish intervals being maintained.

205. A platoon or other part of the company is deployed and marched in the same manner as the company, substituting in the commands, PLATOON (DETACHMENT, etc.) for COMPANY.

## DEPLOYMENTS.

206. Being in line, to form skirmish line to the front: 1. As\_  
\_skirmishers,\_guide\_right\_(left\_or\_center)\_, 2. MARCH.

If marching, the corporal of the base squad moves straight to the front; when that squad has advanced the desired distance, the captain commands: 1. Company, 2. HALT. If the guide be RIGHT (LEFT), the other corporals move to the LEFT (RIGHT) front, and, in succession from the base, place their squads on the line; if the guide be center, the other corporals move to the RIGHT or LEFT front, according as they are on the right or left of the center squad, and in succession from the center squad place their squads on the line.

If at a halt, the base squad is deployed without advancing; the other squads may be conducted to their proper places by the flank; interior squads may be moved when squads more distant from the base have gained comfortable marching distance.

207. Being in column of squads, to form skirmish line to the front: 1. As skirmishers, guide right (left or center), 2. MARCH.

If marching, the corporal of the base squad deploys it and moves straight to the front; if at a halt, he deploys his squad without advancing. If the guide be RIGHT (LEFT), the other corporals move to the LEFT (RIGHT) FRONT, and, in succession from the base, place their squads on the line; if the guide be CENTER, the corporals in front of the center squad move to the right (if at a halt, to the right rear), the corporals in rear of the center squad move to the left front, and each, in succession from the base, places his squad on the line.

The column of twos or files is deployed by the same commands and in like manner.

208. The company in line or in 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.

209. 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.

210. 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.

211. 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 re-formed 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.

## THE ADVANCE.

212. 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 formation, 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.

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

214. Being in skirmish line: 1. Squad columns, 2. MARCH.

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.

215. PLATOON COLUMNS are profitably used where the ground is so difficult or cover 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.[5] SQUAD COLUMNS are of value principally in facilitating the advance over rough or brush-grown ground; they afford no material advantage in securing cover.

[Footnote 5: Ordinarily about 20 yards wide.]

216. 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.

217. 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 re-forming 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 re-formed in line.

218. 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.

Ordinarily each line is made up of one man per squad and the men of a squad are sent forward in order from right to left as deployed. 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.

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.

219. 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 can not 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 less definite target, hence is less likely to draw fire.

220. 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.

THE FIRE ATTACK.

221. The principles governing the advance of the firing line in attack are considered in the School of the Battalion.

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

222. 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 more than one platoon is to join in one rush, the junior platoon leader conforms to the action 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.

223. 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.

224. 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.

For regulations governing the charge, see paragraphs 318 and 319.

#### THE COMPANY IN SUPPORT.

225. To enable it to follow or reach the firing line, the support adopts suitable formations, following the principles explained in paragraphs 212-218.

The support should be kept assembled as long as practicable. If after deploying a favorable opportunity arises to hold it for some time in close formation, it should be reassembled. It is redeployed when necessary.

226. The movements of the support as a whole and the dispatch of reinforcements from it to the firing line are controlled by the major.

A reinforcement of less than one platoon has little influence and will be avoided whenever practicable.

The captain of a company in support is constantly on the alert for the major's signals or commands.

227. A reinforcement sent to the firing line joins it deployed as skirmishers. The leader of the reinforcement places it in an interval in the line, if one exists; and commands it thereafter as a unit. If no such suitable interval exists, the reinforcement is advanced with increased intervals between skirmishers; each man occupies the nearest interval in the firing line, and each then obeys the orders of the nearest squad leader and platoon leader.

228. A reinforcement joins the firing line as quickly as possible without exhausting the men.

229. The original platoon division of the companies in the firing line should be maintained and should not be broken up by the mingling of reinforcements.

Upon joining the firing line, officers and sergeants accompanying a reinforcement take over the duties of others of like grade who have been disabled, or distribute themselves so as best to exercise their normal functions. Conditions with vary and no rules can be prescribed. It is essential that all assist in mastering the increasing difficulties of control.

#### THE COMPANY ACTING ALONE.

230. In general, the company, when acting alone, is employed according to the principles applicable to the battalion acting alone; the captain employs platoons as the major employs companies, making due allowance for the difference in strength.

The support may be smaller in proportion or may be dispensed with.

231. The company must be well protected against surprise. Combat patrols on the flanks are specially important. Each leader of a flank platoon details a man to watch for the signals of the patrol or patrols on his flank.

#### FIRE.

232. Ordinarily pieces are loaded and extra ammunition is issued before the company deploys for combat.

In close order the company executes the firings at the command of the captain, who posts himself in rear of the center of the company.

Usually the firings, in close order consist of saluting volleys

only.

233. When the company is deployed, the men execute the firings at the command of their platoon leaders; the latter give such commands as are necessary to carry out the captain's directions, and, from time to time, add such further commands as are necessary to continue, correct, and control the fire ordered.

234. The voice is generally inadequate for giving commands during fire and must be replaced by signals of such character that proper fire direction and control is assured. To attract attention, signals must usually be preceded by the whistle signal (short blast). A friction of the firing line about to rush should, if practicable, avoid using the long blast signal as an aid to CEASE FIRING. Officers and men behind the firing line can not ordinarily move freely along the line, but must depend on mutual watchfulness and the proper use of the prescribed signals. All should post themselves so as to see their immediate superiors and subordinates.

235. The musicians assist the captain by observing the enemy, the target, and the fire effect by transmitting commands or signals and by watching for signals.

236. Firing with blank cartridges at an outlined or represented enemy at distances less than 100 yards is prohibited.

237. The effect of fire and the influence of the ground in relation thereto, and the individual and collective instruction in marksmanship, are treated in the Small-Arms Firing Manual.

## RANGES.

238. For convenience of reference ranges are classified as follows:

- 0 to 600 yards, close range.
- 600 to 1,200 yards, effective range.
- 1,200 to 2,000 yards, long range.
- 2,000 yards and over, distant range.

239. The distance to the target must be determined as accurately as possible and the sights set accordingly. Aside from training and morale, this is the most important single factor in securing effective fire at the longer ranges.

240. Except in a deliberately prepared defensive position, the most accurate and only practicable method of determining the range will generally be to take the mean of several estimates.

Five or six officers or men, selected from the most accurate estimators in the company, are designated as RANGE ESTIMATORS and are specially trained in estimating distances.

Whenever necessary and practicable, the captain assembles the range estimators, points out the target to them, and adopts the mean of their estimates. The range estimators then take their customary posts.

## CLASSES OF FIRING.

241. VOLLEY FIRING has limited application. In defense it may be used in the early stages of the action if the enemy presents a large, compact target. It may be used by troops executing FIRE OF POSITION. When the ground near the target is such that the strike of bullets can be seen from the firing line, RANGING VOLLEYS may be used to correct the sight setting.

In combat, volley firing is executed habitually by platoon.

242. FIRE AT WILL is the class of fire normally employed in attack or defense.

243. CLIP FIRE has limited application. It is principally used:  
1. In the early stages of combat, to steady the men by habituating them to brief pauses in firing. 2. To produce a short burst of fire.

## THE TARGET.

244. Ordinarily the major will assign to the company an objective in attack or sector in defense; the company's target will lie within the limits so assigned. In the choice of target, tactical considerations are paramount; the nearest hostile troops within the objective or sector will thus be the usual target. This will ordinarily be the hostile firing line; troops in rear are ordinarily proper targets for artillery, machine guns, or, at times, infantry employing fire of position.

Change of targets should not be made without excellent reasons therefor, such as the sudden appearance of hostile troops under conditions which make them more to be feared than the troops comprising the former target.

245. The distribution of fire over the entire target is of special importance.

The captain allots a part of the target to each platoon, or each platoon leader takes as his target that part which corresponds to his position in the company. Men are so instructed that each fires on that part of the target which is directly opposite him.

246. All parts of the target are equally important. Care must be exercised that the men do not slight its less visible parts. A section of the target not covered by fire represents a number of the enemy permitted to fire coolly and effectively.

247. If the target can not be seen with the naked eye, platoon leaders select an object in front of or behind it, designate this as the AIMING TARGET, and direct a sight setting which will carry the cone of fire into the target.

## FIRE DIRECTION.

248. When the company is large enough to be divided into platoons, it is impracticable for the captain to command it directly in

combat. His efficiency in managing the firing line is measured by his ability to enforce his will through the platoon leaders. Having indicated clearly what he desires them to do, he avoids interfering except to correct serious errors or omissions.

249. The captain directs the fire of the company or of designated platoons. He designates the target, and, when practicable, allots a part of the target to each platoon. Before beginning the fire action he determines the range, announces the sight setting, and indicates the class of fire to be employed, and the time to open fire. Thereafter, he observes the fire effect, corrects material errors in sight setting, prevents exhaustion of the ammunition supply, and causes the distribution of such extra ammunition as may be received from the rear.

#### FIRE CONTROL.

250. In combat the platoon is the fire unit. From 20 to 35 rifles are as many as one leader can control effectively.

251. Each platoon leader puts into execution the commands or directions of the captain, having first taken such precautions to insure correct sight setting and clear description of the target or aiming target as the situation permits or requires; thereafter he gives such additional commands or directions as are necessary to exact compliance with the captain's will. He corrects the sight setting when necessary. He designates an aiming target when the target can not be seen with the naked eye.

252. In general, PLATOON LEADERS observe the target and the effect of their fire and are on the alert for the captain's commands or signals; they observe and regulate the rate of fire. The PLATOON GUIDES watch the firing line and check every breach of fire discipline. SQUAD LEADERS transmit commands and signals when necessary, observe the conduct of their squads and abate excitement, assist in enforcing fire discipline and participate in the firing.

253. The best troops are those that submit longest to fire control. Loss of control is an evil which robs success of its greatest results. To avoid or delay such loss should be the constant aim of all.

Fire control implies the ability to stop firing, change the sight setting and target, and resume a well directed fire.

#### FIRE DISCIPLINE.

254. "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 taking advantage of the ground; care in setting the sight and delivery of fire; constant attention to the orders of the leaders, and careful observation of the enemy; an increase of fire when the target is favorable, and a cessation of fire when the enemy disappears; economy of ammunition." (Small-arms Firing Manual.)

In combat, shots which graze the enemy's trench or position and thus reduce the effectiveness of his fire have the approximate value of hits; such shots only, or actual hits, contribute toward fire superiority.

Fire discipline implies that, in a firing line without leaders, each man retains his presence of mind and directs effective fire upon the proper target.

255. To create a correct appreciation of the requirements of fire discipline, men are taught that the rate of fire should be as rapid as is consistent with accurate aiming; that the rate will depend upon the visibility, proximity, and size of the target; and that the proper rate will ordinarily suggest itself to each trained man, usually rendering cautions or commands unnecessary.

In attack the highest rate of fire is employed at the halt preceding the assault, and in pursuing fire.

256. In an advance by rushes, leaders of troops in firing positions are responsible for the delivery of heavy fire to cover the advance of each rushing fraction. Troops are trained to change slightly the direction of fire so as not to endanger the flanks of advanced portions of the firing line.

257. In defense, when the target disappears behind cover, platoon leaders suspend fire, prepare their platoons to fire upon the point where it is expected to reappear, and greet its reappearance instantly with vigorous fire.

## SECTION 7. COMPANY INSPECTION.

745. 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 8 paces in front of the right guide, facing to the left, and commands: 1. FRONT, 2. 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 above the rear sight, 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.

746. If the company is dismissed. rifles are put away. In quarters, headdress and accouterments are removed and the men stand near their respective bunks; in camp they stand covered, but without accouterments, in front of their tents.

If the personal field equipment has not been inspected in ranks and its inspection in quarters or camp is ordered, each man will arrange the prescribed articles on his bunk, if in quarters or permanent camp, or in front of his half of the tent, if in shelter tent camp, in the same relative order as directed in paragraph 747.

The captain, accompanied by the lieutenants, then inspects the quarters or camp. The first sergeant precedes the captain and calls the men to attention on entering each squad room or on approaching the tents; the men stand at attention but do not salute. (C. I. D. R., No. 16, Aug. 25, 1916.)

747. (Edition approved Aug. 10, 1911, and edition corrected to November, 1913.) If the inspection is to include an examination of the equipment while in ranks, the captain, after closing ranks, causes the company to stack arms, to march backward until 4 paces in rear of the stacks and to take intervals. He then commands: 1. UNSLING EQUIPMENT, 2. OPEN PACKS.

At the first command, each man unslings his equipment and places it on the ground at his feet, haversack to the front end of the pack 1 foot in front of toes.

At the second command, pack carriers are unstrapped, packs removed and unrolled, the longer edge of the pack along the lower edge of the cartridge belt. Each man exposes shelter tent pins, removes



meat can, knife, fork, and spoon from the meat-can pouch, and places them on the right of the haversack, knife, fork, and spoon in the open meat can; removes the canteen and cup from the cover and places them on the left side of the haversack; unstraps and spreads out haversack so as to expose its contents; folds up the carrier to uncover the cartridge pockets; opens same; unrolls toilet articles and places them on the outer flap of the haversack; places underwear carried in pack on the left half of the open pack, with round fold parallel with front edge of pack; opens first-aid pouch and exposes contents to view. Special articles carried by individual men, such as flag kit, field glasses, compass, steel tape, notebook, etc., will be arranged on the right half of the open pack. Each man then resumes the attention. Plate VI shows the relative position of all articles except underwear and special articles.

The captain then passes along the ranks and file closers as before, inspects the equipment, returns to the right, and commands: CLOSE PACKS.

Each man rolls up his toilet articles and underwear, straps up his haversack and its contents, replaces the meat can, knife, fork, and spoon, and the canteen and cup: closes cartridge pockets and first-aid pouch; restores special articles to their proper receptacles; rolls up and replaces pack in carrier; and, leaving the equipment in its position on the ground, resumes the attention.

All equipments being packed, the captain commands: SLING EQUIPMENT.

The equipments are slung and belts fastened.

The captain then causes the company to assemble and take arms. The inspection is completed as already explained.

748. Should the inspector be other than the captain, the latter, after commanding FRONT, adds REST, and faces to the front. When the inspector approaches, the captain faces to the left, brings the company to attention, faces to the front, and salutes. The salute acknowledged, the captain carries saber, faces to the left, commands: PREPARE FOR INSPECTION, and again faces to the front.

The inspection proceeds as before; the captain returns saber and accompanies the inspector as soon as the latter passes him.

[Illustration: fig 3.]

## SECTION 8. MANUAL OF TENT PITCHING.

### SHELTER TENTS.

[For Infantry Equipment, model of 1910.][6]

[Footnote 6: For method of pitching shelter tents, with old model Infantry equipment or old model shelter tent, see paragraph 792, in 'Method of Folding Pyramidal Tent'.]

792. Being in line or in column of platoons, the captain commands:

## FORM FOR SHELTER TENTS.

The officers, first sergeant, and guides fallout; the cooks form a file on the flank of the company nearest the kitchen, the first sergeant and right guide fall in, forming the right file of the company; blank files are filled by the file closers or by men taken from the front rank; the remaining guide, or guides, and file closers form on a convenient flank.

Before forming column of platoons, preparatory to pitching tents, the company may be redivided into two or more platoons, regardless of the size of each.

793. The captain then causes the company to take intervals as described in the School of the Squad and commands: PITCH TENTS.

At the command PITCH TENTS, each man steps off obliquely to the right with the right foot and lays his rifle on the ground, the butt of the rifle near the toe of the right foot, muzzle to the front, barrel to the left, and steps back into his place; each front rank man then draws his bayonet and sticks it in the ground by the outside of the right heel.

[Illustration: Plate VI.]

Equipments are unslung, packs opened, shelter half and pins removed: each man then spreads his shelter half, small triangle to the rear, flat upon the ground the tent is to occupy, the rear rank man's half on the right. The halves are then buttoned together; the guy loops at both ends of the lower half are passed through the buttonholes provided in the lower and upper halves; the whipped end of the guy rope is then passed through both guy loops and secured, this at both ends of the tent. Each front rank man inserts the muzzle of his rifle under the front end of the ridge and holds the rifle upright, sling to the front, heel of butt on the ground beside the bayonet. His rear rank man pins down the front corners of the tent on the line of bayonets, stretching the tent taut; he then inserts a pin in the eye of the front guy rope and drives the pin at such a distance in front of the rifle as to hold the rope taut; both men go to the rear of the tent, each pins down a corner, stretching the sides and rear of the tent before securing; the rear rank man then inserts an intrenching tool, or a bayonet in its scabbard, under the rear end of the ridge inside the tent, the front rank man pegging down the end of the rear guy ropes; the rest of the pins are then driven by both men, the rear rank man working on the right.

NOTE.--The use of the hand ax and the pick mattock in organizations equipped with the intrenching tool is authorized for the purpose of driving shelter tent pins. The use of the bayonet for this purpose is prohibited.

The front flaps of the tent are not fastened down, but thrown back on the tent.

As soon as the tent is pitched each man arranges his equipment and the contents of his pack in the tent and stands at attention in front of his own half on line with the front guy-rope pin.

To have a uniform slope when the tents are pitched, the guy ropes should all be of the same length.

In shelter-tent camps, in localities where suitable material is procurable, tent poles may be improvised and used in lieu of the rifle and bayonet or intrenching tool as supports for the shelter tent.

794. When the pack is not carried the company is formed for shelter tents, intervals are taken, arms are laid aside or on the ground, the men are dismissed and proceed to the wagon, secure their packs, return to their places, and pitch tents as heretofore described.

795. Double shelter tents may be pitched by first pitching one tent as heretofore described, then pitching a second tent against the opening of the first, using one rifle to support both tents, and passing the front guy ropes over and down the sides of the opposite tents. The front corner of one tent is not pegged down, but is thrown back to permit an opening into the tent.

#### SINGLE SLEEPING BAG.

796. Spread the poncho on the ground, buttoned end at the feet, buttoned side to the left; fold the blanket once across its short dimension and lay it on the poncho, folded side along the right side of the poncho; tie the blanket together along the left side by means of the tapes provided; fold the left half of the poncho over the blanket and button it together along the side and bottom.

#### DOUBLE SLEEPING BAG.

797. Spread one poncho on the ground, buttoned end at the feet, buttoned side to the left; spread the blankets on top of the poncho; tie the edges of the blankets together with the tapes provided; spread a second poncho on top of the blankets, buttoned end at the feet, buttoned side to the right; button the two ponchos together along both sides and across the end.

#### TO STRIKE SHELTER TENTS.

798. The men standing in front of their tents: STRIKE TENTS.

Equipments and rifles are removed from the tent; the tents are lowered, packs made up, and equipments slung, and the men stand at attention in the places originally occupied after taking intervals.

#### TO PITCH ALL TYPES OF ARMY TENTS, EXCEPT SHELTER AND CONICAL WALL TENTS.

799. To pitch all types of Army tents, except shelter and conical wall tents: Mark line of tents by driving a wall pin on the spot to be occupied by the right (or left) corner of each tent. For pyramidal tents the interval between adjacent pins should be

about 30 feet, which will give a passage of 2 feet between tents. Spread tripod on the ground where the center of tent is to be, if tripod is used. Spread the tent on the ground to be occupied, door to the front, and place the right (or left) front wall loop over the pin. The door (or doors, if more than one) being fastened and held together at the bottom, the left (or right) corner wall loop is carried to the left (or right) as far as it will go and a wall pin driven through it, the pin being placed in line with the right (or left) corner pins already driven. At the same time the rear corner wall loops are pulled to the rear and outward so that the rear wall of the tent is stretched to complete the rectangle. Wall pins are then driven through these loops. Each corner pin should be directly in rear of the corresponding front corner pin, making a rectangle. Unless the canvas be wet, a small amount of slack should be allowed before the corner pins are driven. According to the size of the tent, one or two men, crawling under the tent if necessary, fit each pole or ridge or upright into the ring or ridge-pole holes, and such accessories as hood, fly, and brace ropes are adjusted. If a tripod be used an additional man will go under the tent to adjust it. The tent, steadied by the remaining men, one at each corner guy rope, will then be raised. If the tent is a ward or storage type, corner poles will now be placed at the four corners. The four corner guy ropes are then placed over the lower notches of the large pins driven in prolongation of the diagonals at such distance as to hold the walls and end of the tent vertical and smooth when the guy ropes are drawn taut. A wall pin is then driven through each remaining wall loop and a large pin for each guy rope is driven in line with the corner guy pins already driven. The guy ropes of the tent are placed over the lower notches, while the guy ropes of the fly are placed over the upper notches, and are then drawn taut. Brace ropes when used, are then secured to stakes or pins suitably placed.

800. Rescinded.

#### CONICAL WALL TENT.

801. Drive the door pin and center pin 8 feet 3 inches apart. Using the hood lines, with center pin as center, describe two concentric circles with radii 8 feet 3 inches and 11 feet 3 inches. In the outer circle drive two door guy pins 3 feet apart. At intervals of about 3 feet drive the other guy pins.

In other respects conical tents are erected practically as in the case of pyramidal tents.

#### TO STRIKE COMMON, WALL, PYRAMIDAL, AND CONICAL WALL TENTS.

#### 802. STRIKE TENTS.

The men first remove all pins except those of the four corner guy ropes, or the four quadrant guy ropes in the case of the conical wall tent. The pins are neatly piled or placed in their receptacle.

One man holds each guy, and when the ground is clear the tent

is lowered, folded, or rolled and tied, the poles or tripod and pole fastened together, and the remaining pins collected.

#### TO FOLD TENTS.

803. For folding common, wall, hospital, and storage tents: Spread the tent flat on the ground, folded at the ridge so that bottoms of side walls are even, ends of tent forming triangles to the right and left; fold the triangular ends of the tent in toward the middle, making it rectangular in shape; fold the top over about 9 inches; fold the tent in two by carrying the top fold over clear to the foot; fold again in two from the top to the foot; throw all guys on tent except the second from each end; fold the ends in so as to cover about two-thirds of the second cloths; fold the left end over to meet the turned-in edge of the right end, then fold the right end over the top, completing the bundle; tie with the two exposed guys.

#### METHOD OF FOLDING PYRAMIDAL TENT.

The tent is thrown toward the rear and the back wall and roof canvas pulled out smooth. This may be most easily accomplished by leaving the rear-corner wall pins in the ground with the wall loops attached, one man at each rear-corner guy, and one holding the square iron in a perpendicular position and pulling the canvas to its limit away from the former front of the tent. This leaves the three remaining sides of the tent on top of the rear side, with the door side in the middle.

Now carry the right-front corner over and lay it on the left-rear corner. Pull all canvas smooth, throw guys toward square iron, and pull bottom edges even. Then take the right-front corner and return to the right, covering the right-rear corner. This folds the right side of the tent on itself, with the crease in the middle and under the front side of tent.

Next carry the left-front corner to the right and back as described above; this when completed will leave the front and rear sides of the tent lying smooth and fiat and the two side walls folded inward, each on itself.

Place the hood in the square iron which has been folded downward toward the bottom of the tent, and continue to fold around the square iron as a core, pressing all folds down flat and smooth and parallel with the bottom of the tent. If each fold is compactly made and the canvas kept smooth, the last fold will exactly cover the lower edge of the canvas. Lay all exposed guys along the folded canvas except the two on the center width, which should be pulled out and away from bottom edge to their extreme length for tying. Now, beginning at one end, fold toward the center on the first seam (that joining the first and second widths) and fold again toward the center, so that the already folded canvas will come to within about 3 inches of the middle width. Then fold over to the opposite edge of middle width of canvas. Then begin folding from opposite end, folding the first width in half, then making a second fold to come within about 4 or 5 inches of that already folded; turn this fold entirely over

that already folded. Take the exposed guys and draw them taut across each other, turn bundle over on the under guy, cross guys on top of bundle, drawing tight. Turn bundle over on the crossed guys and tie lengthwise.

When properly tied and pressed together this will make a package 11 by 23 by 34 inches, requiring about 8,855 cubic inches to store or pack.

Stencil the organization designation on the lower half of the middle width of canvas in the back wall.

WAR DEPARTMENT,  
OFFICE OF THE CHIEF OF STAFF,  
\_Washington,\_December\_2,\_1911.\_

Paragraphs 747, 792, 793, 794, 795, 796, 797, and 798. Infantry Drill Regulations, 1911, apply only to troops equipped with the Infantry Equipment, model 1910. For troops equipped under General Orders, No. 23, War Department, 1906, and orders amendatory thereof, the alternative paragraphs published herewith will govern.

By order of the Secretary of War:

LEONARD WOOD,  
\_Major\_General,\_Chief\_of\_Staff\_.

747. If the inspection is to include an examination of the blanket rolls the captain, before dismissing the company and after inspecting the file closers, directs the lieutenants to remain in place, closes ranks, stacks arms, dresses the company back to four paces from the stacks, takes intervals, and Commands: 1. \_Unsling\_, 2. PACKS, 3. \_Open\_, 4. PACKS.

At the second command each man unslings his roll and places it on the ground at his feet, rounded end to the front, square end of shelter half to the right.

At the fourth command the rolls are untied, laid perpendicular to the front, with the triangular end of the shelter half to the front, opened, and unrolled to the left; each man prepares the contents of his roll for inspection and resumes the attention.

The captain then returns saber, passes along the ranks and file closers as before, inspects the rolls, returns to the right, draws saber and commands: 1. \_Close\_, 2. PACKS.

At the second command each man, with his shelter half smoothly spread on the ground with buttons up and triangular end to the front, folds his blanket once across its length and places it upon the shelter half, fold toward the bottom, edge one-half inch from the square end, the same amount of canvas uncovered at the top and bottom. He then places the parts of the pole at the side of the blanket next the square end of shelter half, near and parallel to the fold, end of pole about 6 inches from the edge of the blanket; nests the pins similarly near the opposite edge of the blanket and distributes the other articles carried in the roll; folds the triangular end and then the exposed portion

of the bottom of the shelter half over the blanket.

The two men in each file roll and fasten first the roll of the front and then of the rear rank man. The file closers work similarly two and two, or with the front rank man of a blank file. Each pair stands on the folded side, rolls the blanket roll closely and buckles the straps, passing the end of the strap through both keeper and buckle, back over the buckle and under the keeper. With the roll so lying on the ground that the edge of the shelter half can just be seen when looking vertically downward one end is bent upward and over to meet the other, a clove hitch is taken with the guy rope first around the end to which it is attached and then around the other end, adjusting the length of rope between hitches to suit the wearer.

As soon as a file completes its two rolls each man places his roll in the position it was in after being unslung and stands at attention.

All the rolls being completed, the captain commands: 1. Sling, 2. PACKS.

At the second command the rolls are slung, the end containing the pole to the rear.

The company is assembled, takes arms, and the captain completes the inspection as before.

792. Being in line or in column of platoons, the captain commands: FORM FOR SHELTER TENTS.

The officers, first sergeant, and guides fall out; the cooks form a file on the flank of the company nearest the kitchen, the first sergeant and right guide fall in, forming the right file of the company; blank files are filled by the file closers or by men taken from the front rank; the remaining guide or guides, and file closers form on a convenient flank. Before forming column of platoons, preparatory to pitching tents, the company may be redivided into two or more platoons, regardless of the size of each.

793. The captain then causes the company to take intervals as described in the School of the Squad, and commands: PITCH TENTS.

At the command PITCH TENTS, each man steps off obliquely to the right with the right foot and lays his rifle on the ground, the butt of the rifle near the toe of the right foot, muzzle to the front, barrel to the left, and steps back into his place; each front rank man then draws his bayonet and sticks it in the ground by the outside of the right heel. All unslung and open the blanket rolls and take out the shelter half, poles, and pins. Each then spreads his shelter half, triangle to the rear, flat upon the ground the tent is to occupy, rear rank man's half on the right. The halves are then buttoned together. Each front rank man joins his pole, inserts the top in the eyes of the halves, and holds the pole upright beside the bayonet placed in the ground; his rear rank man, using the pins in front, pins down the front corners of the tent on the line of bayonets, stretching the canvas taut; he then inserts a pin in the eye of the rope and drives the pin

at such distance in front of the pole as to hold the rope taut. Both then go to the rear of the tent; the rear rank man adjusts the pole and the front rank man drives the pins. The rest of the pins are then driven by both men, the rear-rank man working on the right.

NOTE.--The use of the hand ax and the pick mattock in organizations equipped with the intrenching tool is authorized for the purpose of driving shelter tent pins. The use of the bayonet for that purpose is prohibited.

As soon as the tent is pitched each man arranges the contents of the blanket roll in the tent and stands at attention in front of his own half on line with the front guy-rope pin.

The guy ropes, to have a uniform slope when the shelter tents are pitched, should all be of the same length.

794. When the blanket roll is not carried, intervals are taken as described above; the position of the front pole is marked with a bayonet and equipments are laid aside. The men then proceed to the wagon, secure their rolls, return to their places, and pitch tents as heretofore described.

795. To pitch double shelter tent, the captain gives the same commands as before, except TAKE HALF INTERVAL is given instead of TAKE INTERVAL. In taking interval each man follows the preceding man at 2 paces. The captain then commands: PITCH DOUBLE TENTS.

The first sergeant places himself on the right of the right guide and with him pitches a single shelter tent.

Only the odd numbers of the front rank mark the line with the bayonet.

The tent is formed by buttoning together the square ends of two single tents. Two complete tents, except one pole, are used. Two guy ropes are used at each end, the guy pins being placed in front of the corner pins.

The tents are pitched by numbers 1 and 2, front and rear rank; and by numbers 3 and 4, front and rear rank; the men falling in on the left are numbered, counting off if necessary.

All the men spread their shelter halves on the ground the tent is to occupy. Those of the front rank are placed with the triangular ends to the front. All four halves are then buttoned together, first the ridges and then the square ends. The front corners of the tent are pinned by the front rank men, the odd number holding the poles, the even number driving the pins. The rear rank men similarly pin the rear corners.

While the odd numbers steady the poles, each even number of the front rank takes his pole and enters the tent, where, assisted by the even number of the rear rank, he adjusts the pole to the center eyes of the shelter halves in the following order: (1) The lower half of the front tent; (2) the lower half of the rear tent; (3) the upper half of the front tent; (4) the upper half of the rear tent. The guy ropes are then adjusted.



The tents having been pitched, the triangular ends are turned back, contents of the rolls arranged, and the men stand at attention, each opposite his own shelter half and facing out from the tent.

796. Omitted.

797. Omitted.

798. Omitted.

## SECTION 9. MANUAL OF THE BAYONET.

1. The Infantry soldier relies mainly on fire action to disable the enemy, but he should know that personal combat is often necessary to obtain success. Therefore, he must be instructed in the use of the rifle and bayonet in hand-to-hand encounters.

2. The object of this instruction is to teach the soldier how to make effect use of the rifle and bayonet in personal combat: to make him quick and proficient in handling his rifle; to give him an accurate eye and a steady hand; and to give him confidence in the bayonet in offense and defense. When skill in these exercises has been acquired, the rifle will still remain a most formidable weapon at close quarters should the bayonet be lost or disabled,

3. Efficiency of organizations in bayonet fighting will be judged by the skill shown by individuals in personal combat. For this purpose pairs or groups of opponents, selected at random from among recruits and trained soldiers, should engage in assaults, using the fencing equipment provided for the purpose.

4. Officers and specially selected and thoroughly instructed noncommissioned officers will act as instructors.

5. Instruction in bayonet combat should begin as soon as the soldier is familiar with the handling of his rifle and will progress, as far as practicable, in the order followed in the text.

6. Instruction is ordinarily given on even ground; but practice should also be had on uneven ground, especially in the attack and defense of intrenchments.

7. These exercises will not be used as a calisthenic drill.

8. The principles of the commands are the same as those given in paragraph 9, 15, and 38, Infantry Drill Regulations. Intervals and distances will be taken as in paragraphs 109 and 111, Infantry Drill Regulations, except that, in formations for bayonet exercises, the men should be at least four paces apart in every direction.

9. Before requiring soldiers to take a position or execute a movement for the first time, the instructor executes the same for the purpose of illustration, after which he requires the soldiers to execute the movement individually. Movements prescribed in this manual will not be executed in cadence as the attempt to do so results in incomplete execution and lack of vigor. Each movement will be executed correctly as quickly as possible by

every man. As soon as the movements are executed accurately, the commands are given rapidly, as expertness with the bayonet depends chiefly upon quickness of motion.

10. The exercises will be interrupted at first by short and frequent rests. The rests will be less frequent as proficiency is attained. Fatigue and exhaustion will be specially guarded against, as they prevent proper interest being taken in the exercises and delay the progress of the instruction. Rests will be given from the position of order arms in the manner prescribed in Infantry Drill Regulations.

## THE BAYONET.

### NOMENCLATURE AND DESCRIPTION.

11. The bayonet is a cutting and thrusting weapon consisting of three principal parts, viz, the \_blade\_, \_guard\_, and \_grip\_.

12. The blade has the following parts: Edge, false edge, back, grooves, point, and tang. The length of the blade from guard to point is 16 inches, the edge 14.5 inches, and the false edge 5.6 inches. Length of the rifle, bayonet fixed, is 59.4 inches. The weight of the bayonet is 1 pound; weight of rifle without bayonet is 8.69 pounds. The center of gravity of the rifle, with bayonet fixed, is just in front of the rear sight.

NOTE.--The use of the hand ax and the pick mattock in organizations equipped with the intrenching tool is authorized for the purpose of driving shelter-tent pins. The use of the bayonet for that purpose is prohibited.

### I. INSTRUCTION WITHOUT THE RIFLE.

13. The instructor explains the importance of good footwork and impresses on the men the fact that quickness of foot and suppleness of body are as important for attack and defense as is the ability to parry and deliver a strong point or cut.

14. All foot movements should be made from the position of guard. As far as practicable, they will be made on the balls of the feet to insure quickness and agility. No hard and fast rule can be laid down as to the length of the various foot movements; this depends entirely on the situations occurring in combat.

15. The men having taken intervals or distances, the instructor commands:

1. \_Bayonet\_exercise\_, 2. GUARD.

At the command GUARD, half face to the right, carry back and place the right foot about once and a half its length to the rear and about 3 inches to the right, the feet forming with each other an angle of about 60 deg., weight of the body balanced equally on the balls of the feet, knees slightly bent, palms of hands on hips, fingers to the front, thumbs to the rear, head erect,

head and eyes straight to the front.

16. To resume the attention. 1. Squad, 2. ATTENTION, The men take the position of the soldier and fix their attention.

17. ADVANCE. Advance the left foot quickly about once its length, follow immediately with the right foot the same distance.

18. RETIRE. Move the right foot quickly to the rear about once its length, follow immediately with the left foot the same distance.

19. 1. Front, 2. PASS. Place the right foot quickly about once its length in front of the left, advance the left foot to its proper position in front of the right.

20. 1. Rear, 2. PASS, Place the left foot quickly about once its length in rear of the right, retire the right foot to its proper position in rear of the left.

The passes are used to get quickly within striking distance or to withdraw quickly therefrom.

21. 1. Right, 2. STEP. Step to the right with the right foot about once its length and place the left foot in its proper relative position.

22. 1. Left, 2. STEP. Step to the left with the left foot about once its length and place the right foot in its proper relative position.

These steps are used to circle around an enemy, to secure a more favorable line of attack, or to avoid the opponent's attack. Better ground or more favorable light may be gained in this way. In bayonet fencing and in actual combat the foot first moved in stepping to the right or left is the one which at the moment bears the least weight.

## II. INSTRUCTION WITH THE RIFLE.

23. The commands for and the execution of the foot movements are the same as already given for movements without the rifle.

24. The men having taken intervals or distances, the instructor commands:

1. Bayonet\_exercise, 2. GUARD.

At the second command take the position of guard (see par. 15); at the same time throw the rifle smartly to the front, grasp the rifle with the left hand just below the lower band, fingers between the stock and gun sling, barrel turned slightly to the left, the right hand grasping the small of the stock about 6 inches in front of the right hip, elbows free from the body, bayonet point at the height of the chin.

25. 1. Order, 2. ARMS.

Bring the right foot up to the left and the rifle to the position

of order arms, at the same time resuming the position of attention.

26. During the preliminary instruction, attacks and defenses will be executed from guard until proficiency is attained, after which they may be executed from any position in which the rifle is held.

## ATTACKS.

### 27. 1. THRUST.

Thrust the rifle quickly forward to the full length of the left arm, turning the barrel to the left, and direct the point of the bayonet at the point to be attacked, butt covering the right fore-arm. At the same time straighten the right leg vigorously and throw the weight of the body forward and on the left leg, the ball of the right foot always on the ground. Guard is resumed immediately without command.

The force of the thrust is delivered principally with the right arm, the left being used to direct the bayonet. The points at which the attack should be directed are, in order of their importance, stomach, chest, head, neck, and limbs.

### 28. 1. LUNGE.

Executed in the same manner as the thrust, except that the left foot is carried forward about twice its length. The left heel must always be in rear of the left knee. Guard is resumed immediately without command. Guard may also be resumed by advancing the right foot if for any reason it is desired to hold the ground gained in lunging. In the latter case the preparatory command FORWARD will be given. Each method should be practiced.

### 29. 1. \_Butt\_, 2. STRIKE.

Straighten right arm and right leg vigorously and swing butt of rifle against point of attack, pivoting the rifle in the left hand at about the height of the left shoulder, allowing the bayonet to pass to the rear on the left side of the head, Guard is resumed without command.

[Illustration: Par. 27.]

[Illustration: Par. 24.]

The points of attack in their order of importance are head, neck, stomach, and crotch.

### 30. 1. \_Cut\_, 2. DOWN.

Execute a quick downward stroke, edge of bayonet directed at point of attack. Guard is resumed without command.

### 31. 1. \_Cut\_, 2. RIGHT (LEFT).

With a quick extension of the arms execute a cut to the right (left), directing the edge toward the point attacked. Guard is

resumed without command.

The cuts are especially useful against the head, neck, and hands of an enemy. In executing left cut it should be remembered that the false, or back edge, is only 5.6 inches long. The cuts can be executed continuation of strokes, thrusts, lunges, and parries.

[Illustration: Par. 28.]

32. To direct an attack to the right, left, or rear the soldier will change front as quickly as possible in the most convenient manner, for example: 1. To the right rear, 2. Cut, 3. DOWN; 1. To the right, 2. LUNGE; 1. To the left, 2. THRUST, etc.

Whenever possible the impetus gained by the turning movement of the body should be thrown into the attack. In general this will be best accomplished by turning on the ball of the right foot.

These movements constitute a change of front in which the position of guard is resumed at the completion of the movement.

[Illustration: Par. 29.]

33. Good judgment of distance is essential. Accuracy in thrusting and lunging is best attained by practicing these attacks against rings or other convenient openings, about 3 inches in diameter, suitably suspended at desired heights.

34. The thrust and lunges at rings should first be practiced by endeavoring to hit the opening looked at. This should be followed by directing the attack against one opening while looking at another.

35. The soldier should also experience the effect of actual resistance offered to the bayonet and the butt of the rifle in attacks. This will be taught by practicing attacks against a dummy.

36. Dummies should be constructed in such a manner as to permit the execution of attacks without injury to the point or edge of the bayonet or to the barrel or stock of the rifle. A suitable dummy can be made from pieces of rope about 5 feet in length plaited closely together into a cable between 6 and 12 in diameter. Old rope is preferable. Bags weighted and stuffed with hay, straw, shavings, etc. are also suitable.

[Illustration: Par. 36.]

[Illustration: Par. 33.]

## DEFENSES.

37. In the preliminary drills in the defenses the position of guard is resumed, by command, after each parry. When the men have become proficient the instructor will cause them to resume the position of guard instantly without command after the execution

of each parry.

38. 1. \_Parry\_, 2. RIGHT.

Keeping the right hand in the guard position, move the rifle sharply to the right with the left arm, so that the bayonet point is about 6 inches to the right.

39. 1. \_Parry\_, 2. LEFT.

Move the rifle sharply to the left front with both hands so as to cover the point attacked.

40. 1. \_Parry\_, 2. HIGH.

Raise the rifle with both hands high enough to clear the line of vision, barrel downward, point of the bayonet to the left front.

[Illustration: Par. 40.]

[Illustration: Par. 41.]

When necessary to raise the rifle well above the head, it may be supported between the thumb and forefinger of the left hand. This position will be necessary against attacks from higher elevations, such as men mounted or on top of parapets.

41. 1. \_Low\_parry\_, 2. RIGHT (LEFT).

Carry the point of the bayonet down until it is at the height of the knee, moving the point of the bayonet sufficiently to the right (left) to keep the opponent's attacks clear of the point threatened.

These parries are rarely used, as an attack below the waist leaves the head and body exposed.

[Illustration: Par. 41.]

[Illustration: Par. 44.]

42. Parries must not be too wide or sweeping, but sharp, short motions, finished with a jerk or quick catch. The hands should, as far as possible, be kept in the line of attack. Parries against BUTT STRIKE are made by quickly moving the guard so as to cover the point attacked.

43. To provide against attack from the right, left, or rear the soldier will change front as quickly as possible in the most convenient manner: for example: 1. To the left rear, 2. \_Parry\_, 3. HIGH; 1. To the right, 2. \_Parry\_, 3. RIGHT, etc.

These movements constitute a change of front in which the position of guard is resumed at the completion of the movement.

In changing front for the purpose of attack or defense, if there is danger of wounding a comrade, the rifle should first be brought to a vertical position.

### III. INSTRUCTION WITHOUT THE BAYONET.

#### 44. 1. \_Club\_rifle\_, 2. SWING.

[Illustration: Par. 44.]

Being at order arms, at the preparatory command quickly raise and turn the rifle, regrasping it with both hands between the rear sight and muzzle, barrel down, thumbs around the stock and toward the butt; at the same time raise the rifle above the shoulder farthest from the opponent, butt elevated and to the rear, elbows slightly bent and knees straight. Each individual takes such position of the feet, shoulders, and hands as best accords with his natural dexterity. SWING. Tighten the grasp of the hands and swing the rifle to the front and downward, directing it at the head of the opponent, and immediately return to the position of club rifle by completing the swing of the rifle downward and to the rear. Repeat by the command, SWING.

The rifle should be swung with sufficient force to break through any guard or parry that may be interposed.

Being at CLUB RIFLE, order arms is resumed by command.

The use of this attack against dummies or in fencing is prohibited.

45. The position of CLUB RIFLE may be taken from any position of the rifle prescribed in the Manual of Arms. It will not be taken in personal combat unless the emergency is such as to preclude the use of the bayonet.

### IV. COMBINED MOVEMENT.

46. The purpose of combined movements is to develop more vigorous attacks and more effective defenses than are obtained by the single movements; to develop skill in passing from attack to defense and the reverse. Every movement to the front should be accompanied by an attack, which is increased in effectiveness by the forward movement of the body. Every movement to the rear should ordinarily be accompanied by a parry and should always be followed by an attack. Movements to the right or left may be accompanied by attacks or defense.

47. Not more than three movements will be used in any combination. The instructor should first indicate the number of movements that are to be combined as TWO MOVEMENTS or THREE MOVEMENTS. The execution is determined by one command of execution, and the position of guard is taken upon the completion of the last movement only.

#### EXAMPLES.

Front pass and LUNGE.

Right step and THRUST.

Left step and low parry RIGHT.

Rear pass, parry left and LUNGE.

Lunge and cut RIGHT.

Parry right and parry HIGH.

Butt strike and cut DOWN.

Thrust and parry HIGH.

Parry high and LUNGE.

Advance, thrust and cut RIGHT.

Right step, parry left and cut DOWN.

To the left, butt strike and cut DOWN.

To the right rear, cut down and butt STRIKE.

48. Attacks against dummies will be practiced. The approach will be made against the dummies both in quick time and double time.

#### V. PRACTICAL BAYONET COMBAT.

49. The principles of practical bayonet combat should be taught as far as possible during the progress of instruction in bayonet exercise.

50. The soldier must be continually impressed with the extreme importance of the offensive due to its moral effect. Should an attack fail, it should be followed immediately by another attack before the opponent has an opportunity to assume the offensive. Keep the opponent on the defensive. If, due to circumstances, it is necessary to take the defensive, constantly watch for an opportunity to assume the offensive and take immediate advantage of it.

51. Observe the ground with a view to obtaining the best footing. Time for this will generally be too limited to permit more than a single hasty glance.

52. In personal combat watch the opponent's eyes if they can be plainly seen, and do not fix the eyes on his weapon nor upon the point of your attack. If his eyes can not be plainly seen, as in night attacks, watch the movements of his weapon and of his body.

53. Keep the body well covered and deliver attacks vigorously. The point of the bayonet should always be kept as nearly as possible in the line of attack. The less the rifle is moved upward, downward, to the right, or to the left, the better prepared the soldier is for attack or defense.

54. Constantly watch for a chance to attack the opponent's left



hand. His position of guard will not differ materially from that described in paragraph 24. If his bayonet is without a cutting edge, he will be at a great disadvantage.

55. The butt is used for close and sudden attacks. It is particularly useful in riot duty. From the position of port arms a sentry can strike a severe blow with the butt of the rifle.

56. Against a man on foot, armed with a sword, be careful that the muzzle of the rifle is not grasped. All the swordsman's energies will be directed toward getting past the bayonet. Attack him with short, stabbing thrusts, and keep him beyond striking distance of his weapon.

57. The adversary may attempt a greater extension in the thrust and lunge by quitting the grasp of his piece with the left hand and advancing the right as far as possible. When this is done, a sharp parry may cause him to lose control of his rifle, leaving him exposed to a counter attack, which should follow promptly.

58. Against odds a small number of men can fight to best advantage by grouping themselves so as to prevent their being attacked from behind.

59. In fighting a mounted man armed with a saber every effort must be made to get on his near or left side, because here his reach is much shorter and his parries much weaker. If not possible to disable such an enemy, attack his horse and then, renew the attack on the horseman.

60. In receiving night attacks the assailant's movements can be best observed from the kneeling or prone position, as his approach generally brings him against the sky line. When he arrives within attacking distance rise quickly and lunge well forward at the middle of his body.

## VI. FENCING EXERCISES.

61. Fencing exercises in two lines consist of combinations of thrusts, parries, and foot movements executed at command or at will, the opponent replying with suitable parries and returns.

62. The instructor will inspect the entire fencing equipment before the exercise begins and assure himself that everything is in such condition as will prevent accidents.

63. The men equip themselves and form in two lines at the order, facing each other, with intervals of about 4 paces between files and a distance of about 2 paces between lines. One line is designated as number 1; the other, number 2. Also as attack and defense.

64. The opponents being at the order facing each other, the instructor commands: SALUTE.

Each man, with eyes on his opponent, carries the left hand smartly to the right side, palm of the hand down, thumb and fingers extended and joined, forearm horizontal, forefinger touching the bayonet. (Two.) Drop the arm smartly by the side.

This salute is the fencing salute.

All fencing exercises and all fencing at will between individuals will begin and terminate with the formal courtesy of the fencing salute.

65. After the fencing salute has been rendered the instructor commands: 1. *Fencing exercise*, 2. GUARD.

At the command GUARD each man comes to the position of guard, heretofore defined, bayonets crossed, each man's bayonet bearing lightly to the right against the corresponding portion of the opponent's bayonet. This position is known as the ENGAGE or ENGAGE RIGHT.

66. Being at the ENGAGE RIGHT: ENGAGE LEFT.

The attack drops the point of his bayonet quickly until clear of his opponent's rifle and describes a semicircle with it upward and to the right; bayonets are crossed similarly as in the engaged position, each man's bayonet bearing lightly to the left against the corresponding portion of the opponent's bayonet.

67. Being at ENGAGE LEFT: ENGAGE RIGHT.

The attack quickly drops the point of his bayonet until clear of his opponent's rifle and describes a semicircle with it upward and to the left and engages.

68. Being engaged: ENGAGE LEFT AND RIGHT.

The attack ENGAGE LEFT and then immediately ENGAGES RIGHT.

69. Being engaged left: ENGAGE RIGHT AND LEFT.

The attack ENGAGES RIGHT and then immediately ENGAGES LEFT.

70. 1. Number one, ENGAGE RIGHT (LEFT); 2. Number two, COUNTER.

Number one executes the movement ordered, as above; number two quickly drops the point of his bayonet and circles it upward to the original position.

71. In all fencing while maintaining the pressure in the engage a certain freedom of motion of the rifle is allowable, consisting of the play, or up-and-down motion, of one bayonet against the other. This is necessary to prevent the opponent from divining the intended attack. It also prevents his using the point of contact as a pivot for his assaults. In charging from one engage to the other the movement is controlled by the left hand, the right remaining stationary.

72. After some exercise in ENGAGE, ENGAGE LEFT, and COUNTER, exercises will be given in the assaults.

ASSAULTS.

73. The part of the body to be attacked will be designated by name, as head, neck, chest, stomach, legs. No attacks will be made below the knees. The commands are given and the movements for each line are first explained thoroughly by the instructor; the execution begins at the command ASSAULT. Number one executes the attack, and number two parries; conversely, at command, number two attacks and number one parries.

74. For convenience in instruction ASSAULTS are divided into SIMPLE ATTACKS, COUNTER ATTACKS, ATTACKS ON THE RIFLE, and FEINTS.

#### SIMPLE ATTACKS.

75. Success in these attacks depends on quickness of movement. There are three simple attacks--the STRAIGHT, the DISENGAGEMENT, and the COUNTER DISENGAGEMENT. They are not preceded by a feint.

76. In the STRAIGHT the bayonet is directed straight at an opening from the engaged position. Contact with the opponent's rifle may or may not be abandoned while making it. If the opening be high or low, contact with the rifle will usually be abandoned on commencing the attack. If the opening be near his guard, the light pressure used in the engage may be continued in the attack.

Example: Being at the ENGAGE RIGHT, 1. Number one, at neck (head, chest, right leg, etc.), thrust; 2. Number two, parry right; 3. ASSAULT.

77. In the DISENGAGEMENT contact with the opponent's rifle is abandoned and the point of the bayonet is circled under or over his bayonet or rifle and directed into the opening attacked. This attack is delivered by one continuous spiral movement of the bayonet from the moment contact is abandoned.

Example: Being at the ENGAGE RIGHT, 1. Number one, at stomach (left chest, left leg, etc.), thrust; 2. Number two, parry left (etc.); 3. ASSAULT.

78. In the COUNTER DISENGAGEMENT a swift attack is made into the opening disclosed while the opponent is attempting to change the engagement of his rifle. It is delivered by one continuous spiral movement of the bayonet into the opening.

Example: Being at the ENGAGE RIGHT, 1. Number two, engage left; 2. Number one, at chest, thrust; 3. Number two, parry left; 4. ASSAULT.

Number two initiates the movement, number one thrusts as soon as the opening is made, and number two then attempts to parry.

79. A COUNTER ATTACK or RETURN is one made instantly after or in continuation of a parry. The parry should be as narrow as possible. This makes it more difficult for the opponent to recover and counter parry. The counter attack should also be made at or just before the full extension of the opponent's attack, as when it is so made a simple extension of the arms will generally be sufficient to reach the opponent's body.

Example: Being at ENGAGE, 1. Number two, at chest, lunge; 2. Number one, parry right and at stomach (chest, head, etc.), thrust; 3. ASSAULT.

#### ATTACKS ON THE RIFLE.

80. These movements are made for the purpose of forcing or disclosing an opening into which an attack can be made. They are the PRESS, the BEAT, and the TWIST.

81. In the PRESS the attack quickly presses against the opponent's bayonet or rifle with his own and continues the pressure as the attack is delivered.

Example: Being at the ENGAGE, 1. Number one, press, and at chest, thrust; 2. Number two, parry right; 3. ASSAULT.

82. The attack by DISENGAGEMENT is particularly effective following the PRESS.

Example: Being at the ENGAGE, 1. Number one, press, and at stomach, thrust; 2. Number two, low parry left; 3. ASSAULT.

83. The BEAT is an attack in which a sharp blow is struck against the opponent's rifle for the purpose of forcing him to expose an opening into which an attack immediately follows. It is used when there is but slight opposition or no contact of rifles.

Example: Being at the ENGAGE, 1. Number one, beat, and at stomach (chest, etc.), thrust; 2. Number two, parry left; 3. ASSAULT.

84. In the twist the rifle is crossed over the opponent's rifle or bayonet and his bayonet forced downward with a circular motion and a straight attack made into the opening. It requires superior strength on the part of the attack.

Example: Being at the ENGAGE, 1. Number one, twist, and at stomach, thrust; 2. Number two, low parry left; 3. ASSAULT.

#### FEINTS.

85. Feints are movements which threaten or simulate attacks and are made with a view to inducing an opening or parry that exposes the desired point of attack. They are either single or double, according to the number of such movements made by the attack.

86. In order that the attack may be changed quickly, as little force as possible is put into a feint.

Example: Being at the ENGAGE, 1. Number one, feint head thrust; at stomach, lunge; 2. Number two, parry right and low parry right; 3. ASSAULT.

Number one executes the feint and then the attack. Number two executes both parries.

87. In double feints first one part of the body and then another

is threatened and a third attacked.

Example: Being at the ENGAGE, 1. Number one, feint straight thrust at chest; disengagement at chest; at stomach, lunge; 2. Number two, parry right, parry left, and low parry left; 3. ASSAULT.

88. An opening may be offered or procured by opposition, as in the PRESS or BEAT.

89. In fencing exercises every FEINT should at first be parried. When the defense is able to judge or divine the character of the attack the feint is not necessarily parried, but may be nullified by a counter feint.

90. A COUNTER FEINT is a feint following the opponent's feint or following a PARRY of his attack and generally occurs in combined movements.

#### COMBINED MOVEMENTS.

91. When the men have become thoroughly familiar with the various foot movements, parries, guards, attacks, feints, etc., the instructor combines several of them and gives the commands in quick succession, increasing the rapidity and number of movements as the men become more skillful. Opponents will be changed frequently.

1. Example: Being at the ENGAGE. 1. Number one, by disengagement at chest, thrust; 2. Number two, parry left, right step (left foot first), and lunge; 3. ASSAULT.

2. Example: Being at ENGAGE LEFT, 1. Number one, press and lunge; 2. Number two, parry right, left step, and thrust; 3. ASSAULT.

3. Example: Being at the ENGAGE, 1. Number one, by disengagement at chest, thrust; 2. Number two, parry left, front pass, and at head butt strike; 3. Number one, right step; 4. ASSAULT.

92. Examples 1 and 2 are typical of movements known as CROSS COUNTERS, and example No. 3 of movements known as CLOSE COUNTERS.

93. A CHANCERY is an attack by means of which the opponent is disarmed, which causes him to lose control of his rifle, or which disables his weapon.

94. When the different combinations are executed with sufficient skill the instructor will devise series of movements to be memorized and executed at the command ASSAULT. The accuracy and celerity of the movements will be carefully watched by the instructor, with a view to the correction of faulty execution.

95. It is not intended to restrict the number of movements, but to leave to the discretion of company commanders and the ingenuity of instructors the selection of such other exercises as accord with the object of the drill.

#### VII. FENCING AT WILL.

96. As satisfactory progress is made the instructor will proceed to the exercises at will, by which is meant assaults between two men, each endeavoring to hit the other and to avoid being hit himself. Fencing at will should not be allowed to degenerate into random attacks and defenses.

97. The instructor can supervise but one pair of combatants at a time. Frequent changes should be made so that the men may earn different methods of attack and defense from each other.

98. The contest should begin with simple, careful movements, with a view to forming a correct opinion of the adversary; afterwards everything will depend on coolness, rapid and correct execution of the movements, and quick perception of the adversary's intentions.

99. Continual retreat from the adversary's attack and frequent dodging to escape attacks should be avoided. The offensive should be continually encouraged.

100. In fencing at will, when no commands are given, opponents facing each other at the position of order arms, salute. They then immediately and simultaneously assume the position of guard rifles engaged. Neither man may take the position of guard before his opponent has completed his salute. The choice of position is decided before the salute.

101. The opponents being about two paces apart and the fencing salute having been rendered, the instructor commands 1. At will, 2. ASSAULT, after which either party has the right to attack. To interrupt the contest the instructor will command HALT, at which the combatants will immediately come to the order. To terminate the contest, the instructor will command, 1. Halt, 2 SALUTE, at which the combatants will immediately come to the order, salute, and remove their masks.

102. When men have acquired confidence in fencing at will, one opponent should be required to advance upon the other in quick time at CHARGE BAYONET, from a distance not to exceed 10 yards, and deliver an attack. As soon as a hit is made by either opponent the instructor commands, HALT, and the assault terminates. Opponents alternate in assaulting. The assailant is likewise required to advance at double time from a distance not exceeding 20 yards and at a run from a distance not exceeding 30 yards.

103. The instructor will closely observe the contest and decide doubtful points. He will at once stop the contest upon the slightest indication of temper. After conclusion of the combat he will comment on the action of both parties, point out errors and deficiencies and explain how they may be avoided in the future.

104. As additional instruction, the men may be permitted to wield the rifle left handed, that is on the left side of the body, left hand at the small of the stock. Many men will be able to use this method to advantage. It is also of value in case the left hand is wounded.

[Illustration: Par. 104.]

105. After men have fenced in pairs, practice should be given in fencing between groups, equally and unequally divided. When practicable, intrenchments will be used in fencing of this character.

In group fencing it will be necessary to have a sufficient number of umpires to decide hits. An individual receiving a hit is withdrawn at once from the bout, which is decided in favor of the group having the numerical superiority at the end. The fencing salute is not required in group fencing.

#### RULES FOR FENCING AT WILL.

106. 1. Hits on the legs below the knees will not be counted. No hit counts unless, in the opinion of the instructor, it has sufficient force to disable.

2. Upon receiving a hit, call out "hit."

3. After receiving a fair hit a counter attack is not permitted. A position of engage is taken.

4. A second or third hit in a combined attack will be counted only when the first hit was not called.

5. When it is necessary to stop the contest--for example, because of breaking of weapons or displacement of means of protection--take the position of the order.

6. When it is necessary to suspend the assault for any cause, it will not be resumed until the adversary is ready and in condition to defend himself.

7. Attacks directed at the crotch are prohibited in fencing.

8. Stepping out of bounds, when established, counts as a hit.

#### SUGGESTIONS FOR FENCING AT WILL.

107. When engaging in an assault, first study the adversary's position and proceed by false attacks, executed with speed, to discover, if possible, his instinctive parries. In order to draw the adversary out and induce him to expose that part of the body at which the attack is to be made, it is advisable to simulate an attack by a feint and then make the real attack.

108. Return attacks should be frequently practiced, as they are difficult to parry, and the opponent is within easier reach and more exposed. The return can be made a continuation of the parry, as there is no previous warning of its delivery, although it should always be expected. Returns are made without lunging if the adversary can be reached by thrusts or cuts.

109. Endeavor to overcome the tendency to make a return without knowing where it will hit. Making returns blindly is a bad habit and leads to instinctive returns--that is, habitual returns with certain attacks from certain parries--a fault which the skilled opponent will soon discover.

110. Do not draw the rifle back preparatory to thrusting and lunging.

111. The purpose of fencing at will is to teach the soldier as many forms of simple, effective attacks and defenses as possible. Complicated and intricate movements should not be attempted.

#### HINTS FOR INSTRUCTORS.

112. The influence of the instructor is great. He must be master of his weapon, not only to show the various movements, but also to lead in the exercises at will. He should stimulate the zeal of the men and arouse pleasure in the work. Officers should qualify themselves as instructors by fencing with each other.

113. The character of each man, his bodily conformation, and his degree of skill must always be taken into account. When the instructor is demonstrating the combinations, feints, returns, and parries the rapidity of his attack should be regulated by the skill of the pupil and no more force than is necessary should be used. If the pupil exposes himself too much in the feints and parries, the instructor will, by an attack, convince him of his error; but if these returns be too swiftly or too strongly made the pupil will become overcautious and the precision of his attack will be impaired. The object is to teach the pupil, not to give exhibitions of superior skill.

114. Occasionally the instructor should leave himself uncovered and fail to parry, in order to teach the pupil to take quick advantage of such opportunities.

#### SUGGESTIONS.

Instruction in bayonet exercise and bayonet fencing should be conducted with a view to teaching the aggressive use of the bayonet. Unless troops are so thoroughly trained with the bayonet that they believe that with it they are superior to their opponents it will be difficult or impossible to develop that morale which is necessary for a successful assault. Men should be impressed with the importance of acting always on the offensive in bayonet combat, of pushing their attack with all their might. Troops which are successful in their first few bayonet encounters will seldom thereafter be called upon to use the bayonet--their opponents will not await the assault.

### CHAPTER VI.

#### FIELD SERVICE.

##### SECTION 1. PRINCIPLES OF INFANTRY TRAINING.

Inaction gives every advantage to the enemy.



The offensive alone gives decisive results.

A quick and energetic offensive minimizes losses.

An advance against the enemy's position once entered upon must be continued. To go back under fire is to die.

The best way to hold down the fire of the enemy and to diminish his power to inflict losses is to bring the position he occupies under well conducted and continued fire.

Present as small a target as possible to the enemy by utilizing every bit of cover the ground affords.

Individual skill in marksmanship is an advantage in battle only when united with fire discipline and control.

Constant movement to the front lessens the effect of the enemy's fire. Modern battles fought in the open show that the heaviest losses are in the mid and long ranges. When close range is reached the losses diminish rapidly.

The best protection against artillery fire is a constant but irregular movement to the front. When close to the enemy's position his fire is least effective.

A knowledge of how to use the bayonet and the will to use it must often be the deciding factors in battle.

Finally:

In infantry training we can not go far wrong or fail to accomplish the best results if we keep before our minds the spirit as well as the wording of paragraph 352 of the Infantry Drill Regulations: "The duties of infantry are many and difficult. All infantry must be fit to cope with all conditions that may arise. Modern war requires but one kind of infantry--good infantry."

## SECTION 2. COMBAT.

The field of battle is the final test of the instruction, discipline, and efficiency of the fighting force of any army.

The battalion is the attack unit or the defense unit, whether operating alone or as part of a regiment. The companies constitute the firing line and the support.

An individual soldier is concerned only with the enemy in his immediate front, in obeying orders, and instinctively doing what he has been trained to do.

The one requisite necessary to win the battle is intelligent team work. The army is handled just like a football team. A part is on the first line facing the enemy. Another part, like the half backs, is held back as supports. Another part, like the full backs, is held as a reserve. Each unit, like each player, has a certain duty to perform. When the signal is given, all work together--all play the game--team work. The players consist

of all branches of the service.

The same rule holds true down to the smallest unit and even to the individual enlisted man. Each regiment is a team composed of three players--each a battalion. Each battalion is a team of four players--each a company. In the same manner each company is a team of two or more platoons; each platoon a team of two or more squads; and last, but not least, each squad is a team of eight players.

The one question that always presents itself on the battlefield every minute of the time to every person, whether he be a general or a private, is "What play has my team captain ordered, and how best may I act so as to work in conjunction with the other players to bring about the desired result?"--team play.

To the Infantry private this means--

First. Prompt and loyal obedience to the squad leader. Every squad always has a team captain. If the squad leader is killed or disabled, another player previously designated takes his place. If no one was designated, then the private with the longest service takes command. When the squad leader gives the command for a certain play, don't stop to think if the play is a good one, but do your very best to carry out the play as ordered. A poor play in which every player enters with his whole heart (team work) will often win, while, on the other hand, the best play in which some of the players are skulkers and shirkers will probably fail.

Second. Never lose touch with your squad. Every individual, as well as every unit, should always be acting under the control of some higher commander. This is necessary if there is to be any unity of action. Therefore if you lose your squad, or it becomes broken up, join the first squad you can find and obey your new squad leader as loyally and as cheerfully as you did your own.

Infantry approaches the battle field in columns of squads. While yet several miles from the enemy's position the troops may come under artillery fire. On green men entering upon their fight, the sound of the projectile whistling through the air, the noise, flash, and smoke on the burst of the shrapnel, and the hum of the various pieces thereafter, all produce a very terrifying effect, but old soldiers soon learn to pay little attention to this, as the danger is not great.

As the troops advance, the column breaks up into smaller columns, which form on an irregular line with more or less interval between. As the advance continues each column breaks up into smaller columns until finally a line of skirmishers is formed.

Firing is delayed as long as possible for three reasons, viz: (a) At the extreme ranges little damage can be done on the enemy, and ineffective firing always encourages him; (b) halting to fire delays the advance, and the great object to be accomplished is to close in on the enemy where you can meet him on better terms; (c) plenty of ammunition will be required at the decisive stage of the fight, and it is very difficult to

send extra ammunition up to the firing line. Therefore never fire until ordered to do so, and then never fire more than the number of rounds designated. Never fire after the command "cease firing" is given.

Ammunition in the bandoleers will ordinarily be expended first. Thirty rounds in the right pocket section of the belt will be held as a reserve, to be expended only when ordered by an officer.

Soon, however, it will be necessary to halt and open fire on the enemy in order to cause him some loss, to make his riflemen keep down in their trenches, and to make them fire wildly. It is probable that at this time and until you arrive much closer you will not see any of the enemy to fire at. You may not even see any trenches nor know just where the enemy is. Your higher officers, however, with their field glasses and the messages they receive, will know. Each company will be assigned a certain front to cover with its fire. Therefore be careful to fix your sights at the designated range and fire only at the designated target. This means team work in firing, which is one of the most important elements of success.

The firing line advances from position to position by means of rushes. At long range the entire line may rush forward at the same time, but as the range decreases one part of the line rushes forward while the remainder keeps up a hot fire on the enemy. The number taking part in each rush decreases as the fire of the enemy becomes warmer, until perhaps only one squad, or even less, rushes or crawls forward at a time, protected by the fire of the rest of the company. The distance covered by each rush also becomes less and less. After any rush no part of the line again advances until the rest of the line is up. In making a rush, the leader of the unit gives the signal and leads the way. The rest follow. No attempt is made to keep a line, but each man rushes forward at a run, seeking only to reach the new halting position as quickly and with as little exposure as possible. When halted, the skirmishers need not be in a perfect line, but every advantage should be taken of the ground for concealment and protection. It is necessary only that no man or group of men should interfere with the fire of other parts of the firing line.

The noise on the firing line will be great. Leaders will be disabled and new men will take their places. Reinforcements coming up will cause units to become mixed. To the green man everything may appear to be in confusion, but this is not so. This is war as it really is. If you have lost your squad or your squad leader, join the leader nearest to you. This is the way the game is played.

As long as the fight lasts every available rifleman must be kept in the firing line. The first and last consideration is to win the battle. Therefore, under no circumstances will any soldier be permitted to go to the rear, either for ammunition or to assist the wounded.

If the attacking force can no longer advance, it is much safer to throw up hasty intrenchments and await the arrival of reinforcements or darkness than it is to retreat. Retreating troops are the one that suffer the greatest. This lesson is taught by every great

war. Therefore, always remember that the safest thing to do is to stick to firing line.

Troops on the firing line, when not actually engaged in firing at the enemy, busy themselves throwing up shelter trenches. It only requires a few minutes to construct a trench that gives great protection. Therefore, never get separated from your intrenching tool.

Concealment is no less important than protection. Therefore, when conditions permit, as is generally the case when on the defensive, every effort should be made to hide intrenchments by the use of sod, grass, weeds, bushes, etc.

In making an attack the infantry is always supported when possible by its own artillery, which continues to fire over its head until the infantry arrives very close to the enemy's trenches. This fire is helping you a great deal by keeping down the fire of the enemies infantry and artillery. Therefore, don't think you are being fired into by your own artillery because you hear their shells and shrapnel singing through the air or bursting a short distance in your front, but rather be thankful you are receiving their help up to the very last minute.

In the last rush which carries the enemy's position there is always much mixing of units. The firing line does not continue rushing madly as individuals after the enemy, but halts and fires on him until he gets out of good range. The pursuit is taken up by formed troops held in reserve or by the firing line only after its units are again gotten together.

As the fighting often lasts all day, and great suffering is caused from thirst, don't throwaway your canteen when the fight commences. It may also be impossible to get rations up to the line during the night. Therefore, it is advisable to hold onto at least one ration.

As the recent war has shown the possibility of hand-to-hand fighting, especially at night, each soldier should be schooled in the use of the bayonet.

The following has particular reference to the duties of platoon and squad leaders and to the team work of the platoon in combat:

Attacking troops must first gain fire superiority in order to reach the hostile position. By gaining fire superiority is meant making one's fire superior to that of the enemy in volume and accuracy, and it depends upon the number of rifles employed, the rate of fire, the character of the target, training and discipline, and fire direction and control. When the fire of the attackers becomes effective and superior to that of the defenders the latter are no longer able to effectively and coolly aim and fire at the former, and, as a consequence, the attackers are able to inaugurate a successful rush or advance which carries them nearer to the enemy's position.

When a trained organization has been committed to the attack, the gaining of fire superiority depends upon the way in which fire direction and fire control are exercised.

The captain directs the fire of the company. He indicates to the platoon commanders the target (enemy) which the company is to fire and advance upon, and tells each upon which part of this target he is to direct the fire of his platoon. When he desires the fire to be opened he gives the necessary commands or signals, including the range at which the sights are to be set.

When the fire fight has once started it becomes to a great extent a fight of a number of platoons. The platoon is the largest organization which can be controlled by a single leader in action. The platoon commander (lieutenant or sergeant) controls its fire in order to gain the maximum fire effect and to avoid wasting ammunition. He must try his best to make the fire of his platoon effective, to get it forward, and to support neighboring platoons in their effort to advance. At the same time he must hold himself subject to his captain's directions. He should take advantage of every chance to carry his platoon forward unless otherwise ordered. In all this he is assisted by his platoon guide (sergeant) and by his corporals.

At the commencement of an engagement the platoon commander will give the objective (part of the enemy's line or aiming target) at which his platoon is to direct its fire. Noncommissioned officers must be sure that they see and understand the objective, and that all the men in their squads do likewise. Fire is then directed at this objective without further command until the platoon commander gives a new objective.

Men should be instructed to aim at that part of the target assigned to their platoon which corresponds with their own position in their own platoon, so that there will be no portion of the target which is not covered by fire. A portion of the enemy's line not covered by fire means that that portion is able to coolly aim and fire at their opponents.

In an engagement the voice can seldom be heard over a few feet, and the platoon commander will generally have to convey his orders by signals. A corporal may be able to shout orders to his squad, and orders may be repeated along a skirmish line by shouting. Care should be taken that orders intended for one platoon only are not thus conveyed to another platoon.

A short blast on the whistle, given by the platoon commander, means "Attention to Orders." All noncommissioned officers at once suspend firing and glance toward the platoon commander to see if the latter has any signals or orders for them. If not, they resume firing. A long blast on the whistle means "Suspend Firing." When a noncommissioned officer hears this signal from his platoon commander he should at once shout "Suspend Firing." Upon receiving a signal, the noncommissioned officer for whom it is intended should at once repeat it back, to be sure that it is correctly understood.

When a leader in command of a platoon or squad receives an order or signal to rush, he should cause his men to suspend firing and to hold themselves flat but ready for a sprinter's start. He selects the point, as far as possible with reference to cover, to which he intends to carry his unit forward. He then gives the

command "RUSH," springs forward, and running at full speed about three paces ahead of his men, leads them in the rush. Arriving at the position he has selected, he throws himself prone, and the men drop on either side of him. All crawl forward to good firing positions, considering the cover also, and the leader gives the necessary orders for resuming the fire. The latter will include giving the range again, the length of the rush being subtracted from the sight setting ordered at the last position.

As a rule, rushes should be started by a unit on one flank, and should be followed in succession by the other units to the opposite flank. Each succeeding unit should halt on the line established by the unit which first rushed. When a unit is about to rush, leaders in charge of adjacent units should caution their men to be careful not to fire into the rushing unit as it bounds forward.

When one unit suspends fire for the purpose of rushing, adjacent leaders should arrange to have a portion of their men turn their fire on the target of the rushing unit, to the end that there may be no portion of the enemy's line not under fire and able to fire coolly on the rushing unit.

Rushes should be made for as long a distance as possible, due regard being had for the wind of the men and not to get beyond supporting distance of the other units. Long rushes facilitate an advance, and quickly place a skirmish line close to the enemy's position, where its fire will have more effect. An attacking line suffers less from casualties at short ranges than it does at mid range.

Every advantage should be taken to utilize the cover available. The best kind of cover is that which, while it masks the skirmishers from the sight and fire of the enemy, affords favorable conditions for firing and for readily advancing. In order to allow men to regain their wind, or should the fire of the enemy be so effective as to prevent a further advance without reinforcement, advantage may be taken to lie close in cover, or hasty fire trenches may be thrown up in order to allow the line to maintain its position. "To go back under fire is to die."

When a platoon is firing, all noncommissioned officers watch every opportunity to make the fire more effective. The platoon guide should constantly watch the men to see that they do not become excited, fire too hastily or without aim, that their sights are set at the correct range, that they are obviously firing at the designated target, and that they assume steady firing positions and take advantage of cover. In performing these duties it may be necessary for the guides to be constantly crawling along the line. A corporal in like manner supervises his squad, firing with it when he is not actively engaged in controlling it.

Bayonets are fixed preparatory to a charge. This command is usually given by the bugle. Only one or two men in each squad should fix their bayonets at the same time, in order that there may be no marked pause or diminution in the fire at this critical stage of the engagement.

In order to be effective in combat, the platoon must be thoroughly

trained to work as a team. Each noncommissioned officer must be conversant with the signals and commands and the proper methods for instantly putting into effect the orders of his platoon commander. Each private must be trained until he instinctively does the right thing in each phase of the action.

### SECTION 3. PATROLLING.

The designation of a patrol indicates the nature of the duty for which it is detailed, as, for example, visiting, reconnoitering, exploring, flanking, combat, harassing, pursuing, etc. An Infantry patrol consists, as a rule, of from 3 to 16 men.

Reconnoitering patrols are habitually small and seek safety in concealment or flight, fighting only when their mission demands it. The most skillful reconnaissance is where patrols accomplish their mission and return without being discovered by the enemy. When resistance is expected stronger detachments are required. These cover themselves with small patrols of two to four men, the remainder acting as support.

The commander determines the number and strength of patrols and when they are to be sent out. It is a cardinal principle to send out patrols of such strength only as will accomplish the object.

The officer sending out the patrol verifies the detail, designates a second in command, and gives the necessary instruction. The orders or instructions for a patrol, or for any detachment going on reconnaissance, must state clearly where the enemy is or is supposed to be, what information is desired, what features are of special importance, the general direction to be followed, whether friendly patrols are liable to be encountered, and where messages are to be sent or the patrol is to report. Important and comprehensive instructions should be in writing, but precautions against capture of papers must be taken. An officer sending out a patrol must be certain that his orders are understood. Detailed instructions are, as a rule, avoided. When necessary the time of return is stated.

The patrol leader should be selected with care. He should have good judgment, courage, be able to read maps, make sketches, and send clear and concise messages. In addition to his ordinary equipment, he should have a map of the country, a watch, field glass, compass, whistle, message blanks, and pencils.

The leader of a patrol should carefully inspect it before starting out and see that each member is in good physical condition, has serviceable shoes, a full canteen, one ration, a first-aid packet, and that his rifle and ammunition are in good condition. He will see that the equipment is arranged so as not to rattle; that nothing bright is exposed so as to glitter in the sunlight; that nothing is taken along that will give information to the enemy should any member fall into his hands, as, for example, copies of orders, maps with position of troops marked thereon, letters, newspapers, or collar ornaments. Blanket rolls should generally be left behind, in order that the patrol may travel as light as possible.

The leader then gives his patrol information and instructions. These embrace instructions from higher authority; his detailed plans; information of the country and enemy; the countersign, if any; the point where the patrol will assemble if scattered. He will see that the men understand the prescribed signals.

It must always be remembered that it makes no difference how valuable may be the information that the patrol gets, it is worthless if not sent back in time to be of service. Herein is where most patrols fail. This applies particularly to the information obtained by patrols acting as a point or flankers of advance, rear, and flank guards. Whenever the patrol gets any information, the leader must think whether the commanding officer would change his plans or issue new orders if he had the information. If he would, the information should be sent back at once. If the distance is great or the inhabitants are hostile, it is well to send two men with the message. These men should not travel side by side, but as a patrol of two men. If the information is very important, and the danger of capture is considerable, the message should be sent by two parties, each traveling by a different route.

A message from a patrol should always show (a) the place from which it is sent; (b) the time it is sent (date, hour, and minute); (c) to whom it is sent; (d) the message itself; (e) what the patrol intends doing after sending the message; (f) the name of the sender. Under (d) care must be taken to separate what has actually been seen by the patrol from information received from other sources. Care must also be taken not to exaggerate what is seen, but to report only the exact facts.

In their conduct patrols exercise the greatest vigilance to prevent discovery. No formal formation is or should be prescribed. Under the leader's guidance it moves so as to guard against surprise, usually with point and flankers. To extend the sphere of its observation, still smaller patrols (one or two men) may be sent out for short distances, communication with the leader being maintained by signals. Whatever the formation adopted, it should favor the escape of at least one man in case of surprise.

In patrols of two to five men the commander generally leads. In this formation few signals are necessary, the men simply regulating their movements by his.

In questioning civilians caution is observed not to disclose information that may be of value to the enemy. Strangers are not allowed to precede the patrol. Patrol leaders are authorized to seize telegrams and mail matter, and to arrest individuals, reporting the facts as soon as possible.

Patrols should observe everything for signs of the enemy. Even apparent trifles may be of great value. The finding of a collar ornament showing a man's regiment may enable the chief of staff to determine that the enemy has been reinforced.

Patrols should not travel on the main roads if they can observe them and at the same time make the necessary progress by moving some distance to the side of the roads.

Unless in case of attack or of great personal danger, no member



of the patrol should fire on hostile troops without orders from the patrol leader. When sent out to gain information, patrols should avoid fighting unless it is absolutely necessary in order to carry out their orders.

Villages and inclosures involving danger of surprise are entered with precaution, and for brief periods only. Halts are made at points affording good view, and the country is studied in all directions, landmarks to the rear being impressed on the minds of the men so that the way back can be readily found; the leader consults his map and locates himself thereon.

When a patrol is scattered it reassembles at some place previously selected; if checked in one direction, it takes another; if cut off, it returns by a detour or forces its way through. As a last resort, it scatters so that at least one man may return with information. Patrols nearing their own lines should march at a walk unless pressed by the enemy.

Occasionally it is advisable for the leader to conceal his patrol and continue the reconnoissance with one or two companions.

Patrols far from their commands or in contact with the enemy often remain out overnight. In such cases they seek a place of concealment, proceeding thereto after nightfall or under cover.

When the enemy is encountered it is very necessary to locate his main force. Information is particularly desired of his strength, whether he has infantry, cavalry, and artillery, the route and direction of his march, or the location of his camp and line of outposts.

Dust clouds indicate moving bodies. Infantry raises a low, thick cloud; cavalry a high thin cloud; artillery and wagons a broken cloud. The kind of troops, direction of march, and approximate strength may thus sometimes be roughly estimated. If from some position a body of troops can be seen marching along in column, the exact time in minutes and seconds it requires for them to pass a certain point should be noted, together with the formation they are in, thus: Infantry, column of squads, three minutes and twelve seconds; cavalry, columns of twos at a trot, one minute and twenty seconds; wagons, four-mule, five minutes. From this information the strength can be determined by the following rule:

Assuming that infantry in column of squads occupy half a yard per man, cavalry in column of fours 1 yard per man, and artillery and wagons in single column 20 yards per gun, caisson, or wagon, a given point would be passed in one minute by about--

175 infantry.

110 cavalry at a walk.

200 cavalry at a trot.

5 guns, caissons, or wagons.

For troops in column of twos, take one-half of the above estimate.

Patrols should always observe the country marched over, with a view to making a report on the same. The following information is always of value:

ROADS.--Direction; kind, whether dirt, gravel, macadam, etc.; width, whether suitable for column of squads, etc.; border, whether fenced with stone, barbed, wire, rails, etc.; steepness in crossing hills and valleys; where they pass through defiles and along commanding heights. etc.; crossroads.

SURROUNDING COUNTRY.--Whether generally open and passable for infantry, cavalry, and artillery, or whether broken and impassable, due to fences, woods, crops, ravines, etc.

RAILROADS.--Single or double track, narrow or broad gauge, tunnels, bridges, cuts, direction, stations, etc.

BRIDGES.--Material, wood, stone, steel, etc.: length and breadth; number and kind of piers or supports.

RIVERS.--Direction; width, depth; kind of bottom, such as mud, sand, rocky, etc.: banks, steep or gentle, open or wooded; rapidity of current; variations in depth at different times as indicated by driftwood and high-water marks; islands; heights in vicinity commanding streams.

WOODS.--Extent and shape; kind of trees; free from underbrush or not; clearings, roads, swamps, ravines, etc.

TELEGRAPH LINES.--Number of wires, along roads or railroads, stations, etc.

VILLAGES.--Size, kind of houses, nature of streets, means of defense, etc.

HILLS AND RIDGES.--Whether slopes are gentle or steep; whether top is narrow or wide; whether ground is broken or smooth, wooded or clear; whether difficult or easy to cross, etc.; whether commanded by other hills.

DEFILES.--Their direction, length, and width; whether surrounding heights are passable for infantry and artillery; kind of country at each opening of the defile, etc.

RAVINES, DITCHES, ETC.--Width and depth; banks, whether passable for infantry, cavalry, and wagons; whether suitable for trenches, or for movement of troops therein, etc.

In general, every soldier should be constantly on the lookout to obtain information that might be of some military value. Remember that information of the enemy and of the country is worthless unless made known to the proper officials in time to be of use.

Every soldier should be able to find his way in a strange country; should know how to use a compass; should know how to locate the North Star; should be able to travel across country, keeping a given direction, both by day and by night, and by observing landmarks he should be able to return to the starting point either over the same route or by a more circuitous one. This can easily be learned by a little practice.

It adds a great deal to the value of a soldier if he knows how

to use a map to find his way. If he knows how to make a rough sketch of the country, showing the position of roads, streams, woods, railroads, bridges, houses, villages, fields, fences, hills, etc., he has added to his value as a soldier very much, indeed, because a rough sketch of a country will give more and better information at a glance than can be obtained by reading many pages of written description.

PATROLLING is one of the most important duties a soldier can learn. Any enlisted man who understands thoroughly his duties as a member of a patrol will understand also most of his duties when with advance or rear guards or when on outpost duty. Patrolling can not be learned merely by reading books nor by work indoors. Thoroughness comes only by actually going out in the country and acting as a patrol.

In carrying out this idea the following scheme is recommended:

Let four or more men and a noncommissioned officer act as a patrol. They assemble at a certain time, at a convenient point on some country road. An officer, whom we will call Captain A, acts as the director; the noncommissioned officer, whom we will call Sergeant B, acts as patrol leader; and the others (Privates C, D, E, etc.) act as members of Sergeant B's patrol.

Assume that the company (battalion, etc.) has just made camp in this vicinity and find that the inhabitants are friendly (or hostile).

Captain A indicates to the rest of the men where the camp is situated and points out where the various sentinels are posted. (This in itself affords an opportunity for much discussion and for teaching many valuable lessons.)

Captain A then calls up Sergeant B and tells him--

(a) Just what information Captain A has of the enemy, and also any information of the country or of friendly troops in the vicinity that might be of service to Sergeant B.

(b) How many men he shall take for the patrol (this is another problem for Captain A to solve). Any men present not used as part of the patrol go along with Captain A as observers.

(c) How far he shall go and what country he shall cover with the patrol.

(d) Just what information it is particularly desired he shall obtain.

(e) Where he shall send his messages and when he shall return.

Example 1:

"Sergeant B, it has just been reported to me that a company of hostile infantry was in camp last night at X, about 5 miles from here on this road. Take 5 men and proceed toward X and find out whether the enemy is still there, and if not, when he left and where he went. Send messages to me here, and return by 8 o'clock

this evening."

Example 2:

"Sergeant B, I think I heard the firing of field guns over in that direction a short while ago. Take 6 men and proceed to that high hill you see over there about 4 miles away. Send a message to me here when you reach there. You may go farther if you then think it advisable, but return before daylight. I desire particularly to know if there are any hostile troops in this vicinity, especially artillery. I shall send Sergeant X with 3 men to observe the country from that hill you see over there farther to the south. He will remain there till dark. Send messages to me here. If the company is not here on your return you will find a note for you underneath this rail."

Example 3:

"Sergeant B, this friendly country boy has just reported that four hostile cavalymen stopped about half an hour ago at his father's house, which he says is about 2 miles up this road. One of the men seemed to be very sick. You will select eight men from your section and endeavor to capture these men. If they have disappeared you will reconnoiter in that vicinity until dark. This boy will accompany you as a guide. I desire particularly to learn the position, strength, and composition of any hostile troops in this vicinity. Send reports to me here. Return before daylight."

Example 4:

"Sergeant B, here is a map of the country in this vicinity on a scale of 1 inch to the mile. Here is where we are camped [indicating position on map]. I have just learned that foraging parties of the enemy are collecting supplies over here at X [indicating point on map], which is 10 miles off in that direction [pointing across country toward X]. It is reported that this bridge over this stream [indicating same on the map] which is about 3 miles down this road [indicating road and direction on the ground], has been destroyed. You will take three men from your platoon and verify this report. You will also reconnoiter the stream for a distance of 1 mile both above and below the bridge for fords suitable for infantry. Messages will reach me here. Return by 8 o'clock to-night."

Sergeant B then inspects his men and gives them their instructions. The patrol is then formed and moves out exactly as it would under actual war conditions.

Captain A may halt (and assemble if desirable) the patrol at intervals in order to discuss the formation used and the movement of any members of the patrol, their route, use of cover, etc., with the reasons therefor, and compare the same with suggested modifications of the formations, etc. After the discussion, the patrol is again set in motion. Captain A may accompany any part of the patrol. From time to time he presents certain situations to some member of the patrol, being very careful to assume only such situations as might naturally occur.

Thus, take Example 1:

Captain A is with Sergeant B, who, with Private C, is marching along the road as the point of the patrol. The other members of the patrol are distributed to suit the nature of the country over which the patrol is marching. The point has just reached a ridge beyond which the country is open and cultivated for about half a mile. Beyond this the road enters a woods. Captain A now says: "Sergeant B, from this point you see two soldiers in khaki on the road there at the beginning of that cornfield about 200 yards from the woods [points out same]. They are moving in this direction. About 200 yards to the right of these find somewhat farther to their rear you see two more men moving along that rail fence."

Sergeant B now does exactly as he would do in actual war. How does he signal to his patrol? Does he assemble his men? If so, how and where? Does he send a message back to camp; and if so, by whom, and is it written or verbal? (If written, Sergeant B actually writes it and delivers it to Private ----, with the necessary instructions. If verbal, it is actually given to Private ---- with instructions.) Captain A must in this case make notes of what the message was. In either case, Private ---- ceases to be a member of the patrol and joins Captain A as an observer. He should, however, at some later time be required to repeat his message to Captain A, on the assumption that he had reached camp with the same. The message, whether oral or written, should be thoroughly analyzed and discussed. Was it proper to send a message at this time? Does Sergeant B intend to remain in observation; if so, how long? (Captain A can give such information from time to time concerning the hostile patrol as Sergeant B might reasonably be supposed to learn in view of his dispositions. In order that Captain A may present natural assumptions, it is very essential that in his own mind he should, at the outset, assume a situation for the hostile forces and that he should consider himself as in command of all hostile troops. In this particular case he should assume himself to be in command of the hostile patrol, acting under certain specified orders similar to examples given, and he should conduct this patrol in his own mind in accordance with these orders, giving Sergeant B only such information as he might reasonably be expected to obtain in view of whatever action Sergeant B takes.) Will Sergeant B attempt to capture this patrol? If so, how? Will he avoid fighting and attempt to pass it unobserved; and if so, how and why?

In this manner the exercise is continued. Care must be taken not to have the patrol leader or members state what they would do, but they must actually do it. Explanations and discussions may take place later.

In a similar manner the director may inform Sergeant B (or any member of the patrol) that this hostile patrol is followed by a squad (on the assumption that it is the leading unit of an advance guard), and the exercise is then continued along these lines.

The following are examples of assumption that might be made and carried out:

- (a) That the patrol is unexpectedly fired upon.
- (b) That one or more of the patrol is wounded.
- (c) That a prisoner is captured (let an observer act as prisoner).
- (d) That a friendly inhabitant gives certain information.
- (e) That a dust cloud is seen in the distance over the trees.
- (f) That a column of troops can be seen marching along a distant road.
- (g) That an abandoned camp is discovered and certain signs noted.
- (h) That the patrol is attacked by a superior force and compelled to scatter.

There is practically no end to the number of reasonable assumptions that may be made.

Company officers may use this method of instructing non-commissioned officers in patrolling, advance and rear guard duty, outposts, and in squad leading, in writing messages, in selecting positions for trenches, and in constructing and concealing same. This form of instruction is called "a tactical walk." It is very greatly used by all foreign armies. Exercises along the same general lines are conducted for field and staff officers and even general officers, and are called "tactical rides" and "strategical rides," depending upon their object.

After some proficiency has been attained as a result of these tactical walks, the greatest interest and enthusiasm can be awakened in this work by sending out two patrols the same day, one to operate against the other. Each should wear a distinctive uniform. The strength of each patrol, its starting point, route to be followed, and its orders should all be unknown to the other patrol. If blank ammunition is used, an officer should supervise its issue and carefully inspect to see that no man carries any ball cartridges. One umpire should accompany the commander of each party. Each umpire should be fully informed of the strength, orders, and route of both patrols. He must, however, carefully avoid giving suggestions or offering any information to the commander. Observers in these small maneuver problems are generally in the way and none should be permitted to be along.

These small maneuvers may be gradually developed by having one side establish an outpost or fight a delaying action, etc.

It should always be remembered that there is no hard and fast rule prescribing how a patrol of three, five, or any number of men should march. The same is equally true of advance guards, and applies also to the establishment of outposts. It is simply a question of common sense based on military knowledge. Don't try to remember any diagrams in a book. Think only of what you have been ordered to do and how best you can handle your men to accomplish your mission, and at the same time save the men

from any unnecessary hardships. Never use two or more men to do what one can do just as well, and don't let your men get beyond your control.

In addition to the signals prescribed in the Infantry Drill Regulations, the following should be clearly understood by the members of a patrol.

Enemy in sight in small numbers, hold rifle above the head horizontally; enemy in force, same proceeding, raising and lowering the rifle several times; take cover, a downward motion of the hand.

Other signals may be agreed upon, but they must be familiar to the men; complicated signals are avoided. Signals must be used cautiously so as not to convey information to the enemy.

#### SECTION 4. ADVANCE GUARDS.

The advance guard is a detachment of the main body which precedes and covers it on the march. The primary duty of an advance guard is to insure the safe and uninterrupted march of the main body. Specifically its duties are:

1. To guard against surprise and furnish information by reconnoitering.
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 the steady march of the column.

The strength of the advance guard will vary with the proximity of the enemy and character of the country; for a regiment it will generally consist of from two companies to a battalion, for a battalion of one company; for a company of from a squad to a platoon. The advance guard commander is responsible for the proper performance of the duties with which it is charged and for its conduct and formation.

The advance guard provides for its security and gains information by throwing out to the front and flanks smaller bodies. Each part must keep in touch with the unit from which it is sent out. An advance guard is generally divided into a reserve and a support; where it consists of less than a battalion, the reserve is generally omitted.

The support sends forward an advance party, which, in turn, sends forward a point. In small advance guards the point precedes the

advance party about 150 yards, the advance party the support about 300 yards, and the support the main body about 400 yards. Where advance guards are large enough to require a reserve these distances are increased about one-fourth, the reserve following the support, the main body following the reserve at a distance varying from 500 to 800 yards.

Unless the country to the flanks is distinctly visible from the roads for a distance of what may be said to be effective rifle fire, approximately 1,000 yards, flanking patrols of two or three men each should be sent out from the advance party, and, when in proximity of the enemy, in addition from the support. When the nature of the country is such that patrols may move across country without undue effort and fatigue these patrols should march at a distance of from 200 to 300 yards from the flank of the body from which detached. For the examination of any object, such as a wood, buildings, etc., examining patrols should be sent out from the main body. The usual method of protecting the flanks, particularly when the country is at all cut up or difficult, is to send out patrols from time to time to some point from which a good outlook can be obtained, or which will afford protection to the enemy. These patrols remain in observation until the advance guard has passed, when they rejoin the nearest subdivision, as quickly as possible working their way to that to which they belong during the halts. By sending out a succession of small patrols in this manner the flanks are protected. Should the advance party become depleted, it must be reenforced from the support.

A battalion acting as advance guard would have two companies in reserve and two in support. The support would send forward as advance party two platoons, the advance party in turn sending forward as point one squad. A company acting as advance guard would have no reserve and would send forward as advance party one platoon.

Cases may arise when the best means of covering the head and flanks of the column will be by a line of skirmishers extended at intervals of from 5 to 50 yards, as, for instance, when passing through high corn, underbrush, etc.

It must always be remembered that the principal duty of the advance guard is to secure the uninterrupted march of the main body. If the point is fired upon, it should at once deploy and endeavor to advance fighting. The flankers should assist in this and endeavor to locate the enemy's flank should there be such resistance that advance was impossible. Each succeeding body should march promptly forward, and in turn be placed in action, with the idea of clearing the way for the advance of the main body. Should this be impossible, the commander of the entire body must determine what measures he will take.

## SECTION 5. REAR GUARDS.

A rear guard is a detachment detailed to protect the main body from attack in rear. In a retreat it checks pursuit and enables the main body to increase the distance between it and the enemy and to re-form if disorganized. The general formation is that of an advance guard reversed.



Its commander should take advantage of every favorable opportunity to delay the pursuers by obstructing the road or by taking up specially favorable positions from which to force the enemy to deploy. In this latter case care must be taken not to become so closely engaged as to render withdrawal unnecessarily difficult. The position taken should be selected with reference to ease of withdrawal and ability to bring the enemy under fire at long ranges.

## SECTION 6. FLANK GUARDS.

A flank guard is a detachment detailed to cover the flank of a column marching past, or across the front of, an enemy. It may be placed in position to protect the passage, or it may be so marched as to cover the passage. The object of the flank guard is to hold the enemy in check long enough to enable the main body to pass, or, like the advance guard, to enable the main body to deploy. Like all other detachments, it should be no larger than is necessary, and should not be detailed except when its protection is required.

When a flank guard consists of a regiment or less, its distance from the main body should not exceed a mile and a half. Practicable communication must exist between it and the main body. The flank guard is marched as a separate command; that is, with advance or rear guards, or both, as circumstances demand, and with patrolling on the exposed flank.

## SECTION 7. OUTPOSTS.

Troops not on the march provide for their security by outposts. The general duties of an outpost are reconnoissance, observation, and resistance.

The specific duties are:

1. To protect the main body, so that the troops may rest undisturbed.
2. In case of attack, to check the enemy long enough to enable the main body to make the necessary dispositions.

During an advance the outposts are usually detailed from the advance guard. During the retreat the outpost for the night usually forms the rear guard the next day. If the command remains in bivouac, the new outpost generally goes on duty at daybreak.

The vigilance of outpost troops must be unceasing, but they should avoid bringing on combats or unnecessarily alarming the command. Firing disturbs the rest of troops and, if frequently indulged in, ceases to be a warning.

No trumpet signals except "to arms" or "to horse" are sounded, and all unnecessary noises must be avoided.

As a rule an outpost will not exceed one-sixth the strength of a command. For a single company a few sentinels and patrols will

suffice; for a larger command a more elaborate system must be devised. The troops composing the outpost are generally divided into a reserve and several supports.

At a proper distance in front of the camp of the main body a line which offers a good defensive position is selected. This is called the LINE OF RESISTANCE, and should be so located that an advancing enemy will be held in check beyond effective rifle range in case of a small force, artillery range in case of a large force, of the main body until the latter can deploy. The reserve is stationed at some point in rear of this line, where it can be moved quickly to reinforce any point as needed. The line of resistance is divided into sections, the limits of each of which are clearly defined. A support is assigned to each section, which are numbered from right to left, and occupies a position on or near the line, having special regard to covering avenues of approach. The position occupied should always be intrenched. The reserve and supports proceed to their respective positions by the shortest routes, providing for their own protection by sending out covering detachments.

Generally speaking, about one-half the Infantry of the advance guard should be in the supports. As each support arrives at its position it sends out observation groups, varying in size from four men to a platoon, to watch the country in the direction of the enemy. These groups are called outguards. For convenience they are classified as pickets, sentry squads, and cossack posts, and should be sufficient in number to cover the front of the section occupied by the support and connect with the neighboring supports.

A picket is a group consisting of two or more squads, ordinarily not exceeding half a company, posted in the line of outposts to cover a given sector. It furnishes patrols and one or more 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 (eight men) 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.

As a rule not more than one-third of the support should be on outguard duty. As soon as they are sent out to their positions the support commander selects a defensive position on the line of resistance; gives instruction for intrenching same; establishes a sentinel to watch for and transmit signals from outguards; sends out patrols to reconnoiter the country to the front of his section and, if on the flank of the line, the flank; and then proceeds to make a careful reconnoissance of the section assigned him, rectifying the position of outguards if necessary, seeing that they understand their instructions in case of attack or when strangers approach their posts, and pointing out their lines of retreat in case they are compelled to fall back on the

support.

When the outguards are established, the members of the support may stack arms and remove equipment except cartridge belts. No fires will be built or smoking permitted unless specially authorized, or no loud talking or other noise. All patrolling to the front will be done, as a rule, from the support. The support commander should locate the position of the adjacent supports and make arrangements with the commanders for the joint defense of the line of resistance. At night all roads and trails should be carefully covered and the country to the front and between adjacent outguards well patrolled.

The line occupied by the outguards is called the LINE OF OBSERVATION. Outguards move to their positions providing for their own protection and so as to conceal the movement from the enemy. These positions are intrenched and are numbered from right to left in each support.

The duties of the outguard are to observe the enemy, to guard the outpost from surprise, and to make a preliminary resistance to the enemy's advance. The strength of the outguard will vary according to its object. When an important road which at night will afford a line of advance, or a bridge is to be covered, or when several posts are established from an outguard it should be of considerable strength, two squads or a platoon. When mere observation and alarm are all that is required four men will suffice. A squad is a good unit to use as an outguard; this will allow one double sentry post of three reliefs and one man in addition to the commander, who may be used for messenger service. The outguard should be carefully concealed.

The utmost quiet should be observed, and there should be no cooking or smoking. The intervals between outguards will depend upon the situation and the terrain. The line of observation is not necessarily continuous, but all avenues of approach must be carefully guarded. The distance of the outguard from the support likewise is governed by the terrain, but in general may be said to be from 300 to 400 yards. In thick country or at night outguards patrol along the line of observation between posts. Communication between outguards and the support is by signal and messenger, in special cases by wire. Members of the outguard retain possession of their weapons and do not remove their equipment.

Sentinels from the outguard are posted so as to avoid observation, but so that they may have a clear lookout and be able to see, if possible, by day, the sentinels of the adjacent outguards. Double sentinels are always posted near enough to each other to communicate easily in ordinary voice. Sentinels are generally on post two hours out of six. For every sentinel and every patrol there should be three reliefs, and outguards should be of a strength sufficient to allow this. The position of a sentinel should be selected with reference to observation. It may be advantageous to place a sentinel in a tree. Sentinels furnished by cossack posts or sentry squads are kept near their group. Those furnished by their pickets may be kept as far as 100 yards away.

Reliefs, visiting patrols, and inspecting officers approach sentinels from the rear.

A sentinel on the line of observation should always have the following instructions: The names of villages, streams, and prominent features in sight and where the roads lead. The number (if any) of his post, and the number of his and of the adjoining outguards; the position of the support; the line of retreat to be followed if the outguard is compelled to fall back; the position of advance detachments and whether friendly patrols are operating in front; to watch to the front and flanks without intermission and devote special attention to unusual or suspicious occurrences; if he sees indications of the enemy, to at once notify his immediate superior; in case of imminent danger, or when an attack is made, to give the alarm by firing rapidly; by day to pass in or out officers, noncommissioned officers, and detachments recognized as part of the outposts, and officers known to have authority to do so; to detain all others and notify the outguard commander; at night, when persons approach his post, to come to a ready, halt them, and notify the outguard commander; the latter challenges, ascertains their identity, and acts accordingly. When individuals fail to halt, or otherwise disobey, to fire upon them after a second warning, or sooner if they attempt to attack or escape; to require deserters to lay down their arms, and remain until a patrol is sent out to bring them in; to order deserters pursued by the enemy to drop their arms and to give an alarm; if they fail to obey they are fired upon; to require bearers of flags of truce and their escorts to halt and to face outward; to permit them to hold no conversation and to see that they are then blindfolded and disposed of in accordance with instructions from the support commander; if they fail to obey to fire upon them; at night, to remain practically stationary, moving about for purposes of observation only; not to sit or lie down unless authorized to do so; in the daytime, to make use of natural or artificial cover and assume such positions as to give him the best field of view; to inform passing patrols of what he has seen; to carry his weapon habitually loaded and locked and at will.

Outpost patrols are divided into those which operate beyond the lines and those whose duty lies principally within the lines. The former, called reconnoitering patrols, scout in the direction of the enemy; the latter, called visiting patrols, maintain communication between the parts of the outpost and supervise the performance of duty on the line of observation. Reconnaissance should be continuous. Though scouts and detachments of cavalry remain in contact with the enemy, or at least push forward to a considerable distance, more detailed reconnoissance by infantry patrols in the foreground must not be neglected. Reconnoitering patrols are composed of at least two men and a skillful leader, who, in important cases, would be an officer. They obtain information, ascertain the presence of the enemy, or discover his approach. All patrols, when they cross the line of observation, inform the nearest sentinel of the direction in which they are to advance; on their return they similarly report what they have seen of the enemy; signals are agreed upon so that they can be recognized when returning. Any ground near the line of observation which might afford cover for troops, or for scouts or spies, and the approach to which can not be observed by sentinels, is searched frequently by patrols. Definite information concerning the enemy is reported at once. Patrols fire only in self-defense or to give the alarm. Supports on the flank of an outpost position

patrol the country on the exposed flank. Visiting patrols and reliefs should not march in the open, and thereby expose the position of sentinels.

During a march in the vicinity of the enemy when halts are made, special measures for protection are taken. When the halt is for a short period, less than half an hour, the advance party and support remain at ease, the point and flankers move to positions from which they can obtain a good lookout, and additional patrols may be sent out from advance parties and supports. Where the halt is for a period exceeding half an hour a MARCH OUTPOST should be formed. With an advance guard consisting of a battalion, 2 companies in the reserve, 2 in the support, the latter having as advance party one-half a company, a typical march outpost would be formed as follows: The advance party would send one platoon, four or five hundred yards to the right as outguard No. 1, the remaining platoon constituting outguard No. 2. A platoon from the head of the support would be sent a similar distance to the left as outguard No. 3. The balance of the support would constitute the support of the march outpost, the reserve of the advance guard acting as reserve. On signal being given to resume the march, the various units would close in, and as soon as the advance party had assembled the march would be taken up.

## SECTION 8. RIFLE TRENCHES.

Soldiers should remember that only by acting vigorously on the offensive can an army hope to gain the victory. The defensive may delay or stop the enemy, but it can never destroy him. "Troops dig because they are forced to halt; they do not halt to dig."

Trenches will frequently be constructed, without being used, and soldiers must expect this as a feature of campaigning and accept cheerfully what at times may appear as unnecessary labor.

When intrenching under fire cover is first secured in the lying position, each man scooping out a depression for his body and throwing the earth to the front. In this position no excavation can be conveniently made for the legs, but if time permits the original excavation is enlarged and deepened until it is possible to assume a sitting position, with the legs crossed and the shoulder to the parapet. In such a position a man presents a smaller target to shrapnel bullets than in the lying trench and can fire more comfortably and with less exposure than in the kneeling trench. From the sitting position the excavation may be continued until a standing trench is secured.

The accompanying plate shows some of the more common forms of trenches in profile. Figure 1 is the simplest form of standing trench. Figure 2 shows the same trench deepened in rear, so as to allow men to walk along in the rear (deeper) portion of the trench without exposing their heads above the parapet. Figure 3 shows a cover and firing trench, with a chamber in which men can find shelter when under heavy artillery fire. When the excavated earth is easily removed figure 4 shows a good profile. The enemy's infantry, as well as his artillery, will generally have great difficulty in seeing this type of trench.

The mound or bank of earth thrown up for shelter in front of a trench is called the PARAPET. It should be at least 30 inches thick on top, and the front should slope gradually, as shown in the plate, so that shells will tend to glance from it, rather than penetrate and explode. The top should be covered with sod, grass, or leaves, so as to hide the newly turned earth, which could be easily seen and aimed at by the enemy. There should be no rocks, loose stones, or pebbles on top, which might be struck by the bullets, splintering and flying, thus adding greatly to the number of dangerous projectiles, and often deflecting bullets downward into the trench. A stone wall is a very dangerous thing to be behind in a fight.

The portion of the ground in rear of the parapet and between the parapet and the trench not covered by the parapet is to rest the elbows on when firing, the rifle being rested on top of the parapet.

To obtain head cover in a trench fill a gunny sack or other bag with sand or soil and place it on top of the parapet, aiming around the right-hand side of it, or dig a small lateral trench in the parapet large enough to hold the rifle. Roof it over with boards, small logs, or brush, and heap dirt on top, aiming through the small trench or resulting loophole.

Figure 5 shows the plan of a section of a rifle trench.[7] Between the portions occupied by each squad there is often placed a mound of earth as high as the top of the parapet and projecting back into the trench. This is called a TRAVERSE and protects the occupants of the trench from fire from a flank. Bullets from this direction hit a traverse, instead of flying down into the trench and wounding several men.

[Footnote 7: The traverse should be at least 6 feet wide instead of 3 feet, as shown in figure 5.]

Trenches are seldom continuous, but are made in sections placed at the most advantageous points, as shown in figure 6. A company or battalion may occupy a single section. The firing trenches have cover trenches in rear of them, where the supports can rest undisturbed by the hostile fire until they are needed in the firing trench to repel a serious assault or to take part in a counter attack. Passages consisting of deep communicating trenches facilitate passage from the cover trenches to the firing trenches when under fire. These communicating trenches are usually zigzag or traversed to prevent their being swept by hostile fire.

When troops are likely to remain in trenches for a considerable time drainage should be arranged for, and latrines and dressing stations should be constructed in trenches. Water should be brought into the trenches and holes excavated in the front wall of the trench for extra ammunition.

In digging trenches men usually work in reliefs, one relief digging while the others rest, the proportion of shovelers to pick men being about 3 to 1. If a plow can be obtained to turn the sod, it will greatly facilitate the initial work of digging.

[Illustration: Plate V.]

## CHAPTER VII.

### MARCHING AND CAMPING.

#### SECTION 1. BREAKING CAMP AND PREPARATION FOR A MARCH.

##### THE EVENING BEFORE THE MARCH.

When a command learns that it is to make a march on the following day, presumably starting early in the morning, certain details should be attended to the evening before.

All men should fill their canteens as there will probably be no time for this in the morning.

The mess sergeant should find out whether lunch or the reserve ration will be carried on the march and should attend to these details in the evening in order that the issue can be made promptly in the morning.

The commander of the guard should be given a memorandum as to what time to awaken the cooks and where their tent is. The member of the guard who does this should awaken them without noise so as not to disturb the rest of the remainder of the command.

The cooks should be instructed as to what time breakfast is to be served and what time to awaken the first sergeant.

The cooks or cook's police must cut and split all firewood for the morning before 9 p. m. There must be no chopping, talking, or rattling of pans before reveille which will disturb the rest of the command. This applies to every morning in camp.

##### THE MORNING OF THE MARCH.

Cooks arise when called by the guard and start the preparation of breakfast without noise. The first sergeant is usually awakened by one of the cooks about half an hour before reveille in order that he may complete his toilet and breakfast early and be able to devote all his time to supervising the details of the morning's work. If the officers desire to be awakened before reveille they will notify the first sergeant accordingly.

At first call the men turn out, perform their toilets, strike their shelter tents (unless it has been directed to await the sounding of the general for this), and make up their packs.

At the sounding of assembly immediately after reveille each man must be in his proper place in ranks. This assembly is under arms. The first sergeant starts to call the roll or commands "Report" at the last note of assembly. Arms are stacked before the company is dismissed.

Breakfast is served to the company immediately after roll call. Immediately after breakfast each man will wash his mess kit in the hot water provided for that purpose at the kitchen and will at once pack the mess kit in his haversack.

The cooks will provide hot water for washing mess kits at the same time that breakfast is served.

Immediately after breakfast the company proceeds to the work of breaking camp and packing in accordance with a prearranged system similar to the following:

One squad assists the cooks in packing the kitchen.

One squad strikes and folds the officers' tents and brings them to the kitchen.

One squad fills in the sink. The sink should not be filled in earlier than is absolutely necessary.

One squad polices the camp within the company police limits.

One squad is available for possible details from regimental headquarters.

Officers and first sergeant supervise the work.

A permanent assignment of squads to these duties lightens the labor and decreases the time necessary for breaking camp. After the breaking of camp the entire company is used to police camp.

Men should not start from camp thirsty, but should drink all the water they want immediately after breakfast. All canteens should be filled before marching, one man in each squad being detailed to fill the canteens for his squad.

At assembly for the march the men fall in in rear or the stacks fully equipped for marching.

## SECTION 2. MARCHING.

The principal work of troops in the field consists of marching. Battles take place only at indefinite intervals, but marches are of daily occurrence. It is only by good marching that troops can arrive at a given point at a given time and in good condition for battle.

The rate of march depends greatly upon the condition of the roads and the weather, but the average rate for infantry is about 2-1/2 miles per hour. This allows for a rest of 10 minutes each hour. The total distance marched in a day depends not only on the rate of march, but upon the size of the command, large commands often covering only about 10 miles a day, while small commands easily cover double that distance.

In order to make the march with the greatest comfort and the least danger, it is necessary that each unit be kept well in hand. Each man is permitted and encouraged to make himself as



comfortable as possible at all times, excepting only that he must not interfere with the comfort of others or with the march of the column.

Infantry generally marches in column of squads, but on narrow roads or trails column of twos or files is used. The route step is habitually used when silence is not required. In large commands, in order that the column be kept in hand, it is very necessary that each man keep his place in ranks and follow his file leader at the prescribed distance. This is one of the best tests for determining the discipline and efficiency of troops. The equipment should be carefully adjusted before starting out, and any part that is not comfortable should be rearranged at the first opportunity. The rifle is carried at will, except that the muzzle must be pointed up so as not to interfere with the other men.

Under no circumstances will any man leave the ranks without permission from his company or higher commander. If the absence is to be for more than a short while, he must be given a pass showing his name, rank, and organization, and the reason he is permitted to be absent. If sick, it is better to wait by the roadside at some comfortable place for the arrival of the surgeon or the ambulance. In any case, the soldier keeps his rifle and equipment with him, if possible. Soldiers absent from their organization without a pass will be arrested and returned to their command for punishment.

Marches in hot weather are particularly trying. Green leaves or a damp cloth carried in the hat lessens the chance of sunstroke. The hat should have ventilators, and when not exposed to the direct rays of the sun it should be removed from the head. It is well to keep the clothing about the neck and throat open, and sometimes to turn up the shirt sleeves so as to leave the wrists free.

The canteen should always be filled before starting out. Use the water very sparingly. None at all should be drunk during the first three or four hours of the march. After that take only a few mouthfuls at a time and wash out the mouth and throat. Except possibly in very hot weather, one canteen of water should last for the entire day's march. Excessive water drinking on the march will play a man out very quickly. Old soldiers never drink when marching. A small pebble carried in the mouth keeps it moist and therefore reduces thirst. Or a small piece of chocolate may occasionally be eaten. Smoking is very depressing during a march.

Canteens will not be refilled on the march without authority from an officer, as the clearest water, whether from a well, spring, or running stream, may be very impure and the source of many camp diseases. If canteens are to be refilled, it should be done by order, and a detail is generally made for this purpose.

Entering upon private property without permission, or stealing fruit, etc., from gardens and orchards, is a serious military offense, as well as a violation of the civil laws.

When a cooked meal is carried, it should not be eaten until the proper time.

A command ordinarily marches for 50 minutes and halts for 10 minutes. The first halt in a day's march is for about 15 minutes, is made after about 30 minutes' marching, and is for the express purpose of allowing the men to relieve themselves. Men who wish to do this should attend to it at once and not wait until the command is almost ready to march again.

At every halt get all the rest possible and don't spend the time wandering around or standing about. Only green recruits do this. If the ground is dry, stretch out at full length, removing the pack or blanket roll and belt, and get in as comfortable position as possible. The next best way is to sit down with a good back rest against a tree or a fence or some other object. Never sit down or lie down, however, on wet or damp ground. Sit on your pack or blanket roll, or on anything else that is dry. At a halt it is very refreshing to adjust the underclothing.

### SECTION 3. MAKING CAMP.

On reaching the camp site the men should be allowed to fall out and rest as soon as the arms have been stacked and the shelter tents pitched. If the blanket rolls have been carried on the wagons, then the location of the front poles of the shelter tents should be marked before they are allowed to fall out. The men will not be allowed to relieve themselves until sinks are dug. Temporary sinks may be dug with intrenching tools, if carried. A guard should be placed over the water supply at once.

As soon as the shelter tents are pitched the company proceeds to the remainder of the camp work in accordance with a permanent assignment similar to the following:

One squad helps arrange the kitchen.

One squad pitches the officers' tents.

One squad digs the sink.

One squad procures wood and water.

One squad is held available for details from regimental headquarters.

The officers and first sergeant supervise the work.

The sinks are located by the commanding officer. The detail to dig them should wait until informed of the location. An officer should inspect the sink as soon as the detail reports it as completed.

After the camp has been put in order the first sergeant makes the details from roster for kitchen police and noncommissioned officer in charge of quarters for the next day and for such guard as may be ordered for that day.

The details called for by regimental headquarters for pitching the headquarters camp for the quartermaster, etc., should be reported to the adjutant without delay.

The cooks pitch their tent at that end of the company street nearest the kitchen. Space must be left for this tent if the cooks are not in ranks when the company pitches tents. Unless lunch has been carried or cooked during the march, the cooks should get to work on a hot meal as soon as possible. The kitchen police report at the kitchen as soon as their tent is pitched. Wood and water will be required at once.

Officers should avoid keeping the men unnecessarily under arms or on their feet after a hard day's march.

When the details of making camp have been completed, all men should at once care for their rifles and feet. (For details as to the care of the rifle see Chapter II Section 1, for the care of the feet see Chapter IV.)

#### SECTION 4. CAMP SERVICE AND DUTIES.

In camp "Reveille" is preceded by "First call," and a march played by the band or field music, and is followed immediately by "Assembly." If there is a reveille gun, it is fired at the first note of the march and is the signal for all to arise. The roll is called at the last notes of assembly after reveille. At this formation men should fall in in the proper uniform--rifle and belt, service hat, olive-drab flannel shirt, service breeches, leggings, and shoes. The regimental commander may prescribe that coats are to be worn and will prescribe the exact uniform for all drills, parades, and other formations, as well as for men going on pass.

Immediately after reveille roll call the sergeant next in rank to the first sergeant takes command of the company and deploys it for a general police of the camp within the limits assigned to the company. Men pick up all scraps of paper and rubbish of all kinds, depositing it in the company incinerator or place designated for the purpose. The police limits of each company are usually designated as extending from head to rear of camp within the space occupied by the company street, including the ground occupied by the tents of the company, no unassigned space being left between companies.

Immediately after breakfast men police their tents and raise walls of same. If the day is fair, all bedding should be spread on the tents for several hours' airing.

At sick call all men who are sick fall in and are marched to the regimental infirmary, under charge of the noncommissioned officer in charge of quarters. The noncommissioned officer takes with him the company sick report previously filled in and signed by the company commander. The surgeon examines all those reporting and indicates their status on the sick report. This status may be "Duty" (available for all duty), "Quarters" (patient to remain in tent or company street), and "Hospital" (patient to be sent to the hospital). The noncommissioned officer then returns to the company with all the men not marked "Hospital" and hands the sick report to the first sergeant.

At "Drill call" the company prepares for drill and falls in so that it will be completely formed at assembly, which is usually sounded 10 minutes after drill call. All men are required to attend drill except those excused by sick report and those specially excused from headquarters. The excused list should include in each company only the mess sergeant, the two cooks, one kitchen police, and men on regimental guard. During drill hours the guard to be excused should be limited to a small patrol to guard against fire and thieves in camp.

If the bedding has been aired, it should be taken in immediately after drill and placed in the tents neatly folded.

Some time during the morning, at a time designated by him, the company commander inspects the entire company camp. At this inspection the entire street should be policed, kitchen in order, and tents policed, as follows:

In permanent camp, when pyramidal, conical, or wall tents are used: Bedding folded neatly and placed on the head of the cot. (If bed sacks are used, they will be folded in three folds and the bedding placed on top.) Hats on top of the bedding. Shoes under foot of cot. Surplus kit bag at side of squad leader's cot. Equipment suspended neatly from a frame arranged around the tent pole. Rifles in rack constructed around the tent pole.

In shelter-tent camp: Bedding neatly folded and placed at rear of tent, ponchos underneath. Equipment arranged on the bedding. Rifles laid on bedding except when used as tent poles.

The regimental commander prescribes the exact scheme to be followed in the police of tents.

Should there be no parade, retreat roll call is held at the same hour. This roll call is under arms and is supervised by an officer of the company. After the roll call and at the sounding of "Retreat," the officer brings the company to parade rest and keeps it in this position during the sounding of this call. At the first note of the National Anthem ("The Star-Spangled Banner") or "To the Color" the company is brought to attention and so stands until the end of the playing. The officer then reports the result of the roll call to the adjutant or officer of the day, returns to the company, inspects the arms, and dismisses it.

At the sounding of "Call to quarters" all men will repair to their company street.

After taps has sounded all talking must cease and all lights must be extinguished, and so remain until first call for reveille.

In camp all enlisted men are prohibited from crossing the officers' street, or from visiting officers' tents unless actually engaged in some duty requiring them to do so, or sent for by an officer.

Men are not allowed to leave camp without a pass signed by the company commander and countersigned by the regimental adjutant. The first sergeant is sometimes allowed to give men permission to leave camp from retreat to taps.

The noncommissioned officer in charge of quarters, detailed for 24 hours goes on duty each day at reveille. He is responsible that the grounds around the company are kept in proper police; that no loud noise, disturbance, or disorder occurs in the company street; that men confined to the company street do not leave the same without proper authority. He reports men who are sick to the surgeon. He may be required to report all other details called for. He accompanies the captain in his daily inspection of the company. He will not leave the company street during his tour of duty except as provided above.

One or two privates are detailed daily as kitchen police. They go on duty at reveille. It is their duty to assist the cooks in the kitchen. They assist in the preparation of meals, wait on the table, wash dishes, procure water and wood, chop firewood, and keep the kitchen, mess tent, and surrounding ground policed. They are under the orders of the mess sergeant and the cooks.

Rifles need careful attention in camp. They should be cleaned and oiled daily, preferably just before retreat or parade. It is advisable for each man to have a canvas cover to keep off the dust and dampness. In a shelter-tent camp tie the rifle, muzzle up, to the pole of the tent, placing a chip of wood under the butt plate and an oily rag over (never inside) the muzzle.

Wet shoes should be filled with oats or dry sand, and set in a cool place to dry. Never dry them by a fire.

Uniforms need special care, as camp service is very hard on them. In a permanent camp every man should have two pair of breeches. The coat will seldom be worn except at parade or retreat. One pair of breeches and the coat should be kept neat, clean, and pressed for use on ceremonies, inspections, and when going on pass. Woolen uniforms may be cleaned and freed from spots by rubbing with a flannel rag saturated with gasoline. Cotton uniforms may be washed with water, soap, and a scrubbing brush, wrung out, and stretched, properly creased, on a flat wood surface in the sun to dry. Leggings can be similarly washed. Hats should be cleaned with gasoline, and dampened and ironed to restore their shape.

Enlisted men should be very careful to observe all the sanitary regulations of the camp. Flies are the greatest spreaders of camp disease. All fecal matter and food should be carefully guarded from them. In camps extreme precautions are taken to screen the sinks and kitchens from flies, and all enlisted men should cooperate in the effort to make these precautions successful. One fly carrying germs on his feet from the sinks to the food can start a serious and fatal epidemic in a camp. Defecating on the ground in the vicinity of camp or urinating in camp are extremely dangerous to the health of the command, and are serious military offenses. At night a urinal can is provided in each company street.

In a permanent camp cots or bed sacks are usually provided for the men to sleep on. In a shelter tent camp beds should be made of hay, grass, leaves, pine or spruce boughs, or pine needles, on top of which the poncho and blanket are spread, thus softening the ground and keeping the sleeper away from the cold and dampness. Neglect to prepare the bed when sleeping without cot or bed sack

means a loss of sleep, and may lead to colds, bowel disorders, and rheumatism.

In wet weather tents should be ditched, and in windy or cold weather dirt may be banked around them. A place for washing the person and clothes should be arranged for in each company street, and the waste water disposed of by means of drainage or rock-filled pits. In dry weather the streets in camp should frequently be sprinkled with water to keep down the dust. This is specially necessary around the kitchen.

## CHAPTER VIII.

### TARGET PRACTICE.

#### SECTION 1. PRELIMINARY TRAINING IN MARKSMANSHIP.

Effective rifle fire is generally what counts most in battle. To have effective rifle fire, the men on the firing line must be able to HIT what they are ordered to shoot at. There is no man who can not be taught how to shoot. It is not necessary or even desirable to begin instruction by firing on a rifle range. A perfectly green recruit who has never fired a rifle may be made into a good shot by a little instruction and some preliminary drills and exercises.

Before a man goes on the range to fire it is absolutely necessary that he should know--

1. How to set the rear sight.
2. How to sight or aim.
3. How to squeeze the trigger.
4. How to hold the rifle in all positions.

If he does not know these things it is worse than useless for him to fire. He will not improve; the more he shoots the worse he will shoot, and it will become more difficult to teach him.

#### SECTION 2. SIGHT ADJUSTMENT.

Men must be able to adjust their sights correctly and quickly. An error in adjustment so small that one can scarcely see it on the sight leaf is sufficient to cause a miss at an enemy at 500 yards and over.

Notice your rear sight. When the leaf is laid down the BATTLE SIGHT appears on top. This sight is set for 547 yards and is not adjustable. When the leaf is raised four sights come into view. The extreme range sight for 2,850 yards at the top of the leaf is seldom used. The open sight at the upper edge of the drift slide is adjustable from 1,400 to 2,750 yards. To set it the upper edge of the slide is made to correspond with the range reading on the leaf, and the slide is then clamped with the slide screw. This sight also is seldom used. The open sight at the

bottom of the triangular opening in the drift slide is adjustable from 100 to 2,450 yards. To set it the index line at the lower corners of the triangle is set opposite the range graduation on the leaf and the slide clamped. This and the peep sight just below it are the sights most commonly used. To set the peep sight, the index lines on either side of the peephole are set opposite the range desired and the slide clamped.

Notice the scales for the various ranges on either side of the face of the leaf. The odd-numbered hundreds of yards are on the right and the even on the left. The line below the number is the index line for that range. Thus to set the sight for 500 yards the index line of the slide is brought in exact line with the line on the leaf below the figure 5 and the slide clamped. To set for 550 yards the index lines of the slide are set half way between the index lines on the leaf below the figure 5 on the right side and the figure 6 on the left side. Look at your sight carefully when setting it and take great pains to get it exact. An error in setting the width of one of the lines on the leaf will cause an error of about 8 inches in where your bullet will strike at 500 yards.

The WIND GAUGE is adjusted by means of the windage screw at the right front end of the base of the sight. Each graduation on the wind-gauge scale is called a "point." For convenience in adjusting the line of each third point on the scale is longer than the others. If you turn the windage screw so that the movable base moves to the right, you are taking right windage, which will cause your rifle to shoot more to the right.

It is seldom that a rifle will shoot correctly to the point aimed at at a given range with the sights adjusted exactly to the scale graduations for that range. If your sight is not correctly adjusted for your shooting and you wish to move it slightly to make it correct, remember to move it in the direction you wish your shot to hit. If you wish to shoot higher raise your sight. If to the right, move the wind gauge to the right. Always move your sight the correct amount in accordance with the following table:

### SECTION 3. TABLE OF SIGHT CORRECTIONS.

Showing to what extent the point of impact is moved by a change of 25 yards in elevation or 1 point in windage.

Range.	Correction by a change in elevation of 25 yards.	Correction by a change in windage of 1 point.
100	0.72	4
200	1.62	8
300	2.79	12
400	4.29	16
500	6.22	20
600	8.59	24
800	15.43	32
1,000	25.08	40

An easy rule to remember the windage correction by is: "A change of 1 point of wind changes the point of impact 4 inches for every 100 yards of range."

Copy this table and take it to the range with you.

Example of sight adjustment: Suppose you are firing at 500 yards. The first two or three shots show you that your shots are hitting about a foot below and a foot to the right of the center of the bull's-eye. From the above table you will see that if you will raise your sight 50 yards and move the wind gauge half a point to the left the rifle will be sighted so that if you aim correctly the bullets will hit well inside the bull's eye.

#### SECTION 4. AIMING.

OPEN SIGHT: Always align your sights with the front sight squarely in the middle of the "U" or notch of the rear sight, and the top of the front sight even with the upper corners of the "U." (See fig. 1.) All the sights on the rifle except the peep sight are open sights.

PEEP SIGHT: Always center the tip of the front sight in the center of the peephole when aiming with this sight. (See fig. 2.)

[Illustration: FIGURE 1.]

Always aim below the bull's-eye. Never let your front sight appear to touch the bull's-eye in aiming. Try to see the same amount of white target between the top of the front sight and the bottom of the bull's-eye each time. The eye must be focused on the bull's-eye or mark and not on the front or rear sight.

Look at figures 1 and 2 until your eye retains the memory of them, then try to duplicate the picture every time you aim. Aim consistently, always the same. Never change your aim; change your sight adjustment if your shots are not hitting in the right place.

#### SECTION 5. BATTLE SIGHT.

The battle sight is the open sight seen when the leaf is laid flat. It is adjusted for a range of 547 yards. It is intended to be used in battle, when you get nearer to the enemy than 600 yards. Always aim at the belt of a standing enemy, or just below him if he is kneeling, sitting, or lying. On the target range this sight is used for rapid fire. With it the rifle shoots about 2 feet high at ranges between 200 and 400 yards, so you must aim below the figure on the target "D." Find out in four instruction practice just how much you must aim below to hit the figure.

#### SECTION 6. TRIGGER SQUEEZE.

Use the first joint of the fore finger to squeeze the trigger. It is the most sensitive and best controlled portion of the body.



As you place the rifle to your shoulder squeeze the trigger so as to pull it back about one-eighth of an inch, thus taking up the safety portion, or slack, of the pull. Then contract the trigger finger gradually, slowly and steadily increasing the pressure on the trigger while the aim is being perfected. Continue the gradual increase of pressure so that when the aim has become exact the additional pressure required to release the point of the sear can be given almost insensibly and without causing any deflection of the rifle. Put absolutely all your mind and will power into holding the rifle steady and squeezing the trigger off without disturbing the aim. Practice squeezing the trigger in this way every time you have your rifle in your hand until you can surely and quickly do it without a suspicion of a jerk.

[Illustration: FIGURE 2.]

By practice the soldier becomes familiar with the trigger squeeze of his rifle, and knowing this, he is able to judge at any time, within limits, what additional pressure is required for its discharge. By constant repetition of this exercise he should be able finally to squeeze the trigger to a certain point beyond which the slightest movement will release the sear. Having squeezed the trigger to this point, the aim is corrected, and, when true, the additional pressure is applied and the discharge follows and the bullet flies true to the mark.

## SECTION 7. FIRING POSITIONS.

When in ranks at close order the positions are those described in the Infantry Drill Regulations. When in extended order, or when firing alone, these positions may be modified somewhat to better suit the individual. The following remarks on the various positions are offered as suggestions whereby steady positions may be learned by the soldier.

**STANDING POSITION:** Face the target, then execute right half face. Plant the feet about 12 inches apart. As you raise the rifle to the shoulder lean very slightly backward just enough to preserve the perfect balance on both feet which the raising of the rifle has somewhat disturbed. Do not lean far back, and do not lean forward at all. If your body is out of balance it will be under strain and you will tremble. The right elbow should be at about the height of the shoulder. The left hand should grasp well around the stock and handguard in front of the rear sight, and the left elbow should be almost directly under the rifle. The right hand should do more than half the work of holding the rifle up and against the shoulder, the left hand only steadying and guiding the piece. Do not try to meet the recoil; let the whole body move back with it. Do not be afraid to press the jaw hard against the stock; this steadies the position, and the head goes back with the recoil and insures that your face is not hurt.

**KNEELING POSITION:** Assume the position very much as described in the Infantry Drill Regulations. Sit on the right heel. The right knee should point directly to the right, that is, along the firing line. The point of the left elbow should rest over the left knee. There is a flat place under the elbow which fits a flat place on the knee and makes a solid rest. Lean the body

well forward. This position is uncomfortable until practiced, when it quickly ceases to be uncomfortable.

**SITTING POSITION:** Sit down half faced to the right, feet from 6 to 8 inches apart, knees bent, right knee slightly higher than the left, left leg pointed toward the target. Rest both elbows on the knees, hands grasping the piece the same as in the prone position. This is a very steady position, particularly if holes can be found or made in the ground for the heels.

**PRONE POSITION AND USE OF THE GUN SLING:** To adjust the sling for firing, unhook the straight strap of the sling and let it out as far as it will go. Adjust the loop so that when stretched along the bottom of the stock its rear end (bight) comes about opposite the comb of the stock. A small man needs a longer loop than a tall man. Lie down facing at an angle of about 60 deg. to the right of the direction of the target. Spread the legs as wide apart as they will go with comfort. Thrust the left arm through between the rifle and the sling, and then back through the loop of the sling, securing the loop, by means of the keeper, around the upper left arm as high up as it will go. Pass the hand under and then over the sling from the left side, and grasp the stock and handguard just in rear of the lower band. Raise the right elbow off the ground, rolling slightly over on the left side. Place the butt to the shoulder and roll back into position, clamping the rifle hard and steady in the firing position. The rifle should rest deep down in the palm of the left hand with fingers almost around the handguard. Shift the left palm a little to the right or left until the rifle stands perfectly upright (no cant) without effort. The left elbow should rest on the ground directly under the rifle, and right elbow on the ground about 5 inches to the right of a point directly under the stock. In this position the loop of the sling, starting at the lower band, passes to the right of the left wrist, and thence around the left upper arm. The loop should be so tight that about 50 pounds tension is placed on it when the position is assumed. This position is uncomfortable until practiced, when it quickly ceases to be uncomfortable. It will be steadier if small holes can be found or dug in the ground for the elbows. In this position the sling binds the left forearm to the rifle and to the ground so that it forms a dead rest for the rifle, with a universal joint, the wrist, at its upper end. Also the rifle is so bound to the shoulder that the recoil is not felt at all. This is the steadiest of all firing positions.

The gun sling can also be used in this manner with advantage in the other positions.

## SECTION 8. CALLING THE SHOT.

It is evident that the sights should be so adjusted at each range that the rifle will hit where you aim. In order to determine that the sights are so adjusted it is necessary that you shall know each time just where you were aiming on the target at the instant your rifle was discharged. If you know this and your rifle hits this point your rifle is correctly sighted. If your shot does not hit near this point, you should change your sight adjustment in accordance with the table of sight corrections

in section 3.

No man can hold absolutely steady. The rifle trembles slightly, and the sights seem to wobble and move over the target. You try to squeeze off the last ounce of the trigger squeeze just as the sights move to the desired alignment under the bull's-eye. At this instant, just before the recoil blots out a view of the sights and target, you should catch with your eye a picture, as it were, of just where on the target your sights were aligned, and call to yourself or to the coach this point. This point is where your shot should strike if your sights are correctly adjusted, and if you have squeezed the trigger without disturbing your aim. Until a man can call his shots he is not a good shot, for he can never tell if his rifle is sighted right or not, or if a certain shot is a good one or only the result of luck.

## SECTION 9. COORDINATION.

Good marksmanship consists in learning thoroughly the details of--

Holding the rifle in the various positions.

Aiming.

Squeezing the trigger.

Calling the shot.

Adjusting the sights.

And, when these have been mastered in detail, then the coordination of them in the act of firing. This coordination consists in putting absolutely all of one's will power into an effort to hold the rifle steadily, especially in getting it to steady down when the aim is perfected; in getting the trigger squeezed off easily at the instant the rifle is steadiest and the aim perfected; in calling the shot at this instant; and, if the shot does not hit near the point called, then in adjusting the sights the correct amount so that the rifle will be sighted to hit where you aim.

## SECTION 10. ADVICE TO RIFLEMEN.

Before going to the range clean the rifle carefully, removing every trace of oil from the bore. This can best be done with a rag saturated with gasoline. Put a light coat of oil on the bolt and cams. Blacken the front and rear sights with smoke from a burning candle or camphor or with liquid sight black.

Look through the bore and see that there is no obstruction in it.

Keep the rifle off the ground; the stock may absorb dampness, the sights may be injured, or the muzzle filled with dirt.

Watch your hold carefully and be sure to know where the line of sight is at discharge. It is only in this way that the habit of calling shots, which is essential to good shooting, can be acquired.

Study the conditions, adjust the sling, and set the sight before

going to the firing point.

Look at the sight adjustment before each shot and see that it has not changed.

If sure of your hold and if the hit is not as called, determine and make FULL correction in elevation and windage to put the next shot in the bull's-eye.

Keep a written record of the weather conditions and the corresponding elevation and windage for each day's firing.

Less elevation will generally be required on hot days; on wet days; in a bright sunlight; with a 6 o'clock wind; or with a cold barrel.

More elevation will generally be required on cold days; on very dry days; with a 12 o'clock wind; with a hot barrel; in a dull or cloudy light.

The upper band should not be tight enough to bind the barrel.

Do not put a cartridge into the chamber until ready to fire. Do not place cartridges in the sun. They will get hot and shoot high.

Do not rub the eyes--especially the sighting eye.

In cold weather warm the trigger hand before shooting.

After shooting, clean the rifle carefully and then oil it to prevent rust.

Have a strong, clean cloth that will not tear and jam, properly cut to size, for use in cleaning.

Always clean the rifle from the breech, using a brass cleaning rod when available. An injury to the rifling at the muzzle causes the piece to shoot very irregularly.

Regular physical exercise, taken systematically, will cause a marked improvement in shooting.

Frequent practice of the "Position and aiming drills" is of the greatest help in preparing for shooting on the range.

**RAPID FIRING:** Success in rapid firing depends upon catching a quick and accurate aim, holding the piece firmly and evenly, and in squeezing the trigger without a jerk.

In order to give as much time as possible for aiming accurately, the soldier must practice taking position, loading with the clip, and working the bolt, so that no time will be lost in these operations. With constant practice all these movements may be made quickly and without false motions.

When the bolt handle is raised, it must be done with enough force to start the shell from the chamber; and when the bolt is pulled back, it must be with sufficient force to throw the empty shell

well away from the chamber and far enough to engage the next cartridge.

In loading, use force enough to load each cartridge with one motion.

The aim must be caught quickly, and, once caught, must be held and the trigger squeezed steadily. Rapid firing, as far as holding, aim, and squeezing the trigger are concerned, should be done with all the precision of slow fire. The gain in time should be in getting ready to fire, loading, and working the bolt.

FIRING WITH RESTS: In order that the shooting may be uniform the piece should always be rested at the same point.

## SECTION 11. THE COURSE IN SMALL-ARMS FIRING.

The course in small-arms firing consists of--

- (a) Nomenclature and care of rifle.
- (b) Sighting drills.
- (c) Position and aiming drills.
- (d) Deflection and elevation correction drills.
- (e) Gallery practice.
- (f) Estimating distance drill.
- (g) Individual known-distance firing, instruction practice.
- (h) Individual known-distance firing, record practice.
- (i) Long-distance practice.
- (j) Practice with telescopic sights.
- (k) Instruction combat practice.
- (l) Combat practice.
- (m) Proficiency test.

The regulations governing these are found in Small Arms Firing Manual, 1913. There should be several copies of this manual in every company.

## SECTION 12. TARGETS.

The accompanying plates show the details and size of the targets:

[Illustration: TARGET A.]

[Illustration: TARGET B.]

[Illustration: TARGET C.]

[Illustration: TARGET D.]

## SECTION 13. PISTOL AND REVOLVER PRACTICE.[8]

[Footnote 8: Whenever in these regulations the word "pistol" appears the regulation applies with equal force to the revolver, if applicable to that weapon.]

AGAINST ACCIDENTS.--The soldier will first be taught the nomenclature of those parts of the weapon necessary to an understanding of its action and use and the proper measures for its care and preservation. Ordnance pamphlets Nos. 1866 (description of the Colt's automatic pistol), 1919, and 1927 (description of the Colt's revolver, calibers .38 and .45, respectively) contain full information on this subject, and are furnished to organizations armed with these weapons.

[Footnote 9: The number refer to paragraphs in the Small Arms Firing Manual, 1918.]

Careless handling of the pistol or revolver is the cause of many accidents and results in broken parts of the mechanism. The following rules will, if followed, prevent much trouble of this character:

(a) On taking the PISTOL from the armrack or holster, take out the magazine and see that it is empty before replacing it; then draw back the slide and make sure that the piece is unloaded. Observe the same precaution after practice on the target range, and again before replacing the pistol in the holster or in the armrack. When taking the REVOLVER from the armrack or holster and before returning it to the same, open the cylinder and eject empty shells and cartridges. Before beginning a drill and upon arriving on the range observe the same precaution.

(b) Neither load nor cock the weapon until the moment of firing, nor until a run in the mounted course is started.

(c) Always keep the pistol or revolver in the position of "Raise pistol" (par. 146, Cavalry Drill Regulations, 1916), except when it is pointed at the target. (The position of "Lower pistol" is authorized for mounted firing only.)

(d) Do not place the weapon on the ground where sand or earth can enter the bore or mechanism.

(e) Before loading the PISTOL, draw back the slide and look through the bore to see that it is free from obstruction. Before loading the REVOLVER, open the cylinder and look through the bore to see that it is free from obstruction. When loading<sup>[10]</sup> the pistol for target practice place five cartridges in the magazine and insert the magazine in the handle; draw back the slide and insert the first cartridge in the chamber and carefully lower<sup>[11]</sup> the hammer fully down.

[Footnote 10: TO LOAD PISTOL: Being at raise pistol (right hand grasping stock at the height of and 6 inches in front of the point of the right shoulder, forefinger alongside barrel, barrel to the rear and inclined forward about 30 deg.).

Without deranging position of the hand, rotate the pistol so the sights move to the left, the barrel pointing to the right front and up.

With the thumb and forefinger of the left hand (thumb to the right) grasp the slide and pull it toward the body until it stops, and then release it. The pistol is thus loaded, and the hammer at full cock.

If the pistol is to be kept in the hand and not to be fired at once, engage the safety lock with the thumb of the right hand.

If the pistol is to be carried in the holster, remove safety lock, if on, and lower the hammer fully down.]

[Footnote 11: TO LOWER THE HAMMER: Being at the loading position at full cock.

I. Firmly seat thumb of right hand on the hammer: insert forefinger inside trigger guard.

II. With thumb of left hand exert a momentary pressure on the grip-safety to release hammer from sear.

III. At the same instant exert pressure on the trigger and carefully and slowly lower the hammer fully down.

IV. Remove finger from trigger.

V. Insert pistol in holster.

CAUTION.--The pistol must never be placed in the holster until hammer is fully down.]

In loading the REVOLVER place five cartridges in the cylinder and let the hammer down on the EMPTY CHAMBER.

(f) Whenever the pistol is being LOADED or UNLOADED, the muzzle must be kept up.

(g) Do not point the weapon in any direction where an accidental discharge might do harm.

(h) After loading do not cock the pistol or the revolver until ready to fire.

(i) Keep the working parts properly lubricated.

136. POSITION, DISMOUNTED.--Stand firmly on both feet, body perfectly balanced and erect and turned at such an angle as is most comfortable when the arm is extended toward the target; the feet far enough apart to insure firmness and steadiness of position (about 8 to 10 inches); weight of body borne equally upon both feet; right arm fully extended, left arm hanging naturally.

REMARKS.--The right arm may be slightly bent, although the difficulty of holding the pistol uniformly and of keeping it as well as the forearm in the same vertical plane makes this objectionable.

137. THE GRIP.--Grasp the stock as high as possible with the thumb and last three fingers, the forefinger alongside the trigger guard, the thumb extended along the stock. The barrel, hand, and forearm should be as nearly in one line as possible when the weapon is pointed toward the target. The grasp should not be so tight as to cause tremors of the hand or arm to be communicated to the weapon, but should be firm enough to avoid losing the grip when the recoil takes place.

REMARKS.--The force of recoil of the pistol or revolver is exerted in a line above the hand which grasps the stock. The lower the stock is grasped the greater will be the movement or "jump" of the muzzle caused by the recoil. This not only results in a severe strain upon the wrist, but in loss of accuracy.

If the hand be placed so that the grasp is on one side of the stock, the recoil will cause a rotary movement of the weapon toward the opposite side.

The releasing of the sear causes a slight movement of the muzzle, generally to the left. The position of the thumb along the stock overcomes much of this movement. The soldier should be encouraged to practice this method of holding until it becomes natural.

To do uniform shooting the weapon must be held with exactly the same grip for each shot. Not only must the hand grasp the stock at the same point for each shot, but the tension of the grip must be uniform.

138. (a) THE TRIGGER SQUEEZE.--The trigger must be squeezed in the same manner as in rifle dring. (See Chapter VIII, section 6.) The pressure of the forefinger on the trigger should be steadily increased and should be straight back, not sideways. The pressure should continue to that point beyond which the slightest movement will release the sear. Then, when the aim is true, the additional pressure is applied and the pistol fired.

Only by much practice can the soldier become familiar with the trigger squeeze. This is essential to accurate shooting. It is the most important detail to master in pistol or revolver shooting.

(b) SELF-COCKING ACTION.--The force required to squeeze the trigger of the revolver when the self-cocking device is used is considerably greater than with the single action. To accustom a soldier to the use of the self-cocking mechanism, and also to strengthen and develop the muscles of the hand, a few minutes practice daily in holding the unloaded revolver on a mark and snapping it, using the self-cocking mechanism, is recommended. The use of the self-cocking device in firing is not recommended except in emergency. By practice in cocking the revolver the soldier can become sufficiently expert to fire very rapidly, using single action, while his accuracy will be greater than when using double action.

139. AIMING.--Except when delivering rapid or quick fire, the rear and front sights of the pistol are used in the same manner as the rifle sights. The normal sight is habitually used (see Pl. VI), and the line of sight is directed upon a point just under the bull's-eye at "6 o'clock." The front sight must be seen through the middle of the rear-sight notch, the top being on a line with the top of the notch. Care must be taken not to cant the pistol to either side.[12]

[Footnote 12: The instructor should take cognizance of the fact that the proper aiming point is often affected by the personal and fixed peculiarities of the firer, and if unable to correct such abnormalities, permit firer to direct sight at such point



as promises effective results.]

If the principles of aiming have not been taught, the soldier's instruction will begin with sighting drills as prescribed for the rifle so far as they may be applicable. The sighting bar with open sight will be used to teach the normal sight and to demonstrate errors likely to be committed.

To construct a sighting rest for the pistol (see Pl. VI) take a piece of wood about 10 inches long, 1-1/4 inches wide, and 9/16 inch thick. Shape one end so that it will fit snugly in the handle of the pistol when the magazine has been removed. Screw or nail this stick to the top of a post or other object at such an angle that the pistol when placed on the stick will be approximately horizontal. A suitable sighting rest for the revolver may be easily improvised.

[Illustration: Plate VI.]

140. (a) HOW TO COCK THE PISTOL.--The pistol should be cocked by the thumb of the right hand and with the least possible derangement of the grip. The forefinger should be clear of the trigger when cocking the pistol. Some men have difficulty at first in cocking the pistol with the right thumb. This can be overcome by a little practice. Jerking the pistol forward while holding the thumb on the hammer will not be permitted.

(b) HOW TO COCK THE REVOLVER.--The revolver should be cocked by putting the thumb on the hammer at as nearly a right angle to the hammer as possible, and by the action of the thumb muscles alone bringing the hammer back to the position of full cock. Some men with large hands are able to cock the revolver with the thumb while holding it in the position of aim or raise pistol. Where the soldier's hand is small this can not be done, and in this case it assists the operation to give the revolver a slight tilt to the right and upward (to the right). Particular care should be taken that the forefinger is clear of the trigger or the cylinder will not revolve. Jerking the revolver forward while holding the thumb on the hammer will not be permitted.

141. POSITION AND AIMING DRILLS, DISMOUNTED.--For this instruction the squad will be formed with an interval of 1 pace between files. Black pasters to simulate bull's-eyes will be pasted opposite each man on the barrack or other wall, from which the squad is 10 paces distant.

The squad being formed as described above, the instructor gives the command: 1. *Raise*, 2. *Pistol* (par. 156, Cavalry Drill Regulations), and cautions, "Position and aiming drill, dismounted." The men take the positions described in paragraph 136, except that the pistol is held at "Raise pistol."

The instructor cautions, "Trigger squeeze exercise." At the command *READY*, cock the weapon as described in paragraph 140. At the command, 1. *Squad*, 2. *FIRE*, slowly extend the arm till it is nearly horizontal, the pistol directed at a point about 6 inches below the bull's-eye. At the same time put the forefinger inside the trigger guard and gradually "feel" the trigger. Inhale enough air to comfortably fill the lungs and gradually raise

the piece until the line of sight is directed at the point of aim, i. e., just below the bull's-eye at 6 o'clock. While the sights are directed upon the mark, gradually increase the pressure on the trigger until it reaches that point where the slightest additional pressure will release the sear. Then, when the aim is true, the additional pressure necessary to fire the piece is given so smoothly as not to derange the alignment of the sights. The weapon will be held on the mark for an instant after the hammer falls and the soldier will observe what effect, if any, the squeezing of the trigger has had on his aim.

It is impossible to hold the arm perfectly still, but each time the line of sight is directed on the point of aim a slight additional pressure is applied to the trigger until the piece is finally discharged at one of the moments when the sights are correctly aligned upon the mark.

When the soldier has become proficient in taking the proper position, the trigger squeeze should be executed at will. The instructor prefaces the preparatory command by "At will" and gives the command HALT at the conclusion of the exercise, when the soldier will return to the position of "Raise pistol."

At first this exercise should be executed with deliberation, but gradually the soldier will be taught to catch the aim quickly and to lose no time in beginning the trigger squeeze and bringing it to the point where the slightest additional pressure will release the sear.

REMARKS.--In service few opportunities will be offered for slow aimed fire with the pistol or revolver, although use will be made of the weapon under circumstances when accurate pointing and rapid manipulation are of vital importance.

In delivering a rapid fire, the soldier must keep his eyes fixed upon the mark and, after each shot, begin a steadily increasing pressure on the trigger, trying at the same time to get the sights as nearly on the mark as possible before the hammer again falls. The great difficulty in quick firing with the pistol lies in the fact that when the front sight is brought upon the mark, the rear sight is often found to be outside the line joining the eye with the mark. This tendency to hold the pistol obliquely can be overcome only by a uniform manner of holding and pointing. This uniformity is to be attained only by acquiring a grip which can be taken with certainty each time the weapon is fired. It is this circumstance which makes the position and aiming drills so important. The soldier should constantly practice pointing the pistol until he acquires the ability to direct it on the mark in the briefest interval of time and practically without the aid of sights.

The soldier then repeats the exercises with the pistol in the left hand, the left side being turned toward the target.

142. TO DRAW AND FIRE QUICKLY--SNAP SHOOTING.--With the squad formed as described in paragraph 141 except that the pistol is in the holster and the flap, if any, buttoned, the instructor cautions "Quick-fire exercise." And gives the command, 1. SQUAD; 2. Fire. At this command each soldier, keeping his eye on the

target, quickly draws his pistol, cocks it as in paragraph 140, thrusts it toward the target, squeezes the trigger, and at the instant the weapon is brought in line with the eye and the objective increases the pressure, releasing the sear. To enable the soldier to note errors in pointing, the weapon will be momentarily held in position after the fall of the hammer. Efforts at deliberate aiming in this exercise must be discouraged.

Remarks under paragraph 141 are specially applicable also to this type of fire. When the soldier has become proficient in the details of this exercise, it should be repeated at will; the instructor cautions, "At will; quick fire exercise." The exercise should be practiced until the mind, the eye, and trigger finger act in unison.

To simulate this type of fire mounted, the instructor places the squad so that the simulated bull's-eyes are in turn, to the RIGHT, to the LEFT, to the RIGHT FRONT, to the LEFT FRONT, to the RIGHT REAR. With the squad in one of these positions, the instructor cautions, "Position and aiming drill, mounted." At this caution the right foot is carried 20 inches to the right and the left hand to the position of the bridle hand (par. 246, Cavalry Drill Regulations). The exercise is carried out as described for the exercise dismounted, using the commands and means laid down in paragraphs 161 to 168, inclusive, Cavalry Drill Regulations, for firing in the several directions. The exercise is to be executed at will when the squad has been sufficiently well instructed in detail.

When firing to the left the pistol hand will be about opposite the left shoulder and the shoulders turned about 45 deg. to the left; when firing to the right rear the shoulders are turned about 45 deg. to the right.

When the soldier is proficient in these exercises with the pistol in the right hand, they are repeated with the pistol in the left hand.

REVOLVER OR PISTOL RANGE PRACTICE.--The courses in range practice are given in paragraphs 147 to 199, Small Arms Firing Manual, 1913.

## CHAPTER IX.

### EXTRACTS FROM MANUAL OF INTERIOR GUARD DUTY.

UNITED STATES ARMY, 1914.

[The numbers refer to paragraphs in the Manual.]

### SECTION 1. INTRODUCTION.

1. Guards may be divided into four classes: Exterior guards, interior guards, military police, and provost guards.

2. Exterior guards are used only in time of war. They belong to the domain of tactics and are treated of in the Field Service Regulations and in the drill regulations of the different arms of the service,

The purpose of exterior guards is to prevent surprise, to delay attack, and otherwise to provide for the security of the main body.

On the march they take the form of advance guards, rear guards, and flank guards. At a halt they consist of outposts.

3. Interior guards are used in camp or garrison to preserve order, protect property, and to enforce police regulations. In time of war such sentinels of an interior guard as may be necessary are placed close in or about a camp, and normally there is an exterior guard further out consisting of outposts. In time of peace the interior guard is the only guard in a camp or garrison.

4. Military police differ somewhat from either of these classes. (See Field Service Regulations.) They are used in time of war to guard prisoners, to arrest stragglers and deserters, and to maintain order and enforce police regulations in the rear of armies, along lines of communication, and in the vicinity of large camps.

5. Provost guards are used in the absence of military police, generally in conjunction with the civil authorities at or near large posts or encampments, to preserve order among soldiers beyond the interior guard.

## SECTION 2. CLASSIFICATION OF INTERIOR GUARDS.

6. The various elements of an interior guard classified according to their particular purpose and the manner in which they perform their duties are as follows:

(a) The main guard.

(b) Special guards: Stable guards, park guards, prisoner guards, herd guards, train guards, boat guards, watchmen, etc.

## SECTION 3. DETAILS AND ROSTERS.

7. At every military post, and in every regiment or separate command in the field, an interior guard will be detailed and duly mounted.

It will consist of such number of officers and enlisted men as the commanding officer may deem necessary, and will be commanded by the senior officer or noncommissioned officer therewith, under the supervision of the officer of the day or other officer detailed by the commanding officer.

8. The system of sentinels on fixed posts is of value in discipline and training because of the direct individual responsibility which is imposed and required to be discharged in a definite

and precise manner. While the desirability of this type of duty is recognized, it should only be put in practice to an extent sufficient to insure thorough instruction in this method of performing guard duty and should not be the routine method of its performance. The usual guard duty will be performed by watchmen, patrols, or such method as, in the opinion of the commanding officer, may best secure results under the particular local conditions.

9. At posts where there are less than three companies the main guard and special guards may all be furnished by one company or by details from each company. It is directed that whenever possible such guards shall be furnished by a single company, for the reason that if guard details are taken from each organization at a post of two companies, troops, or batteries it will result in both being so reduced as to seriously interfere with drill and instruction, whereas if details are taken from only one, the other is available for instruction at full strength.

Where there are three or more companies, the main guard will, if practicable, be furnished by a single company, and, as far as practicable, the same organization will supply all details for that day for special guard, overseer, and fatigue duty. In this case the officer of the day and the officers of the guard, if there are any, will, if practicable, be from the company furnishing the guard.

10. At a post or camp where the headquarters of more than one regiment are stationed, or in the case of a small brigade in the field, if but one guard be necessary for the whole command, the details will be made from the headquarters of the command.

If formal guard mounting is to be held, the adjutant, sergeant major, and band to attend guard mounting will be designated by the commanding officer.

11. When a single organization furnishes the guard, a roster of organizations will be kept by the sergeant major under the supervision of the adjutant. (See Appendix B.)

12. When the guard is detailed from several organizations, rosters will be kept by the adjutant, of officers of the day and officers of the guard by name; by the sergeant major under the supervision of the adjutant, of sergeants, corporals, musicians, and privates of the guard by number per organization; and by first sergeants, of sergeants, corporals, musicians, and privates by name. (See Appendix A.)

13. When organizations furnish their own stable, or stable and park guards, credit will be given each for the number of enlisted men so furnished as though they had been detailed for main guard.

14. Special guards, other than stable or park guards, will be credited the same as for main guard, credited with fatigue duty, carried on special duty, or credited as the commanding officer may direct. (Pars. 6, 221, 247, and 300.)

15. Captains will supervise the keeping of company rosters and see that all duties performed are duly credited. (See pars. 355-364,

A. R., for rules governing rosters, and Form 342, A. G. O., for instructions as to how rosters should be kept.)

16. There will be an officer of the day with each guard, unless in the opinion of the commanding officer the guard is so small that his services are not needed. In this case an officer will be detailed to supervise the command and instruction of the guard for such period as the commanding officer may direct.

17. When more than one guard is required for a command, a field officer of the day will be detailed, who will receive his orders from the brigade or division commander, as the latter may direct. When necessary captains may be placed on the roster for field officer of the day.

18. The detail of officers of the guard will be limited to the necessities of the service and efficient instruction; inexperienced officers may be detailed as supernumerary officers of the guard for purposes of instruction.

19. Officers serving on staff departments are, in the discretion of the commanding officer, exempt from guard duty.

20. Guard details will, if practicable, be posted or published the day preceding the beginning of the tour, and officers notified personally by a written order at the same time.

21. The strength of guards and the number of consecutive days for which an organization furnishes the guard will be so regulated as to insure privates of the main guard an interval of not less than five days between tours.

When this is not otherwise practicable, extra and special duty men will be detailed for night guard duty, still performing their daily duties. When so detailed a roster will be kept by the adjutant showing the duty performed by them.

22. The members of main guards and stable and park guards will habitually be relieved every 24 hours. The length of the tour of enlisted men detailed as special guards, other than stable or park guards, will be so regulated as to permit of these men being held accountable for a strict performance of their duty.

23. Should the officer of the day be notified that men are required to fill vacancies in the guard, he will cause them to be supplied from the organization to which the guard belongs. If none are available in that organization, the adjutant will be notified and will cause them to be supplied from the organization that is next for guard. (Par. 68.)

24. The adjutant will have posted on the bulletin board at his office all data needed by company commanders in making details from their companies.

At first sergeant's call, first sergeants will go to headquarters and take from the bulletin board all data necessary for making the details required from their companies; these details will be made from their company rosters.

25. In order to give ample notice, first sergeants will, when practicable, publish at retreat and post on the company bulletin board all details made from the company for duties to be performed.

26. Where rosters are required to be kept by this manual, all details will be made by roster.

#### SECTION 4. COMMANDER OF THE GUARD.

41. The commander of the guard is responsible for the instruction and discipline of the guard. He will see that all of its members are correctly instructed in their orders and duties and that they understand and properly perform them. He will visit each relief at least once while it is on post, and at least one of these visits will be made between 12 o'clock midnight and daylight.

42. He receives and obeys the orders of the commanding officer and the officer of the day, and reports to the latter without delay all orders to the guard not received from the officer of the day; he transmits to his successor all material instructions and information relating to his duties.

43. He is responsible under the officer of the day for the general safety of the post or camp as soon as the old guard marches away from the guardhouse. In case of emergency, while both guards are at the guardhouse, the senior commander of the two guards will be responsible that the proper action is taken.

44. Officers of the guard will remain constantly with their guards, except while visiting patrols or necessarily engaged elsewhere in the performance of their duties. The commanding officer will allow a reasonable time for meals.

45. A commander of a guard leaving his post for any purpose will inform the next in command of his destination and probable time of return.

46. Except in emergencies, the commander of the guard may divide the night with the next in command, but retains his responsibility; the one on watch must be constantly on the alert.

47. When any alarm is raised in camp or garrison, the guard will be informed immediately. (Par, 234.) If the case be serious, the proper call will be sounded, and the commander of the guard will cause the commanding officer and the officer of the day to be at once notified.

48. If a sentinel calls: "The guard," the commander of the guard will at once send a patrol to the sentinel's post. If the danger be great, in which case the sentinel will discharge his piece, the patrol will be as strong as possible.

49. When practicable, there should always be an officer or noncommissioned officer and two privates of the guard at the guardhouse in addition to the sentinels there on post.

50. Between reveille and retreat, when the guard had been turned out for any person entitled to the compliment (see pars. 222 and

224), the commander of the guard, if an officer, will receive the report of the sergeant, returning the salute of the latter with the right hand. He will then draw his saber and place himself two paces in front of the center of the guard. When the person for whom the guard has been turned out approaches, he faces his guard and commands: 1. *Present*, 2. *ARMS*; faces to the front and salutes. When his salute is acknowledged, he resumes the carry, faces about, and commands: 1. *Order*, 2. *ARMS*; and faces to the front.

If it be an officer entitled to inspect the guard, after saluting and before bringing his guard to an order, the officer of the guard reports: "Sir, all present or accounted for"; or "Sir, (so-and-so) is absent"; or if the roll call has been omitted: "Sir, the guard is formed," except that at guard mounting the commanders of the guards present their guards and salute without making any report.

Between retreat and reveille the commander of the guard salutes and reports but does not bring the guard to a present.

51. To those entitled to have the guard turned out but not entitled to inspect it, no report will be made; nor will a report be made to any officer unless he halts in front of the guard.

52. When a guard commanded by a noncommissioned officer is turned out as a compliment or for inspection, the noncommissioned officer, standing at a right shoulder on the right of the right guide, commands: 1. *Present*, 2. *ARMS*. He then executes the rifle salute. If a report be also required, he will, after saluting, and before bringing his guard to an order, report as prescribed for the officer of the guard. (Par. 50.)

53. When a guard is in line, not under inspection, and commanded by an officer, the commander of the guard salutes his regimental, battalion, and company commander, by bringing the guard to attention and saluting in person.

For all other officers, excepting those entitled to the compliment from a guard (par. 224), the commander of the guard salutes in person, but does not bring the guard to attention.

When commanded by a noncommissioned officer, the guard is brought to attention in either case, and the noncommissioned officer salutes.

The commander of a guard exchanges salutes with the commanders of all other bodies of troops; the guard is brought to attention during the exchange.

"Present arms" is executed by a guard only when it has turned out for inspection or as a compliment, and at the ceremonies of guard mounting and relieving the old guard.

54. In marching a guard or a detachment of a guard the principles of paragraph 53 apply. "Eyes right" is executed only in the ceremonies of guard mounting and relieving the old guard.

55. If a person entitled to the compliment, or the regimental,



battalion, or company commander, passes in rear of a guard, neither the compliment nor the salute is given, but the guard is brought to attention while such person is opposite the post of the commander.

After any person has received or declined the compliment, or received the salute from the commander of the guard, official recognition of his presence thereafter while he remains in the vicinity will be taken by bringing the guard to attention.

56. The commander of the guard will inspect the guard at reveille and retreat, and at such other times as may be necessary, to assure himself that the men are in proper condition to perform their duties and that their arms and equipments are in proper condition. For inspection by other officers, he prepares the guard in each case as directed by the inspecting officer.

57. The guard will not be paraded during ceremonies unless directed by the commanding officer.

58. At all formations members of the guard or reliefs will execute inspection arms as prescribed in the drill regulations of their arm.

59. The commander of the guard will see that all sentinels are habitually relieved every two hours, unless the weather or other cause makes it necessary that it be done at shorter or longer intervals, as directed by the commanding officer.

60. He will question his noncommissioned officers and sentinels relative to the instructions they may have received from the old guard; he will see that patrols and visits of inspection are made as directed by the officer of the day.

61. He will see that the special orders for each post and member of the guard, either written or printed, are posted in the guardhouse and, if practicable, in the sentry box or other sheltered place to which the member of the guard has constant access.

62. He will see that the proper calls are sounded at the hours appointed by the commanding officer.

63. Should a member of the guard be taken sick, or be arrested, or desert, or leave his guard, he will at once notify the officer of the day. ( Par. 23.)

64. He will, when the countersign is used (pars. 210 to 216), communicate it to the noncommissioned officers of the guard and see that it is duly communicated to the sentinels before the hour for challenging; the countersign will not be given to sentinels posted at the guardhouse.

65. He will have the details for hoisting the flag at reveille and lowering it at retreat, and for firing the reveille and retreat gun, made in time for the proper performance of these duties. (See pars. 338, 344, 345, and 346.) He will see that the flags are kept in the best condition possible, and that they are never handled except in the proper performance of duty.

66. He may permit members of the guard while at the guardhouse

to remove their head dress, overcoats, and gloves; if they leave the guardhouse for any purpose whatever, he will require that they be properly equipped and armed, according to the character of the service in which engaged, or as directed by the commanding officer.

67. He will enter in the guard report a report of his tour of duty and, on the completion of his tour, will present it to the officer of the day. He will transmit with his report all passes turned in at the post of the guard.

68. Whenever a prisoner is sent to the guardhouse or guard tent for confinement, he will cause him to be searched, and will without unnecessary delay, report the case to the officer of the day.

69. Under war conditions, if anyone is to be passed out of camp at night, he will be sent to the commander of the guard who will have him passed beyond the sentinels.

70. The commander of the guard will detain at the guardhouse all suspicious characters, or parties attempting to pass a sentinel's post without authority, reporting his action to the officer of the day, to whom persons so arrested will be sent, if necessary.

71. He will inspect the guardrooms and cells, and the irons of such prisoners as may be ironed, at least once during his tour, and at such other times as he may deem necessary.

72. He will cause the corporals of the old and new reliefs to verify together, immediately before each relief goes on post, the number of prisoners who should then properly be at the guardhouse.

73. He will see that the sentences of prisoners under his charge are executed strictly in accordance with the action of the reviewing authority.

74. When no special prisoner guard has been detailed (par. 300), he will, as far as practicable, assign as guards over working parties of prisoners sentinels from posts guarded at night only.

75. The commander of the guard will inspect all meals sent to the guardhouse and see that the quantity and quality of food are in accordance with regulations.

76. At guard mounting he will report to the old officer of the day all cases of prisoners whose terms of sentence expire on that day, and also all cases of prisoners concerning whom no statement of charges has been received. (See par. 241.)

77. The commander of the guard is responsible for the security of the prisoners under the charge of his guard; he becomes responsible for them after their number has been verified and they have been turned over to the custody of his guard by the old guard or by the prisoner guard or overseers.

78. The prisoners will be verified and turned over to the new guard without parading them, unless the commanding officer or the officer of the day shall direct otherwise.

79. To receive the prisoners at the guardhouse when they have been paraded and after they have been verified by the officers of the day, the commander of the new guard directs his sergeant to form his guard with an interval, and commands: 1. Prisoners, 2. Right, 3. FACE, 4. Forward, 5. MARCH. The prisoner's having arrived opposite the interval in the new guard, he commands: 1. Prisoners, 2. HALT, 3. Left, 4. FACE, 5. Right (or left), 6. DRESS. 7. FRONT.

The prisoners dress on the line of the new guard.

#### SECTION 5. SERGEANT OF THE GUARD.

80. The senior noncommissioned officer of the guard always acts as sergeant of the guard, and if there be no officer of the guard, will perform the duties prescribed for the commander of the guard.

81. The sergeant of the guard has general supervision over the other noncommissioned officers and the musicians and privates of the guard, and must be thoroughly familiar with all of their orders and duties.

82. He is directly responsible for the property under charge of the guard, and will see that it is properly cared for. He will make lists of articles taken out by working parties and see that all such articles are duly returned. If they are not, he will immediately report the fact to the commander of the guard.

83. Immediately after guard mounting he will prepare duplicate lists of the names of all noncommissioned officers, musicians, and privates of the guard, showing the relief and post or duties of each. One list will be handed as soon as possible to the commander of the guard; the other will be retained by the sergeant.

84. He will see that all reliefs are turned out at the proper time, and that the corporals thoroughly understand, and are prompt and efficient in, the discharge of their duties.

85. During the temporary absence from the guardhouse of the sergeant of the guard, the next in rank of the noncommissioned officers will perform his duties.

86. Should the corporal whose relief is on post be called away from the guardhouse, the sergeant of the guard will designate a noncommissioned officer to take the corporal's place until his return.

87. The sergeant of the guard is responsible at all times for the proper police of the guardhouse or guard tent, including the ground about them and the prison cells.

88. At first sergeant's call he will proceed to the adjutant's office and obtain the guard report book.

89. When the national or regimental colors are taken from the stacks of the color line, the color bearer and guard, or the sergeant of the guard, unarmed, and two armed privates as a guard,

will escort the colors to the colonel's quarters, as prescribed for the color guard in the drill regulations of the arm of the service to which the guard belongs.

90. He will report to the commander of the guard any suspicious or unusual occurrence that comes under his notice, will warn him of the approach of any armed body, and will send to him all persons arrested by the guard.

91. When the guard is turned out its formation will be as follows: The senior noncommissioned officer, if commander of the guard, is on the right of the right guide; if not commander of the guard, he is in the line of file closers, in rear of the right four of the guard; the next in rank is right guide; the next left guide: the others in the line of file closers, usually each in rear of his relief; the field music, with its left three paces to the right of the right guide. The reliefs form in the same order as when the guard was first divided, except that if the guard consists of dismounted cavalry and infantry, the cavalry forms on the left.

92. The sergeant forms the guard, calls the roll, and, if not in command of the guard, reports to the commander of the guard as prescribed in drill regulations for a first sergeant forming a troop or company; the guard is not divided into platoons or sections, and, except when the whole guard is formed prior to marching off, fours are not counted.

93. The sergeant reports as follows: "Sir, all present or accounted for," or "Sir, (so-and-so) is absent"; or if the roll call has been omitted, "Sir, the guard is formed." Only men absent without proper authority are reported absent. He then takes his place, without command.

94. At night the roll may be called by reliefs and numbers instead of names; thus, the first relief being on post: Second relief: No. 1; No. 2, etc.; Third relief, Corporal; No. 1, etc.

95. Calling the roll will be dispensed with in forming the guard when it is turned out as a compliment, on the approach of an armed body, or in any sudden emergency; but in such cases the roll may be called before dismissing the guard. If the guard be turned out for an officer entitled to inspect it, the roll will, unless he directs otherwise, always be called before a report is made.

96. The sergeant of the guard has direct charge of the prisoners, except during such time as they may be under the charge of the prisoner guard or overseers, and is responsible to the commander of the guard for their security.

97. He will carry the keys of the guardroom and cells, and will not suffer them to leave his personal possession while he is at the guardhouse, except as hereinafter provided. (Par. 99.) Should he leave the guardhouse for any purpose he will turn the keys over to the noncommissioned officer who takes his place. (Par. 85.)

98. He will count the knives, forks, etc., given to the prisoners

with their food, and see that none of these articles remain in their possession. He will see that no forbidden articles of any kind are conveyed to the prisoners.

99. Prisoners when paraded with the guard are placed in line, in its center. The sergeant, immediately before forming the guard, will turn over his keys to the noncommissioned officer at the guardhouse. Having formed the guard, he will divide it into two nearly equal parts. Indicating the point of division with his hand, he commands: 1. Right\_(or\_left)\_, 2. FACE, 3. Forward\_, 4. MARCH, 5. Guard\_, 6. HALT, 7. Left\_(or\_right)\_, 8. FACE.

If the first command be RIGHT FACE, the right half of the guard only will execute the movements; if LEFT FACE, the left half only will execute them. The command HALT is given when sufficient interval is obtained to admit the prisoners. The doors of the guardroom and cells are then opened by the noncommissioned officer having the keys. The prisoners will file out under the supervision of the sergeant, the noncommissioned officer, and sentinel on duty at the guardhouse, and such other sentinels all may be necessary; they will form in line in the interval between the two parts of the guard.

100. To return the prisoners to the guardroom and cells, the sergeant commands: 1. Prisoners\_, 2. Right\_(or\_left)\_, 3. FACE, 4. Column\_right\_(or\_left)\_, 5. MARCH.

The prisoners, under the same supervision as before, return to their proper rooms or cells.

101. To close the guard. the sergeant commands: 1. Left\_(or\_right)\_, 2. FACE, 3. Forward\_, 4. MARCH, 5. Guard\_, 6. HALT, 7. Right\_(or\_left)\_, 8. FACE.

The left or right half only of the guard, as indicated, executes the movement.

102. If there be but few prisoners, the sergeant may indicate the point of division as above, and form the necessary interval by the commands: 1. Right\_(or\_left)\_step\_, 2. MARCH: 3. Guard\_, 4. HALT, and close the intervals by the commands: 1. Left\_(or\_right)\_step\_, 2. MARCH, 3. Guard\_, 4. HALT.

103. If sentinels are numerous, reliefs may, at the discretion of the commanding officer, be posted in detachments, and sergeants, as well as corporals, required to relieve and post them.

## SECTION 6. CORPORAL OF THE GUARD.

104. A corporal of the guard receives and obeys orders from none but noncommissioned officers of the guard senior to himself, the officers of the guard, the officer of the day, and the commanding officer.

105. It is the duty of the corporal of the guard to post and relieve sentinels and to instruct the members of his relief in

their orders and duties.

106. Immediately after the division of the guard into reliefs the corporals will assign the members of their respective reliefs to posts by number, and a soldier so assigned to his post will not be changed to another during the same tour of guard duty, unless by direction of the commander of the guard or higher authority. Usually, experienced soldiers are placed over the arms of the guard, and at remote and responsible posts.

107. Each corporal will then make a list of the members of his relief, including himself. This list will contain the number of the relief, the name, the company, and the regiment of every member thereof, and the post to which each is assigned. The list will be made in duplicate, one copy to be given to the sergeant of the guard as soon as completed, the other to be retained by the corporal.

108. When directed by the commander of the guard, the corporal of the first relief forms his relief, and then commands: CALL OFF.

Commencing on the right, the men call off alternately rear and front rank, "one," "two," "three," "four," and so on; it in single rank, they call off from right to left. The corporal then commands: 1. Right, 2. FACE, 3. Forward, 4. MARCH.

The corporal marches on the left, and near the rear file, in order to observe the march. The corporal of the old guard marches on the right of the leading file, and takes command when the last one of the old sentinels is relieved, changing places with the corporal of the new guard.

109. When the relief arrives at six paces from a sentinel (see par. 168), the corporal halts it and commands, according to the number of the post: No. (----.)

Both sentinels execute port arms or saber; the new sentinel approaches the old, halting about one pace from him. (See par. 172.)

110. The corporals advance and place themselves, facing each other, a little in advance of the new sentinel, the old corporal on his right, the new corporal on his left, both at right shoulder, and observe that the old sentinel transmits correctly his instructions.

The following diagram will illustrate the positions taken:



R is the relief; A, the new corporal; B, the old; C, the new sentinel; D, the old.

111. The instructions relative to the post having been communicated, the new corporal commands. Post: both sentinels then resume the

right shoulder, face toward the new corporal and step back so as to allow the relief to pass in front of them. The new corporal then commands: "1. Forward, 2. March"; the old sentinel takes his place in rear of the relief as it passes him, his piece in the same position as those of the relief. The new sentinel stands fast at a right shoulder until the relief has passed six paces beyond him, when he walks his post. The corporals take their places as the relief passes them.

112. Mounted sentinels are posted and relieved in accordance with the same principles.

113. On the return of the old relief, the corporal of the new guard falls out when the relief halts; the corporal of the old guard forms his relief on the left of the old guard, salutes, and reports to the commander of his guard: "Sir, the relief is present"; or "Sir, (so and so) is absent," and takes his place in the guard.

114. To post a relief other than that which is posted when the old guard is relieved, its corporal commands:

1. (Such)\_relief, 2. FALL IN; and if arms are stacked, they are taken at the proper commands.

The relief is formed facing to the front, with arms at an order, the men place themselves according to the numbers of their respective posts, viz, two, four, six, and so on, in the front rank, and one, three, five, and so on, in the rear rank. The corporal, standing about two paces in front of the center of his relief, then commands: CALL OFF.

The men call off as prescribed. The corporal then commands: 1. Inspection, 2. ARMS, 3. Order, 4. ARMS; faces the commander of the guard, executes the rifle salute, reports: "Sir, the relief is present "; or "Sir, (so and so) is absent"; he then takes his place on the right at order arms.

115. When the commander of the guard directs the corporal, POST YOUR RELIEF, the corporal salutes and posts his relief as prescribed (Pars. 108 to 111); the corporal of the relief on post does not go with the new relief, except when necessary to show the way.

116. To dismiss the old relief, it is halted and faced to the front at the guardhouse by the corporal of the new relief, who then falls out; the corporal of the old relief then steps in front of the relief and dismisses it by the proper commands.

117. Should the pieces have been loaded before the relief was posted, the corporal will, before dismissing the relief, see that no cartridges are left in the chambers or magazines. The same rule applies to sentinels over prisoners.

118. Each corporal will thoroughly acquaint himself with all the special orders of every sentinel on his relief, and see that each understands and correctly transmits such order in detail to his successor.

119. There should be at least one noncommissioned officer constantly

on the alert at the guardhouse, usually the corporal whose relief is on post. This noncommissioned officer takes post near the entrance of the guardhouse, and does not fall in with the guard when it is formed. He will have his rifle constantly with him.

120. Whenever it becomes necessary for the corporal to leave his post near the entrance of the guardhouse, he will notify the sergeant of the guard, who will at once take his place, or designate another noncommissioned officer to do so.

121. He will see that no person enters the guardhouse or guard tent, or crosses the posts of the sentinels there posted without proper authority.

122. Should any sentinel call for the corporal of the guard, the corporal will, in every case, at once and quickly proceed to such sentinel. He will notify the sergeant of the guard before leaving the guardhouse.

123. He will at once report to the commander of the guard any violation of regulations or any unusual occurrence which is reported to him by a sentinel, or which comes to his notice in any other way.

124. Should a sentinel call "The Guard," the corporal will promptly notify the commander of the guard.

125. Should a sentinel call "Relief," the corporal will at once proceed to the post of such sentinel, taking with him the man next for duty on that post. If the sentinel is relieved for a short time only, the corporal will again post him as soon as the necessity for his relief ceases.

126. When the countersign is used, the corporal at the posting of the relief during whose tour challenging is to begin gives the countersign to the members of the relief, excepting those posted at the guardhouse.

127. He will wake the corporal whose relief is next on post in time for the latter to verify the prisoners, form his relief, and post it at the proper hour.

128. Should the guard be turned out, each corporal will call his own relief, and cause its members to fall in promptly.

129. Tents or bunks in the same vicinity will be designated for the reliefs so that all the members of each relief may, if necessary,

be found and turned out by the corporal in the least time and with the least confusion.

130. When challenged by a sentinel while posting his relief, the corporal commands: 1. Relief, 2. HALT; to the sentinel's challenge he answers "Relief," and at the order of the sentinel he advances alone to give the countersign, or to be recognized. When the sentinel says, "Advance relief," the corporal commands: 1. Forward, 2. MARCH.

If to be relieved, the sentinel is then relieved as prescribed.



131. Between retreat and reveille, the corporal of the guard will challenge all suspicious looking persons or parties he may observe, first halting his patrol or relief, if either be with him. He will advance them in the same manner that sentinels on post advance like parties (pars. 191 to 197), but if the route of a patrol is on a continuous chain of sentinels, he should not challenge persons coming near him unless he has reason to believe that they have eluded the vigilance of sentinels.

132. Between retreat and reveille, whenever so ordered by an officer entitled to inspect the guard, the corporal will call: "Turn out the guard," announcing the title of the officer, and then, if not otherwise ordered, he will salute and return to his post.

133. As a general rule he will advance parties approaching the guard at night in the same manner that sentinels on post advance like parties. Thus, the sentinel at the guardhouse challenges and repeats the answer to the corporal, as prescribed hereafter (par. 200); the corporal, advancing at port arms, says: "Advance (so and so) with the countersign," or "to be recognized," if there be no countersign used; the countersign being correctly given, or the party being duly recognized, the corporal says: "Advance (so and so)," repeating the answer to the challenge of the sentinel.

134. When officers of different rank approach the guardhouse from different directions at the same time, the senior will be advanced first, and will not be made to wait for his junior.

135. Out of ranks and under arms, the corporal salutes with the rifle salute. He will salute all officers, whether by day or night.

136. The corporal will examine parties halted and detained by sentinels, and, if he have reason to believe the parties have no authority to cross sentinel's posts, will conduct them to the commander of the guard.

137. The corporal of the guard will arrest all suspicious looking characters prowling about the post or camp, all persons of a disorderly character disturbing the peace, and all persons taken in the act of committing crime against the Government on a military reservation or post. All persons arrested by corporals of the guard or by sentinels will at once be conducted to the commander of the guard by the corporal.

## SECTION 7. MUSICIANS OF THE GUARD.

138. The musicians of the guard will sound calls as prescribed by the commanding officer.

139. Should the guard be turned out for national or regimental colors or standards, uncased, the field music of the guard will, when the guard present arms, sound, "To the color" or "To the standard"; or, if for any person entitled thereto, the march, flourishes, or ruffles, prescribed in paragraphs 375, 376, and

SECTION 8. ORDERLIES AND COLOR SENTINELS.

140. When so directed by the commanding officer, the officer who inspects the guard at guard mounting will select from the members of the new guard an orderly for the commanding officer and such number of other orderlies and color sentinels as may be required.

141. For these positions the soldiers will be chosen who are most correct in the performance of duty and in military bearing, neatest in person and clothing, and whose arms and accouterments are in the best condition. Clothing, arms, and equipments must conform to regulations. If there is any doubt as to the relative qualifications of two or more soldiers, the inspecting officer will cause them to fall out at the guardhouse and to form in line in single rank. He will then, by testing them in drill regulations, select the most proficient. The commander of the guard will be notified of the selection.

142. When directed by the commander of the guard to fall out and report an orderly will give his name, company, and regiment to the sergeant of the guard, and, leaving his rifle in the arm rack in his company quarters, will proceed at once to the officer to whom he is assigned, reporting: "Sir, Private ----, Company ----, reports all orderly."

143. If the orderly selected be a cavalryman, he will leave his rifle in the arm rack of his troop quarters, and report with his belt on, but without side arms unless specially otherwise ordered.

144. Orderlies, while on duty as such, are subject only to the orders of the commanding officer and of the officers to whom they are ordered to report.

145. When an orderly is ordered to carry a message, he will be careful to deliver it exactly as it was given to him.

146. His tour of duty ends when he is relieved by the orderly selected from the guard relieving his own.

147. Orderlies are members of the guard, and their name, company, and regiment are entered on the guard report and lists of the guard.

148. If a color line is established, sufficient sentinels are placed on the color line to guard the colors and stacks.

149. Color sentinels are posted only so long as the stacks are formed. The commander of the guard will divide the time equally among them.

150. When stacks are broken, the color sentinels may be permitted to return to their respective companies. They are required to report in person to the commander of the guard at reveille and retreat. They will fall in with the guard, under arms, at guard

mounting.

151. Color sentinels are not placed on the regular reliefs, nor are their posts numbered. In calling for the corporal of the guard, they call: "Corporal of the guard. Color line."

152. Officers or enlisted men passing the uncased colors will render the prescribed salute. If the colors are on the stacks, the salute will be made on crossing the color line or on passing the colors.

153. A sentinel placed over the colors will not permit them to be moved except in the presence of an armed escort. Unless otherwise ordered by the commanding officer, he will allow no one to touch them but the color bearer.

He will not permit any soldier to take arms from the stacks or to touch them except by order of an officer or noncommissioned officer of the guard.

If any person passing the colors or crossing the color line fails to salute the colors, the sentinel will caution him to do so, and if the caution be not heeded he will call the corporal of the guard and report the facts.

#### SECTION 9. PRIVATES OF THE GUARD.

154. Privates are assigned to reliefs by the commander or the guard, and to posts usually by the corporal of their relief. They will not change from one relief or post to another during the same tour of guard duty unless by proper authority.

#### SECTION 10. ORDERS FOR SENTINELS.

155. Orders for sentinels are of two classes: General orders and special orders. General orders apply to all sentinels. Special orders relate to particular posts and duties.

156. Sentinels will be required to memorize the following:

My general orders are:

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 salute all officers, and all colors and standards not cased.

12. 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.

#### REGULATIONS RELATING TO THE GENERAL ORDERS FOR SENTINELS.

No. 1: To take charge of this post and all Government property in view.

157. All persons, of whatever rank in the service, are required to observe respect toward sentinels and members of the guard when such are in the performance of their duties.

158. A sentinel will at once report to the corporal of the guard every unusual or suspicious occurrence noted.

159. He will arrest suspicious persons prowling about the post or camp at any time, all parties to a disorder occurring on or near his post, and all, except authorized persons, who attempt to enter the camp at night, and will turn over to the corporal of the guard all persons arrested.

160. The number, limits, and extent of his post will invariably constitute part of the special orders of a sentinel on post. The limits of his post should be so defined as to include every place to which he is required to go in the performance of his duties.

No. 2: To walk my post in a military manner, keeping always on the alert and observing everything that takes place within sight or hearing.

161. A sentinel is not required to halt and change the position of his rifle on arriving at the end of his post, nor to execute TO THE REAR, MARCH, precisely as prescribed in the drill regulations, but faces about while walking in the manner most convenient to him and at any part of his post as may be best suited to the proper performance of his duties. He carries his rifle on either shoulder, and in wet or severe weather, when not in a sentry box, may carry it at a secure.

162. Sentinels when in sentry boxes stand at ease. Sentry boxes

will be used in wet weather only, or at other times when specially authorized by the commanding officer.

163. In very hot weather, sentinels may be authorized to stand at ease on their posts, provided they can effectively discharge their duties in this position; but they will take advantage of this privilege only on the express authority of the officer of the day or the commander of the guard.

164. A mounted sentinel may dismount occasionally and lead his horse, but will not relax his vigilance.

No. 3: To report all violations of orders I am instructed to enforce.

165. A sentinel will ordinarily report a violation of orders when he is inspected or relieved, but if the case be urgent, he will call the corporal of the guard, and also, if necessary, will arrest the offender.

No. 4: To repeat all calls from posts more distant from the guardhouse than my own.

166. To call the corporal of the guard for any purpose other than relief, fire, or disorder (pars. 167 and 178), a sentinel will call, "Corporal of the guard, No. (----)," adding the number of his post. In no case will any sentinel call, "Never mind the corporal"; nor will the corporal heed such call if given.

No. 5: To quit my post only when properly relieved.

167. If relief becomes necessary, by reason of sickness or other cause, a sentinel will call, "Corporal of the guard, No. (----), Relief," giving the number of his post.

168. Whenever a sentinel is to be relieved, he will halt, and with arms at a right shoulder, will face toward the relief, when it is 30 paces from him. He will come to a port arms with the new sentinel, and in a low tone will transmit to him all the special orders relating to the post and any other information which will assist him to better perform his duties.

No. 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.

169. During his tour of duty a soldier is subject to the orders of the commanding officer, officer of the day, and officers and noncommissioned officers of the guard only; but any officer is competent to investigate apparent violations of regulations by members of the guard.

170. A sentinel will quit his piece on an explicit order from any person from whom he lawfully receives orders while on post; under no circumstances will he yield it to any other person. Unless necessity therefor exists, no person will require a sentinel to

quit his piece, even to allow it to be inspected.

171. A sentinel will not divulge the countersign (pars. 209 to 217) to anyone except the sentinel who relieves him, or to a person from whom he properly receives orders, on such person's verbal order given personally. Privates of the guard will not use the countersign except in the performance of their duties while posted as sentinels.

No. 7: To talk to no one except in line of duty.

172. When calling for any purpose, challenging, or holding communication with any person a dismounted sentinel armed with a rifle or saber will take the position of port arms or saber. At night a dismounted sentinel armed with a pistol takes the position of raised pistol in challenging or holding communication. A mounted sentinel does not ordinarily draw his weapon in the daytime when challenging or holding conversation; but if drawn, he holds it at advance rifle, raise pistol, or port saber, according as he is armed with a rifle, pistol, or saber. At night in challenging and holding conversation his weapon is drawn and held as just prescribed, depending on whether he is armed with a rifle, pistol, or saber.

No. 8: In case of fire or disorder to give the alarm.

173. In case of fire, a sentinel will call, "Fire, No. (----)," adding the number of his post; if possible, he will extinguish the fire himself. In case of disorder he will call, "The Guard, No. (----)," adding the number of his post. If the danger be great, he will in either case discharge his piece before calling.

No. 11: To salute all officers and all colors and standards not cased.

174. When not engaged in the performance of a specific duty, the proper execution of which would prevent it, a member of the guard will salute all officers who pass him. This rule applies at all hours of the day or night, except in the case of mounted sentinels armed with a rifle or pistol, or dismounted sentinels armed with a pistol, after challenging. (See par. 181.)

175. Sentinels will salute as follows: A dismounted sentinel armed with a rifle or saber, salutes by presenting arms; if otherwise armed, he salutes with the right hand.

A mounted sentinel, if armed with a saber and the saber be drawn, salutes by presenting saber; otherwise he salutes in all cases with the right hand.

176. To salute, a dismounted sentinel, with piece at a right shoulder or saber at a carry, halts and faces toward the person to be saluted when the latter arrives within 30 paces.

The limit within which individuals and insignia of rank can be readily recognized is assumed to be about 30 paces, and therefore

at this distance cognizance is taken of the person or party to be saluted.

177. The salute is rendered at six paces; if the person to be saluted does not arrive within that distance, then when he is nearest.

178. A sentinel in a sentry box, armed with a rifle, stands at attention in the doorway on the approach of a person or party entitled to salute, and salutes by presenting arms according to the foregoing rules.

If armed with a saber, he stands at a carry and salutes as before.

179. A mounted sentinel on a regular post, halts, faces, and salutes in accordance with the foregoing rules. If doing patrol duty, he salutes, but does not halt unless spoken to.

180. Sentinels salute, in accordance with the foregoing rules, all persons and parties entitled to compliments from the guards (pars. 224, 227, and 228); officers of the Army, Navy, and Marine Corps; military and naval officers of foreign powers; officers of volunteers and militia officers when in uniform.

181. A sentinel salutes as just prescribed when an officer comes on his post; if the officer holds communication with the sentinel, the sentinel again salutes when the officer leaves him.

During the hours when challenging is prescribed, the first salute is given as soon as the officer has been duly recognized and advanced. A mounted sentinel armed with a rifle or pistol, or a dismounted sentinel armed with a pistol, does not salute after challenging.

He stands at advance rifle or raise pistol until the officer passes.

182. In case of the approach of an armed party of the guard, the sentinel will halt when it is about 30 paces from him, facing toward the party with his piece at the right shoulder. If not himself relieved, he will, as the party passes, place himself so that the party will pass in front of him; he resumes walking his post when the party has reached six paces beyond him.

183. An officer is entitled to the compliments prescribed, whether in uniform or not.

184. A sentinel in communication with an officer will not interrupt the conversation to salute. In the case of seniors the officer will salute, whereupon the sentinel will salute.

185. When the flag is being lowered at retreat, a sentinel on post and in view of the flag will face the flag, and, at the first note of the Star Spangled Banner or to the color will come to a present arms. At the sounding of the last note he will resume walking his post.

No. 12: 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.

186. During challenging hours, if a sentinel sees any person or party on or near his post, he will advance rapidly along his post toward such person or party and when within about 30 yards will challenge sharply, "Halt, Who is there!" He will place himself in the best possible position to receive or, if necessary, to arrest the person or party.

187. In case a mounted party be challenged, the sentinel will call, "Halt, Dismount. Who is there?"

188. The sentinel will permit only one of any party to approach him for the purpose of giving the countersign (pars. 209 to 217), or, if no countersign be used, of being duly recognized. When this is done the whole party is advanced, i. e., allowed to pass.

189. In all cases the sentinel must satisfy himself beyond a reasonable doubt that the parties are what they represent themselves to be and have a right to pass. If he is not satisfied, he must cause them to stand and call the corporal of the guard. So, likewise, if he have no authority to pass persons with the countersign, or when the party has not the countersign, or gives all incorrect one.

190. A sentinel will not permit any person to approach so close as to prevent the proper use of his own weapon before recognizing the person or receiving the countersign.

191. When two or more persons approach in one party, the sentinel, on receiving an answer that indicates that some one in the party has the countersign, will say, "Advance one with the countersign," and, if the countersign is given correctly, will then say, "Advance (so-and-so)," repeating the answer to his challenge. Thus if the answer be "Relief (friend with the countersign, patrol, etc.)," the sentinel will say, "Advance one with the countersign"; then "Advance, relief (friends, patrol, etc.)."

192. If a person having the countersign approach alone, he advanced to give the countersign. Thus if the answer be "Friend with the countersign (or officer of the day, or etc.)." the sentinel will say, "Advance, friend (or officer of the day, or etc.) with the countersign"; then "Advance, friend (or officer of the day, or etc.)."

193. If two or more persons approach a sentinel's post from different directions at the same time, all such persons are challenged in turn and required to halt and to remain halted until advanced.

The senior is first advanced, in accordance with the foregoing rules.

194. If a party is already advanced and in communication with a sentinel, the latter will challenge any other party that may approach; if the party challenged be senior to the one already on his post, the sentinel will advance the new party at once. The senior may allow him to advance any or all of the other parties; otherwise the sentinel will not advance any of them until the senior leaves him. He will then advance the senior only of the



remaining parties, and so on.

195. The following order of rank will govern a sentinel in advancing different persons or parties approaching his post: Commanding officers, officer of the day, officer of the guard, officers, patrols, reliefs, noncommissioned officers of the guard in order of rank, friends.

196. A sentinel will never allow himself to be surprised, nor permit two parties to advance upon him at the same time.

197. If no countersign be used, the rules for challenging are the same. The rules for advancing parties are modified only as follows: Instead of saying "Advance (so-and-so) with the countersign," the sentinel will say; "Advance (so-and-so) to be recognized." Upon recognition he will say, "Advance (so-and-so)."

198. Answers to a sentinel's challenge intended to confuse or mislead him are prohibited, but the use of such an answer as "Friends with the countersign," is not to be understood as misleading, but as the usual answer made by officers, patrol, etc., when the purpose of their visit makes it desirable that their official capacity should not be announced.

#### SPECIAL ORDERS FOR SENTINELS AT THE POST OF THE GUARD.

199. Sentinels posted at the guard will be required to memorize the following:

Between reveille and retreat to turn out the guard for all persons designated by the commanding officer, for all colors or standards not cased, and in time of war for all armed parties approaching my post, except troops at drill and reliefs and detachments of the guard.

At night after challenging any person or party, to advance no one but call the corporal of the guard, repeating the answer to the challenge.

200. After receiving an answer to his challenge, the sentinel calls, "Corporal of the guard (so and so)," repeating the answer to the challenge.

He does not in such cases repeat the number of his post.

201. He remains in the position assumed in challenging until the corporal has recognized or advanced the person or party challenged, when he resumes walking his post, or, if the person or party he entitled thereto, he salutes and, as soon as the salute has been acknowledged, resumes walking his post.

202. The sentinel at the post of the guard will be notified by direction of the commanding officer of the presence in camp or garrison of persons entitled to the compliment. (Par. 224.)

203. The following examples illustrate the manner in which the sentinel at the post of the guard will turn out the guard upon the approach of persons or parties entitled to the compliment (pars.

224, 227, and 228), "Turn out the guard, commanding officer"; "Turn out the guard, governor of a Territory"; "Turn out the guard, national colors"; "Turn out the guard, armed party"; etc.

At the approach of the new guard at guard mounting the sentinel will call, "Turn out the guard, armed party."

204. Should the person named by the sentinel not desire the guard formed, he will salute, whereupon the sentinel will call "Never mind the guard."

205. After having culled "Turn out the guard," the sentinel will never call "Never mind the guard," on the approach of an armed party.

206. Though the guard be already formed he will not fail to call, "Turn out the guard," as required in his special orders, except that the guard will not be turned out for any person while his senior is at or coming to the post of the guard.

207. The sentinels at the post of the guard will warn the commander of the approach of any armed body and of the presence in the vicinity of all suspicious or disorderly persons.

208. In case of fire or disorder in sight or hearing, the sentinel at the guardhouse will call the corporal of the guard and report the facts to him.

## SECTION 11. COUNTERSIGNS AND PAROLES.

209. Seventy-seventh article of war.--Any person subject to military law who makes known the parole or countersign to any person not entitled to receive it according to the rules and discipline of war, or gives a parole or countersign different from that which he received, shall, if the offense be committed in time of war, suffer death or such other punishment as a court-martial may direct. (See par. 171.)

210. The COUNTERSIGN is a word given daily from the principal headquarters of a command to aid guards and sentinels in identifying persons who may be authorized to pass at night.

It is given to such persons as may be authorized to pass and repass sentinels' posts during the night, and to officers, noncommissioned officers, and sentinels of the guard.

211. The PAROLE is a word used as a check on the countersign in order to obtain more accurate identification of persons. It is imparted only to those who are entitled to inspect guards and to commanders of guards.

The parole or countersign, or both, are sent sealed in the form of an order to those entitled to them.

212. When the commander of the guard demands the parole, he will advance and receive it as the corporal receives the countersign. (See par. 133.)

213. As the communications containing the parole and countersign must at times be distributed by many orderlies, the parole intrusted to many officers, and the countersign and parole to many officers and sentinels, and as both the countersign and parole must, for large commands, be prepared several days in advance, there is always danger of their being lost or becoming known to persons who would make improper use of them; moreover, a sentinel is too apt to take it for granted that any person who gives the right countersign is what he represents himself to be; hence for outpost duty there is greater security in omitting the use of the countersign and parole, or in using them with great caution. The chief reliance should be upon personal recognition or identification of all persons claiming authority to pass.

Persons whose sole means of identification is the countersign, or concerning whose authority to pass there is a reasonable doubt, should not be allowed to pass without the authority of the corporal of the guard after proper investigation; the corporal will take to his next superior any person about whom he is not competent to decide.

214. The COUNTERSIGN is usually the name of a battle; the PAROLE, that of a general or other distinguished person.

215. When they can not be communicated daily, a series of words for some days in advance may be sent to posts or detachments that are to use the same parole or countersign as the main body.

216. If the countersign be lost, or if a member of the guard deserts with it, the commander on the spot will substitute another for it and report the case at once to headquarters.

217. In addition to the countersign, use may be made of pre-concerted signals, such as striking the rifle with the hand or striking the hands together a certain number of times as agreed upon. Such signals may be used only by guards that occupy exposed points.

They are used before the countersign is given and must not be communicated to anyone not entitled to know the countersign. Their use is intended to prevent the surprise of a sentinel.

In the daytime signals such as raising a cap or a handkerchief in a prearranged manner may be used by sentinels to communicate with the guard or with each other.

## SECTION 12. GUARD PATROLS.

218. A guard patrol consists of one or more men detailed for the performance of some special service connected with guard duty.

219. If the patrol be required to go beyond the chain of sentinels, the officer or noncommissioned officer in charge will be furnished with the countersign and the outposts and sentinels warned.

220. If challenged by a sentinel, the patrol is halted by its commander, and the noncommissioned officer accompanying it advances alone and gives the countersign.

## SECTION 13. WATCHMEN.

221. Enlisted men may be detailed as watchmen or as overseers over prisoners, and as such will receive their orders and perform their duties as the commanding officer may direct.

## SECTION 14. COMPLIMENTS FROM GUARDS.

222. The compliment from a guard consists in the guard turning out and presenting arms. (See par. 50.) No compliments will be paid between retreat and reveille except as provided in paragraphs 361 and 362, nor will any person other than those named in paragraph 224 receive the compliment.

223. Though a guard does not turn out between retreat and reveille as a matter of compliment it may be turned out for inspection at any time by a person entitled to inspect it.

224. Between reveille and retreat, the following persons are entitled to the compliment: The President; sovereign or chief magistrate of a foreign country and members of a royal-family; Vice President; President and President pro tempore of the Senate; American and foreign ambassadors; members of the Cabinet; Chief Justice; Speaker of the House of Representatives; committees of Congress officially visiting a military post; governors within their respective States and Territories; governors general; Assistant Secretary of War officially visiting a military post; all general officers of the Army; general officers of foreign services visiting a post; naval, marine, volunteer, and militia officers in the service of the United States and holding the rank of general officer; American or foreign envoys or ministers; ministers accredited to the United States; charges d'affaires accredited to the United States; consuls general accredited to the United States; commanding officer of the post or camp; officer of the day.

225. The relative rank between officers of the Army and Navy is as follows: General with admiral, lieutenant general with vice admiral, major general with rear admiral, brigadier general with commodore,<sup>[13]</sup> colonel with captain, lieutenant colonel with commander, major with lieutenant commander, captain with lieutenant, first lieutenant with lieutenant (junior grade), second lieutenant with ensign. (A. R. 12.)

[Footnote 13: The grade of commodore ceased to exist as a grade on the active list of the Navy of the United States on Mar. 3, 1899. By section 7 of the act of Mar. 3, 1899, the nine junior rear admirals are authorized to receive the pay and allowances of a brigadier general of the Army.]

226. Sentinels will not be required to memorize paragraph 224, and, except in the cases of general officers of the Army, the commanding officer and the officer of the day will be advised in each case of the presence in camp or garrison of persons entitled to the compliment.

227. Guards will turn out and present arms when the national

or regimental colors or standards, not cased, are carried past by a guard or an armed party. This rule also applies when the party carrying the colors is at drill. If the drill is conducted in the vicinity of the guardhouse, the guard will be turned out when the colors first pass, and not thereafter.

228. In case the remains of a deceased officer or soldier are carried past, the guard will turn out and present arms.

229. In time of war all guards will turn out under arms when armed parties, except troops at drill and reliefs or detachments of the guard, approach their post. (See par. 53.)

230. The commander of the guard will be notified of the presence in camp or garrison of all persons entitled to the compliment except general officers of the Army, the commanding officer, and the officer of the day. Members of the guard will salute all persons entitled to the compliment and all officers in the military or naval service of foreign powers, officers of the Army, Navy, and Marine Corps, officers of volunteers, and officers of militia when in uniform.

#### GENERAL RULES CONCERNING GUARD DUTY.

232. Eighty-fifth article of war.-- Any person subject to military law, except an officer, who is found drunk on duty shall be punished as a court-martial may direct.

233. All material instructions given to a member of the guard by an officer having authority will be promptly communicated to the commander of the guard by the officer giving them.

234. Should the guard be formed, soldiers will fall in ranks under arms. At roll call each man, as his name or number and relief are called, will answer "Here," and come to an ORDER ARMS.

235. Whenever the guard or a relief is dismissed, each member not at once required for duty will place his rifle in the arm racks, if they be provided, and will not remove it therefrom unless he requires it in the performance of some duty.

236. Without permission from the commander of the guard, members of the main guard, except orderlies, will not leave the immediate vicinity of the guardhouse. Permission to leave will not be granted except in cases of necessity.

237. Members of the main guard, except orderlies, will not remove their accouterments or clothing without permission from the commander of the guard. (Par. 66.)

#### SECTION 15. PRISONERS.

238. Articles of war 69, 70, 71, 72, and 73 have special reference to the confinement of prisoners and should be carefully borne in mind.

239. The commander of the guard will place a civilian in confinement

on an order from higher authority only, unless such civilian is arrested while in the act of committing some crime within the limits of the military jurisdiction, in which case the commanding officer will be immediately notified.

240. Except as provided in the sixty-eighth article of war, or when restraint is necessary, no soldier will be confined without the order of an officer, who shall previously inquire into his offense. (A. R. 930.)

241. An officer ordering a soldier into confinement will send, as soon as practicable, a written statement, signed by himself, to the commander of the guard, setting forth the name, company, and regiment of such soldier, and a brief statement of the alleged offense. It is a sufficient statement of the offense to give the number and article of war under which the soldier is charged.

242. A prisoner, after his first day of confinement, and until his sentence has been duly promulgated, is considered as held in confinement by the commanding officer. After due promulgation of his sentence, the prisoner is held in confinement by authority of the officer who reviews the proceedings of the court awarding sentence. The commander of the guard will state in his report, in the proper place, the name of the officer by whom the prisoner was originally confined.

243. Enlisted men against whom charges have been preferred will be designated as "awaiting trial"; enlisted men who have been tried will, prior to the promulgation of the result, be designated as "awaiting result of trial"; enlisted men serving sentences of confinement not involving dishonorable discharge, will be designated as "garrison prisoners." Persons sentenced to dismissal or dishonorable discharge and to terms of confinement at military posts or elsewhere will be designated as "general prisoners." (A. R. 928.)

244. The sentences of prisoners will be read to them when the order promulgating the same is received. The officer of the guard, or the officer of the day if there be no officer of the guard, will lead them unless the commanding officer shall direct otherwise.

245. When the date for the commencement of a term of confinement imposed by sentence of a court-martial is not expressly fixed by sentence, the term of confinement begins on the date of the officer promulgating it. The sentence is continuous until the term expires, except when the person sentenced is absent without authority. (A. R. 969.)

246. When soldiers awaiting trial or the result of trial, or undergoing sentence commit offenses for which they are tried, the second sentence will be executed upon the expiration of the first.

247. Prisoners awaiting trial by, or undergoing sentence of, a general court-martial and those confined for serious offenses will be kept apart, when practicable, from those confined by sentence of an inferior court or for minor offenses. Enlisted men in confinement for minor offenses, or awaiting trial or the result of trial for the same, will ordinarily be sent to work

under charge of unarmed overseers instead of armed sentinels and will be required attend drills unless the commanding officer shall direct otherwise.

248. Prisoners, other than general prisoners, will be furnished with food from their respective companies or from the organizations to which they may be temporarily attached.

The food of prisoners will, when practicable, be sent to their places of confinement, but post commanders may arrange to send the prisoners, under proper guard, to their messes for meals.

When there is no special mess for general prisoners, they will be attached for rations to companies.

Enlisted men bringing meals for the prisoners will not be allowed to enter the prison room. (See par. 289.)

249. With the exception of those specially designated by the commanding officer, no prisoners will be allowed to leave the guardhouse unless under charge of a sentinel and passed by an officer or noncommissioned officer of the guard. The commanding officer may authorize certain garrison prisoners and paroled general prisoners to leave the guardhouse, not under the charge of a sentinel, for the purpose of working outside under such surveillance and restrictions as he may impose.

250. Prisoners reporting themselves sick at sick cull, or at the time designated by the commanding officer, will be sent to the hospital under charge of proper guard, with a sick report kept for the purpose. The recommendation of the surgeon will be entered in the guard report.

251. The security of sick prisoners in the hospital devolves upon the post surgeon, who will, if necessary, apply to the post commander for a guard.

252. Prisoners will be paraded with the guard only when directed by the commanding officer or the officer of the day.

253. A prisoner under charge of a sentinel will not salute an officer.

254. All serviceable clothing which belongs to a prisoner, and his blankets, will accompany him to the post designated for his confinement, and will be fully itemized on the clothing list sent to that post. The guard in charge of the prisoner during transfer will be furnished with a duplicate of this list, and will be held responsible for the delivery of all articles itemized therein with the prisoner. At least one serviceable woolen blanket will be sent with every such prisoner so transferred. (A.R. 939.)

255. When mattresses are not supplied, each prisoner in the guardhouse will be allowed a bed sack and 30 pounds of straw per month for bedding. So far as practicable iron bunks will be furnished to all prisoners in post guardhouses and prison room. (A. R. 1084.)

256. If the number of prisoners, including general prisoners,

confined at a post justifies it, the commanding officer will detail a commissioned officer as "officer in charge of prisoners." At posts where the average number of prisoners continually in confinement is less than 12, the detail of an officer in charge of prisoners will not be made.

## SECTION 16. GUARDING PRISONERS.

299. The sentinel at the post of the guard has charge of the prisoners except when they have been turned over to the prisoner guard or overseers. (Pars. 247 and 300 to 304.)

(a) He will allow none to escape.

(b) He will allow none to cross his post leaving the guardhouse except when passed by an officer or noncommissioned officer of the guard.

(c) He will allow no one to communicate with prisoners without permission from proper authority.

(d) He will promptly report to the corporal of the guard any suspicious noise made by the prisoners.

(e) He will be prepared to tell, whenever asked, how many prisoners are in the guardhouse and how many are out at work or elsewhere.

Whenever prisoners are brought to his post returning from work or elsewhere, he will halt them and call the corporal of the guard, notifying him of the number of prisoners returning. Thus: "Corporal of the guard, (so many). Prisoners."

He will not allow prisoners to pass into the guardhouse until the corporal of the guard has responded to the call and ordered him to do so.

300. Whenever practicable, special guards will be detailed for the particular duty of guarding working parties composed of such prisoners as can not be placed under overseers. (Par. 247.)

301. The prisoner guard and overseers will be commanded by the police officer; if there be no police officer, then by the officer of the day.

302. The provost sergeant is sergeant of the prisoner guard and overseers, and as such receives orders from the commanding officer and the commander of the prisoner guard only.

303. Details for prisoner guard are marched to the guardhouse and mounted by being inspected by the commander of the main guard, who determines whether all of the men are in proper condition to perform their duties and whether their arms and equipments are in proper condition, and rejects any men found unfit.

304. When prisoners have been turned over to the prisoner guard or overseers, such guards or overseers are responsible for them under their commander, and all responsibility and control of the main guard ceases until they are returned to the main guard.



(Par. 306.)

305. It a prisoner attempts to escape, the sentinel will call "Halt." If he fails to halt when the sentinel has once repeated his call, and if there be no other possible means of preventing his escape, the sentinel will fire upon him.

The following will more fully explain the important duties of a sentinel in this connection:

(Circular.)                      WAR DEPARTMENT.  
   ADJUTANT GENERAL'S OFFICE,  
   \_Washington,\_November\_1,\_1887.\_

By direction of the Secretary of War, the following is published for the information of the Army:

UNITED STATES CIRCUIT COURT, EASTERN DISTRICT OF MICHIGAN, AUGUST 1, 1887.

THE UNITED STATES V. JAMES CLARK.

The circuit court has jurisdiction of a homicide committed by one soldier upon another within a military reservation of the United States.

If a homicide be committed by a military guard without malice and in the performance of his supposed duty as a soldier, such homicide is excusable, unless it was manifestly beyond the scope of his authority or was such that a man of ordinary sense and understanding would know that it was illegal.

It seems that the sergeant of the guard has a right to shoot a military convict if there be no other possible means of preventing his escape.

The common-law distinction between felonies and misdemeanors has no application to military offenses.

While the finding of a court of inquiry acquitting the prisoner of all blame is not a legal bar to a prosecution, it is entitled to weight as an expression of the views of the military court of the necessity of using a musket to prevent the escape of the deceased.

\* \* \* \* \*

By order of the Secretary of War:  
   R. C. DRUM, \_Adjutant\_General.\_

The following is taken from Circular No. 3, of 1883, from Headquarters Department of the Columbia:

   VANCOUVER BARRACKS, W. T., \_April\_20,\_1883\_.

To the ASSISTANT ADJUTANT GENERAL,  
   \_Department\_of\_the\_Columbia.\_

SIR:

\* \* \* \* \*

A sentinel is placed as guard over prisoners to prevent their escape, and, for this purpose, he is furnished a musket, with ammunition. To prevent escape is his first and most important duty.

\* \* \* \* \*

I suppose the law to be this: That a sentinel shall not use more force or violence to prevent the escape of a prisoner than is necessary to effect that object, but if the prisoner, after being ordered to halt, continues his flight the sentinel may maim or even kill him, and it is his duty to do so.

A sentinel who allows a prisoner to escape without firing upon him, and firing to hit him, is, in my judgment, guilty of a most serious military offense, for which he should and would be severely punished by a general court-martial.

\* \* \* \* \*

(Signed) HENRY A. MORROW,  
\_Colonel\_Twenty-first\_Infantry,\_Commanding\_Post.\_

[Third indorsement.]

OFFICE JUDGE ADVOCATE,  
MILITARY DIVISION OF THE PACIFIC,  
\_May\_11,\_1883.\_

Respectfully returned to the assistant adjutant general, Military Division of the Pacific, concurring fully in the views expressed by Col. Morrow. I was not aware that such a view had ever been questioned. That the period is a time of peace does not affect the authority and duty of the sentinel or guard to fire upon the escaping prisoner, if this escape can not otherwise be prevented. He should, of course, attempt to stop the prisoner before firing by ordering him to halt, and will properly warn him by the words "Halt, or I fire," or words to such effect.

W. WINTHROP, \_Judge\_Advocate\_.

[Fourth indorsement.]

HEADQUARTERS MILITARY DIVISION OF THE PACIFIC,  
\_May\_11,\_1883.\_

Respectfully returned to the commanding general, Department of the Columbia, approving the opinion of the commanding officer, Twenty-first Infantry, and of the judge advocate of the division, in respect to the duty of and method to be adopted by sentinels in preventing prisoners from escaping.

\* \* \* \* \*

By command of Maj. Gen. Schofield:  
J. C. KELTON,

\_Assistant\_Adjutant\_General.\_

See also Circular No. 53, A. G. O., December 22, 1900.

306. On approaching the post of the sentinel at the guardhouse, a sentinel of the prisoner guard or an overseer in charge of prisoners will halt them and call, "No. 1, (so many) prisoners." He will not allow them to cross the post of the sentinel until so directed by the corporal of the guard.

307. Members of the prisoner guard and overseers placed over prisoners for work will receive specific and explicit instructions covering the required work; they will be held strictly responsible that the prisoners under their care properly and satisfactorily perform the designated work.

SECTION 17. FLAGS.

337. The garrison, post, and storm flags are national flags and shall be of bunting. The union of such is as described in paragraph 216, Army Regulations, and shall be of the following proportions: Width, seven-thirteenths of the hoist of the flag; length, seventy-six one-hundredths of the hoist of the flag.

The garrison flag will have 38 feet fly and 20 feet hoist. It will be furnished only to posts designated in orders from time to time from the War Department, and will be hoisted only on holidays and important occasions.

The post flag will have 19 feet fly and 10 feet hoist. It will be furnished for all garrison posts and will be hoisted in pleasant weather.

The storm flag will have 9 feet 6 inches fly and 5 feet hoist. It will be furnished for all occupied posts for use in stormy and windy weather. It will also be furnished to national cemeteries. (A. R. 223.)

338. At every military post or station the flag will be hoisted at the sounding of the first note of the reveille, or of the first note of the march, if a march be played before the reveille. The flag will be lowered at the sounding of the last note of the retreat, and while the flag is being lowered the band will play "The Star Spangled Banner," or, if there be no band present, the field music will sound "to the color." When "to the color" is sounded by the field music while the flag is being lowered the same respect will be observed as when "The Star-Spangled Banner" is played by the band, and in either case officers and enlisted men out of ranks will face toward the flag, stand at attention, and render the prescribed salute at the last note of the music. (A: R. 437.)

The lowering of the flag will be so regulated as to be completed at the last note of "The Star-Spangled Banner" or "to the color."

339. The national flag will be displayed at a seacoast or lake fort at the beginning of and during an action in which a fort may be engaged, whether by day or by night. (A. R. 437.)

340. The national flag will always be displayed at the time of firing a salute. (A. R. 397.)

341. The flag of a military post will not be dipped by way of salute or compliment. (A. R. 405.)

342. On the death of an officer at a military post the flag is displayed at halfstaff and so remains between reveille and retreat until the last salvo or volley is fired over the grave; or if the remains are not interred at the post until they are removed therefrom. (A. R. 422.)

343. During the funeral of all enlisted man at a military post the flag is displayed at halfstaff. It is hoisted to the top after the final volley or gun is fired or after the remains are taken from the post. The same honors are paid on the occasion of the funeral of a retired enlisted man. (A. R. 423.)

344. When practicable, a detail consisting of a noncommissioned officer and two privates of the guard will raise or lower the flag. This detail wears side arms or if the special equipments do not include side arms then belts only.

The noncommissioned officer, carrying the flag, forms the detail in line, takes his post in the center and marches it to the staff. The flag is then securely attached to the halyards and rapidly hoisted. The halyards are then securely fastened to the cleat on the staff and the detail marched to the guardhouse.

345. When the flag is to be lowered, the halyards are loosened from the staff and made perfectly free. At retreat the flag is lowered at the last note of retreat. It is then neatly folded and the halyards made fast. The detail is then re-formed and marched to the guardhouse, where the flag is turned over to the commander of the guard.

The flag should never be allowed to touch the ground and should always be hoisted or lowered from the leeward side of the staff, the halyards being held by two persons.

#### SECTION 18. REVEILLE AND RETREAT GUN.

346. The morning and evening gun will be fired by a detachment of the guard, consisting, when practicable, of a corporal and two privates. The morning gun is fired at the first note of reveille, or, if marches be played before the reveille, it is fired at the beginning of the first march. The retreat gun is fired at the last note of retreat.

The corporal marches the detachment to and from the piece, which is fired, sponged out, and secured under his direction.

#### SECTION 19. GUARD MOUNTING.

347. Guard mounting will be formal or informal as the commanding officer may direct. It will be held as prescribed in the drill

regulations of the arm of the service to which the guard belongs. If none is prescribed, then as for infantry. In case the guard is composed wholly of mounted organizations, guard mounting may be held mounted.

348. When infantry and mounted troops dismounted are united for guard mounting, all details form as prescribed for infantry.

## SECTION 20. FORMAL GUARD MOUNTING FOR INFANTRY.

349. Formal guard mounting will ordinarily be held only in posts or camps where a band is present.

350. At the assembly, the men designated for the guard fall in on their company parade grounds as prescribed in paragraph 106, I. D. R. The first sergeant then verifies the detail, inspects it, replaces any man unfit to go on guard, turns the detail over to the senior noncommissioned officer, and retires. The band takes its place on the parade ground so that the left of its front rank shall be 12 paces to the right of the front rank of the guard when the latter is formed.

351. At adjutant's call, the adjutant, dismounted and the sergeant major on his left, marches to the parade ground. The adjutant halts and takes post so as to be 12 paces in front of and facing the center of the guard when formed; the sergeant major continues on, moves by the left flank and takes post facing to the left, 12 paces to the left of the front rank of the band; the band plays in quick or double time; the details are marched to the parade ground by the senior noncommissioned officers; the detail that arrives first is marched to the line so that, upon halting, the breast of the front rank men shall be near to and opposite the left arm of the sergeant major; the commander of the detail halts his detail, places himself in front of and facing the sergeant major, at a distance equal to or a little greater than the front of his detail, and commands: 1. Right, 2. DRESS. The detail dresses up to the line of the sergeant major and its commander, the right front rank man placing his breast against the left arm of the sergeant major; the noncommissioned officers take post two paces in rear of the rear rank of the detail. The detail aligned, the commander of the detail commands: FRONT, salutes, and then reports; "The detail is correct," or "(So many) sergeants, corporals, or privates are absent"; the sergeant major returns the salute with the right hand after the report is made. The commander then passes by the right of the guard and takes post in the line of noncommissioned officers in rear of the right file of his detail.

Should there be more than one detail, it is formed in like manner on the left of the one preceding. The privates, noncommissioned officers, and commander of each detail dress on those of the preceding details in the same rank or line. Each detail commander closes the rear rank to the right and fills blank files as far as practicable with the men from his front rank.

Should the guard from a company not include a noncommissioned officer, one will be detailed to perform the duties of commander of the detail. In this case the commander of the detail, after

reporting to the sergeant major, passes around the right flank between the guard and the band and retires.

352. When the last detail has formed, the sergeant major takes a side step to the right, draws sword, verifies the detail, takes post two paces to the right and two paces to the front of the guard, facing to the left, causes the guard to count off, completes the left squad, if necessary, as in the School of the Company, and if there be more than three squads, divides the guard into two platoons, again takes post as described above and commands: 1. Open\_ranks, 2. MARCH.

At the command march, the rear rank and file closers march backward four steps, halt, and dress to the right. The sergeant major aligns the ranks and file closers and again taking post as described above, commands: FRONT, moves parallel to the front rank until opposite the center, turns to the right, halts midway to the adjutant, salutes and reports: "Sir, the details are correct," or "Sir, (so many) sergeants, corporals, or privates are absent"; the adjutant returns the salute, directs the sergeant major: Take your post, and then draws saber; the sergeant major faces about, approaches to within two paces of the center of the front rank, turns to the right, moves three paces beyond the left of the front rank, turns to the left, halts on the line of the front rank, faces about, and brings his sword to the order. When the sergeant major has reported the officer of the guard takes post, facing to the front three paces in front of the center of the guard, and draws saber.

The adjutant then commands: 1. Officer\_(or\_officer)\_and\_  
\_noncommissioned\_officers, 2. Front\_and\_center, 3. MARCH.

At the command center, the officers carry saber. At the command MARCH, the officer advances and halts three paces from the adjutant, remaining at the carry; the noncommissioned officers pass by the flanks, along the front, and form in order of rank from right to left, three paces in rear of the officer, remaining at the right shoulder; if there is no officer of the guard the noncommissioned officers halt on a line three paces from the adjutant; the adjutant then assigns the officers and noncommissioned officers according to rank, as follows: Commander of the guard, leader of first platoon, leader of second platoon, right guide of first platoon, left guide of second platoon, left guide of first platoon, right guide of second platoon, and file closers, or, if the guard is not divided into platoons: Commander of the guard, right guide, left guide, and file closers.

The adjutant then commands: 1. Officer\_(or\_officers)\_and\_  
\_noncommissioned\_officers, 2. POSTS, 3. MARCH.

At the command posts, all, except the officer commanding the guard, face about. At the command MARCH, they take the posts presented in the school of the company with open ranks. The adjutant directs: Inspect your guard, sir; at which the officer commanding the guard faces about, commands: Prepare for inspection, returns saber and inspects the guard.

During the inspection the band plays; the adjutant returns saber, observes the general condition of the guard, and falls out any

man who is unfit for guard duty or does not present a creditable appearance. Substitutes will report to the commander of the guard at the guardhouse.

353. The adjutant, when so directed, selects orderlies and color sentinels, as prescribed in paragraphs 140 and 141, and notifies the commander of the guard of his selection.

354. If there be a junior officer of the guard he takes post at the same time as the senior, facing to the front, three paces in front of the center of the first platoon; in going to the front and center he follows and takes position on the left of the senior and is assigned as leader of the first platoon; he may be directed by the commander of the guard to assist in inspecting the guard.

If there be no officer of the guard, the adjutant inspects the guard. A noncommissioned officer commanding the guard takes post on the right of the right guide when the guard is in line, and takes the post of the officer of the guard when in column or passing in review.

355. The inspection ended, the adjutant faces himself about thirty paces in front of and facing the center of the guard and draws saber; the new officer of the day takes post in front of and facing the guard, about thirty paces from the adjutant; the old officer of the day takes post three paces to the right of and one pace to the rear of the new officer of the day; the officer of the guard takes post three paces in front of its center, draws saber with the adjutant, and comes to the order; thereafter he takes the same relative position as a captain of a company.

The adjutant then commands: 1. Parade, 2. REST, 3. SOUND OFF, and comes to the order and parade rest.

The band, playing, passes in front of the officer of the guard to the left of the line and back to its post on the right, when it ceases playing.

The adjutant then comes to attention, carries saber and commands: 1. Guard, 2. ATTENTION, 3. Close ranks, 4. MARCH.

The ranks are opened and closed as in paragraph 745, I. D. R.

The adjutant then commands: 1. Present, 2. ARMS, faces toward the new officer of the day, salutes, and then reports: Sir, the guard is formed. The new officer of the day, after the adjutant has reported, returns the salute with the hand and directs the adjutant: March the guard in review, sir.

The adjutant carries saber, faces about, brings the guard to an order, and commands: 1. At trail, platoons (or guard) right, 2. MARCH, 3. Guard, 4. HALT.

The platoons execute the movement; the band turns to the right and places itself 12 paces in front of the first platoon.

The adjutant places himself six paces from the flank and abreast of the commander of the guard; the sergeant major six paces from

the left flank of the second platoon.

The adjutant then commands: 1. Pass in review, 2. FORWARD, 3. MARCH.

The guard marches in quick time past the officer of the day, according to the principles of review, and is brought to eyes right at the proper time by the commander of the guard; the adjutant, commander of the guard, leaders of platoons, sergeant major, and drum major salute.

The band, having passed the officer of the day, turns to the left of the column, places itself opposite and facing him, and continues to play until the guard leaves the parade ground. The field music detaches itself from the band when the latter turns out of the column, and, remaining in front of the guard, commences to play when the band ceases.

Having passed 12 paces beyond the officer of the day, the adjutant halts; the sergeant major halts abreast of the adjutant and 1 pace to his left; they then return saber, salute, and retire; the commander of the guard then commands: 1. Platoons, right by squads, 2. MARCH, and marches the guard to its post.

The officers of the day face toward each other and salute; the old officer of the day turns over the orders to the new officer of the day.

While the band is sounding off, and while the guard is marching in review, the officers of the day stand at parade rest with arms folded. They take this position when the adjutant comes to parade rest, resume the attention with him, again take the parade rest at the first note of the march in review, and resume attention as the head of the column approaches.

The new officer of the day returns the salute of the commander of the guard and the adjutant, making one salute with the hand.

356. If the guard be not divided into platoons, the adjutant commands: 1. At trail, guard right, 2. MARCH, 3. Guard, 4. HALT, and it passes in review as above; the commander of the guard is 3 paces in front of its center; the adjutant places himself 6 paces front the left flank and abreast of the commander of the guard; the sergeant covers the adjutant on a line with the front rank.

## SECTION 21. INFORMAL GUARD MOUNTING FOR INFANTRY.

357. Informal guard mounting will be held on the parade ground of the organization from which the guard is detailed. If it is detailed from more than one organization, then at such place as the commanding officer may direct.

358. At assembly, the detail for guard falls in on the company parade ground. The first sergeant verifies the detail, inspects their dress and general appearance, and replaces any man unfit to march on guard. He then turns the detail over to the commander of the guard and retires.



359. At adjutant's call, the officer of the day takes his place 15 paces in front of the center of the guard and commands: 1. Officer (or officers) and noncommissioned officers, 2. Front and center, 3. MARCH; whereupon the officers and noncommissioned officers take their positions, are assigned and sent to their posts as prescribed in formal guard mounting. (Par. 352.)

The officer of the day will then inspect the guard with especial reference for its fitness for the duty for which it is detailed and will select, as prescribed in paragraphs 140 and 141, the necessary orderlies and color sentinels. The men found unfit for guard will be returned to quarters and will be replaced by others found to be suitable, if available in the company. If none are available in the company the fact will be reported to the adjutant immediately after guard mounting.

When the inspection shall have been completed the officer of the day resumes his position and directs the commander of the guard to march the guard to its post.

## SECTION 22. RELIEVING THE OLD GUARD.

360. As the new guard approaches the guardhouse, the old guard is formed in line, with its field music three paces to its right; and, when the field music at the head of the new guard arrives opposite its left, the commander of the new guard commands: 1. Eyes, 2. RIGHT; the commander of the old guard commands: 1. Present, 2. ARMS; commanders of both guards salute. The new guard marches in quick time past the old guard.

When the commander of the new guard is opposite the field music of the old guard, he commands: FRONT; the commander of the old guard commands: 1. Order, 2. ARMS, as soon as the new guard shall have cleared the old guard.

The field music having marched three paces beyond the field music of the old guard, changes direction to the right, and, followed by the guard, changes direction to the left when on a line with the old guard; the changes of direction are without command. The commander of the guard halts on the line of the front rank of the old guard, allows his guard to march past him, and, when its rear approaches, forms it in line to the left, establishes the left guide three paces to the right of the field music of the old guard, and on a line with the front rank, and then dresses his guard to the left; the field music of the new guard is three paces to the right of its front rank.

361. The new guard being dressed the commander of each guard, in front of and facing its center, commands: 1. Present, 2. ARMS, resumes his front, salutes, carries saber, faces his guard, and commands: 1. Order, 2. ARMS.

Should a guard be commanded by a noncommissioned officer, he stands on the right or left of the front rank, according as he commands the old or new guard, and executes the rifle salute.

362. After the new guard arrives at its post and has saluted the old guard, each guard is presented by its commander to its officer of the day; if there be but one officer of the day present, or if one officer acts in the capacity of old and new officer of the day, each guard is presented to him by its commander.

363. If other persons entitled to a salute approach, each commander of the guard will bring his own guard to attention if not already at attention. The senior commander of the two guards will then command: "1. Old and new guards, 2. Present, 3. Arms."

The junior will salute at the command "Present Arms" given by the senior. After the salute has been acknowledged, the senior brings both guards to the order.

364. After the salutes have been acknowledged by the officers of the day, each guard is brought to an order by its commander; the commander of the new guard then directs the orderly or orderlies to fall out and report and causes bayonets to be fixed if so ordered by the commanding officer; bayonets will not then be unfixed during the tour except in route marches while the guard is actually marching or when specially directed by the commanding officer.

The commander of the new guard then falls out members of the guard for detached posts, placing them under charge of the proper noncommissioned officers, divides the guard into three reliefs, first, second, and third, from right to left, and directs a list of the guard to be made by reliefs. When the guard consists of troops of different arms combined, the men are assigned to reliefs so as to insure a fair division of duty under rules prescribed by the commanding officer.

365. The sentinels and detachments of the old guard are at once relieved by members of the new guard, the two guards standing at ease or at rest while these changes are being made. The commander of the old transmits to the commander of the new guard all his orders, instructions, and information concerning the guard and its duties. The commander of the new guard then takes possession of the guardhouse and verifies the articles in charge of the guard.

366. If considerable time is required to bring in that portion of the old guard still on post, the commanding officer may direct that as soon as the orders and property are turned over to the new guard the portion of the old guard at the guardhouse may be marched off and dismissed. In such a case the remaining detachment or detachments of the old guard will be inspected by the commander of the new guard when they reach the guardhouse. He will direct the senior noncommissioned officer present to march these detachments off and dismiss them in the prescribed manner.

367. In bad weather, at night, after long marches, or when the guard is very small, the field music may be dispensed with.

## MAP READING AND SKETCHING.

### SECTION 1. MILITARY MAP READING.

When you pick up a map, the first question is, Where is the north? This can usually be told by an arrow (see fig. 1, section 1) which will be found in one of the corners of the map, and which points to the true north--the north of the north star.

On some maps no arrow is to be found. The chances are a hundred to one that the north is at the top of the map, as it is on almost all printed maps. But you can only assure yourself of that fact by checking the map with the ground it represents. For instance, if you ascertain that the city of Philadelphia is due east of the city of Columbus, then the Philadelphia-Columbus line on the map is a due east-and-west line, and establishes at once all the other map directions.

Now, the map represents the ground as nearly as it can be represented on a flat piece of paper. If you are standing up, facing the north, your right hand will be in the east, your left in the west, and your back to the south. It is the same with a map; if you look across it in the direction of the arrow--that is, toward its north--your right hand will be toward what is east on the map; your left hand to the west; the south will be at the bottom of the map.

There is another kind of an arrow that sometimes appears on a map. It is like the one in figure 2, section 1, and points not to the true north but to the magnetic north, which is the north of the compass. Though the compass needle, and therefore the arrow that represents it on the map, does not point exactly north, the deviation is, from a military point of view, slight, and appreciable error will rarely result through the use of the magnetic instead of the true north in the solution of any military problems.

[Illustration: Fig. 1. Fig. 2. Fig. 3. Fig. 4. Fig. 5.]

Should you be curious to know the exact deviation, consult your local surveyor or any civil engineer.

Both arrows may appear on your map. In that case disregard the magnetic arrow unless you are using the map in connection with a compass.

If a map is being used on the ground, the first thing to be done is to put the lines of the map parallel to the real outlines of the ground forms, and roads, fences, railroads, etc., that the map shows; for the making of a map is no more than the drawing on paper of lines parallel to and proportional in length to real directions and distances on the ground.

For instance, the road between two places runs due north and south. Then on the map a line representing the road will be parallel to the arrow showing the north and will be proportional in length to the real road. In this way a map is a picture, or, better, a bare outline sketch; and, as we can make out a picture, though

it be upside down, or crooked on the wall, so we call use a map that is upside down or not parallel to the real ground forms. But it is easier to make out both the picture and the map if their lines are parallel to what they represent. So in using a map on the ground we always put the lines parallel to the actual features they show. This is easy if the map has an arrow.

If the map has no arrow, you must locate objects or features on the ground, and on the map, their representations. Draw on the map a line connecting any two of the features; place this line parallel to all imaginary line through the two actual features located, and your map will be correctly placed. Look to it that you do not reverse on the map the positions of the two objects or features, or your map will be exactly upside down.

When the map has been turned into the proper position--that is to say, "oriented"--the next thing is to locate on the map your position. If you are in the village of Easton and there is a place on the map labeled Easton, the answer is apparent. But if you are out in the country, at an unlabeled point that looks like any one of a dozen other similar points, the task is more complicated. In this latter case you must locate and identify, both on the map and on the ground, other points--hills, villages, peculiar bends in rivers, forests--any ground features that have some easily recognizable peculiarity and that you can see from your position.

Suppose, for instance, you were near Leavenworth and wanted to locate your exact position, of which you are uncertain. You have the map shown in this manual, and, looking about, you see southwest from where you stand the United States Penitentiary; also, halfway between the south and the southeast--south-southeast a sailor would say--the reservoir (rectangle west of "O" in "Missouri"). Having oriented your map, draw on it a line from the map position of the reservoir toward its actual position on the ground. Similarly draw a line from the map position of penitentiary toward its actual position. Prolong the two lines until they intersect. The intersection of the lines will mark the place where you stand--south Merritt Hill.

This method consists merely in drawing on the map lines that represent the lines of sight to known and visible places. The lines pass through the map position of the places you see and are parallel to the actual lines of sight; therefore they are the map representations of the lines of sight, and their intersection is the map position of the eye of the observer.

After this orientation and location of position, one can deduce from the map everything there is to know in regard to directions. In this respect, study of the ground itself will show no more than will study of the map.

After "What direction?" comes "How far?" To answer this, one must understand that the map distance between any two points shown bears a fixed and definite relation or proportion to the real distance between the two points.

For instance: We measure on a map and find the distance between two points to be 1 inch. Then we measure the real distance on

the ground and find it to be 10,000 inches; hence the relation between the map distance and the real distance is 1 to 10,000, or 1/10000. Now, if the map is properly drawn, the same relation will hold good for all distances, and we can obtain any ground distance by multiplying by 10,000 the corresponding map distance.

This relation need not be 1/10000, but may be anything from 1/100 that an architect might use in making a map or plan of a house up to one over a billion and a half, which is about the proportion between map and real distances in a pocket-atlas representation of the whole world on a 6-inch page. Map makers call this relation the "scale" of the map and put it down in a corner in one of three ways.

First. 1 inch equals 100.

Second. 1/100.

Third. As shown in figure 3 (section 1).

These expressions mean one and the same thing. A variation of the first method on a map of different scale might be: 1 inch equals 1 mile. Since a mile contains 63,360 inches, then the real distance between any two points shown on the map is 63,360 times the map distance.

To find the ground distance by the third kind of scale, copy it on the edge of a slip of paper, apply the slip directly to the map, and read off the distance; and so we answer the question, "How far?"

After direction and distance comes the interpretation of the signs, symbols, and abbreviations on the map. Those authorized are given in section 2 (a reprint of Appendix 4, Field Service Regulations, 1914); but there are a good many other conventional signs in common use. A key to them is published by the War Department, and is called "Conventional Signs, United States Army." From these you read at once the natural and artificial features of the country shown on your map. It should be borne in mind that these conventional signs are not necessarily drawn to scale, as are the distances. They show the position and outline of the features rather than the size. This, for the reason that many of the features shown, if drawn to scale, would be so small that one could not make them out except with a magnifying glass. If the exact dimensions are of any importance, they will be written in figures on the map. For instances, bridges.

In addition to the above conventional signs, we have CONTOURS to show the elevations, depressions, slope, and shape of the ground. Abroad, HACHURES are much used, but they serve only to indicate elevation, and, as compared to contours, are of little value. Contours resemble the lines shown in figure 4 (section 1)

Hachures are shown in figure 5 (section 1), and may be found on any European map. They simply show slopes, and, when carefully drawn, show steeper slopes by heavier shading and gentler slopes by the fainter hachures. The crest of the mountain is within the hachures. (See fig. 5, section 1.)

Contours.--A certain student, when asked by his instructor to define "space," said: "I have it, sir, in my head, but can not put it into words." The Instructor replied: "I suppose that under those circumstances, Mr. ----, the definition really would not help much." And so it is with contours--the definition does not help much if you know a contour when you meet it on a map. For examples of contours, turn to the map in section 2 and, starting at the United States penitentiary, note the smooth, flowing, irregular curved lines marked 880, 860, 840, 840, 860, etc.

The only other lines on the map that at all resemble contours are stream lines, like "Corral Creek," but the stream lines are readily distinguished from contours by the fact that they cross the contours squarely, while the contours run approximately parallel to each other. Note the stream line just to the west of South Merritt Hill.

The contours represent lines on the ground that are horizontal and whose meanderings follow the surface, just as the edge of a flood would follow the irregularities of the hills about it. Those lines that contours stand for are just as level as the water's edge of a lake, but horizontally they wander back and forth to just as great a degree.

The line marked 880, at the penitentiary, passes through on that particular piece of ground every point that is 880 feet above sea level. Should the Missouri River rise in flood to 880 feet, the penitentiary would be on an island, the edge of which is marked by the 880 contour.

Contours show several things; among them the height of the ground they cross. Usually the contour has labeled on it in figures the height above some starting point, called the DATUM PLANE--generally sea level. If, with a surveying instrument, you put in on a piece of ground a lot of stakes, each one of which is exactly the same height above sea level--that is, run a line of levels--then make a map showing the location of the stakes, a line drawn on the map through all the stake positions is a contour and shows the position of all points of that particular height.

On any given map all contours are equally spaced in a vertical direction, and the map shows the location of a great number of points at certain fixed levels. If you know the vertical interval between any two adjacent contours, you know the vertical interval for all the contours on that map, for these intervals on a given map are all the same.

With reference to a point through which no contour passes, we can only say that the point in question is not higher than the next contour up the hill, nor lower than the next one down the hill. For the purposes of any problem, it is usual to assume that the ground slopes evenly between the two adjacent contours and that the vertical height of the point above the lower contour is proportional to its horizontal distance from the contour, as compared to the whole distance between the two contours. For instance, on the map, find the height of point A. The horizontal measurements are as shown on the map. The vertical distance between the contours is 20 feet. A is about one-quarter of the distance

between the 800 and the 820 contours, and we assume its height to be one-quarter of 20 feet (5 feet) higher than 800 feet. So the height of A is 805 feet.

The vertical interval is usually indicated in the corner of the map by the letters "V. I." For instance: V. I.=20 feet.

On maps of very small pieces of ground, the V. I. is usually small--perhaps as small as 1 foot; on maps of large areas on a small scale it may be very great--even 1,000 feet.

Contours also show SLOPES. It has already been explained that from any contour to the next one above it the ground rises a fixed number of feet, according to the vertical interval of that map. From the scale of distances on the map the horizontal distance between any two contours can be found. For example: On the map the horizontal distance between D and E is 90 yards, or 270 feet. The vertical distance is 20 feet the V. I. of the map. The slope then is  $20/270 = 1/13.5 = 7\text{-}1/2\% = 4\text{-}1/2 \text{ deg.}$ , in all of which different ways the slope can be expressed,

[Illustration]

On a good many contoured maps a figure like this will be found in one of the corners:

[Illustration]

On that particular map contours separated by the distance

[Illustration]

on the vertical scale show a slope of 1 deg.: if separated by the distance

[Illustration]

they show a 2 deg. slope. etc. A slope of 1 deg. is a rise of 1 foot in 57. To use this scale of slopes copy it on the edge of a piece of paper just as you did the scale of distances and apply it directly to the map.

You will notice that where the contours lie closest the slope is steepest; where they are farthest apart the ground is most nearly flat,

It has already been set forth how contours show height and slope; in addition to this they show the shape of the ground, or GROUND FORMS. Each single contour shows the shape at its particular level of the hill or valley it outlines; for instance, the 880 contour about the penitentiary shows that the hill at that level has a shape somewhat like a horse's head. Similarly, every contour on the map gives us the form of the ground at its particular level, and knowing these ground forms for many levels we can form a fair conception of what the whole surface is like.

A round contour like the letter O outlines a round ground feature; a long narrow one indicates a long narrow ground feature.

Different hills and depressions have different shapes. A good many of them have one shape at one level and another shape at another level, all of which information will be given you by the contours on the map.

One of the ways to see how contours show the shape of the ground is to pour half a bucket of water into a small depression in the ground. The water's edge will be exactly level, and if the depression is approximately round the water's edge will also be approximately round. The outline will look something like figure 6.

Draw roughly on a piece of paper a figure of the same shape and you will have a contour showing the shape of the bit of ground where you poured your water.

Next, with your heel gouge out on one edge of your little pond a small round bay. The water will rush in and the water-mark on the soil will now be shaped something like figure 7.

Alter your drawing accordingly, and the new contour will show the new ground shape.

Again do violence to the face of nature by digging with a stick a narrow inlet opening out of your miniature ocean, and the watermark will now look something like figure 8.

Alter your drawing once more and your contour shows again the new ground form. Drop into your main pond a round clod and you will have a new watermark, like figure 9, to add to your drawing. This new contour, of the same level with the one showing the limit of the depression, shows on the drawing the round island.

Drop in a second clod, this time long and narrow, the watermark will be like figure 10, and the drawing of it, properly placed, will show another island of another shape. Your drawing now will look like figure 11.

It shows a depression approximately round, off which open a round bay and a long narrow bay. There is also a round elevation and a long, narrow one; a long, narrow ridge, jutting out between the two bays, and a short, broad one across the neck of the round bay.

[Illustration: Fig. 6. Fig. 7. Fig 8. Fig. 9. Fig 10. Fig. 11.]

Now flood your lake deeply enough to cover up the features you have introduced. The new water line, about as shown by the dotted line in figure 11, shows the oblong shape of the depression at a higher level; the solid lines show the shape farther down; the horizontal distance between the two contours at different points shows where the bank is steep and where the slope is gentler.

Put together the information that each of these contours gives you, and you will see how contours show the shape of the ground. On the little map you have drawn you have introduced all the varieties of ground forms there are; therefore all the contour forms.



The contours on an ordinary map seem much more complicated, but this is due only to the number of them, their length, and many turns before they finally close on themselves. Or they may close off the paper. But trace each one out, and it will resolve itself into one of the forms shown in figure 11.

Just as the high-tide line round the continents of North and South America runs a long and tortuous course, but finally closes back on itself, so will every contour do likewise. And just as truly as every bend in that high-tide mark turns out around a promontory, or in around a bay, so will every bend in a contour stand for a hill or a valley, pointing to the lowlands if it be a hill, and to the height if it mark a valley.

If the map embrace a whole continent or an island, all the contours will be of closed form, as in figure 11, but if it embrace only it part of the continent or island, some of the contours will be chopped off at the edge of the map, and we have the open form of contours, as we would have if figure 11 were cut into two parts.

The closed form may indicate a hill or a basin; the open form, a ridge or a valley; sometimes a casual glance does not indicate which.

Take up, first, the contour of the open type. If the map shows a stream running down the inside of the contour, there is no difficulty in saying at once that the ground feature is a valley; for instance, V, V, V, and the valley of Corral Creek on the map. But if there is no stream line, does the contour bend show a valley or a ridge?

First of all, there is a radical difference between the bend of a contour round the head of a valley and its bend round the nose of a ridge,

Compare on the map the valleys V and the ridges R. The bend of the contour round the head of the valley is much sharper than the bend of the contour round the nose of the ridge. This is a general truth, not only in regard to maps, but also in regard to ground forms. Study any piece of open ground and note how much wider are the ridges than the valleys. Where you find a "hog back" or "devil's backbone," you have an exception to the rule, but the exceptions are not frequent enough to worry over.

To tell whether a given point is on a ridge or in a valley, start from the nearest stream shown on the map and work across the map to the undetermined point, keeping in mind that in a real trip across the country you start from the stream, go up the hill to the top of a ridge, down the other side of the hill to a water-course, then up a hill to the top of a ridge, down again, up again, etc. That is all traveling is--valley, hill, valley, hill, valley, etc., though you wander till the crack o' doom. And so your map travels must go--valley, hill, valley, hill--till you run off the map or come back to the starting point.

On the map, follow the R-V line, V indicating valley and R ridge or hill. Note first the difference in sharpness in the contour bends; also how the valley contours point to the highland and

the ridge contours to the lowland.

The contours go thus:

[Illustration]

The streams flow down the valleys, and the sharp angle of the contour points always up stream. Note also how the junction of a stream and its tributary usually makes an angle that points down stream.

"Which way does this stream run?"

Water flows down hill. If you are in the bed of a stream, contours representing higher ground must be to your right and to your left. Get the elevations of these contours. Generally the nearest contour to the bank of the stream will cross the stream and there will be an angle or sharp turn in the contour at this crossing. If the point of the angle or sharp turn is toward you, you are going downstream; if away from you, you are going upstream.

If the contours are numbered, you have only to look at the numbers to say where the low and where the high places are; but to read a map with any speed one must be quite independent of these numbers. In ordinary map reading look, first of all, for the stream lines. The streams are the skeleton upon which the whole map is hung. Then pick out the hilltops and ridges and you have a body to clothe with all the details that will be revealed by a close and careful study of what the map maker has recorded.

As to closed contours, they may outline a depression or a hill. On the map, "881" or "885" might be hills or ponds, as far as their shape is concerned. But, clearly, they are hills, for on either side are small streams running away from them. If they were ponds, the stream lines would run toward the closed contours. The rest of "hill, valley, hill," will always solve the problem when there are not enough stream lines shown to make evident at once whether a closed contour marks a pond or a hill. Look in the beginning for the stream lines and valleys, and, by contrast, if for no other reason, the hills and ridges at once loom up.

To illustrate the subject of contours to aid those who have difficulty in reading contoured maps the following is suggested:

1. Secure modeling clay and build a mound.
2. Use wire and slice this mound horizontally at equal vertical intervals into zones; then insert vertical dowels through the mound of clay.
3. Remove the top zone, place on paper, and draw outline of the bottom edge. Trim your paper roughly to the outline drawn. Indicate where the holes made by the dowels pierce the paper.
4. Do the above with each zone of your mound.
5. Place these papers in proper order on dowels similarly placed to ones in original mound at, say, 1 inch vertical interval apart.

A skeleton mound results.

6. Replace the zones of the clay mound and form the original clay mound along the side of skeleton mound.

7. Now force all the paper sheets down the dowels onto the bottom sheet, and we have a map of clay mound with contours.

NOTE.--One-inch or 2-inch planks can be made into any desired form by the use of dowels and similar procedure followed.

People frequently ask, "What should I see when I read a map?" and the answer is given, "The ground as it is." This is not true any more than it is true that the words, "The valley of the Meuse," bring to your mind vine-clad hills, a noble river, and green fields where cattle graze. Nor can any picture ever put into your thought what the Grand Canyon really is. What printed word or painted picture can not do, a map will not. A map says to you, "Here stands a hill," "Here is a valley," "This stream runs so," and gives you a good many facts in regard to them. But you do not have to "see" anything, any more than you have to visualize Liege in order to learn the facts of its geography. A map sets forth cold facts in an alphabet all its own, but an easy alphabet, and one that tells with a few curving lines more than many thousand words could tell.

## SECTION 2. SKETCHING.

Noncommissioned officers and selected privates should be able to make simple route sketches. This is particularly useful in patrolling as thereby a patrol leader is able to give his commander a good idea of the country his patrol has traversed. Sketches should be made on a certain scale, which should be indicated on the sketch, such as 3 inches on the sketch equals 1 mile on the ground. The north should be indicated on the sketch by means of an arrow pointing in that direction. Any piece of paper may be used to make the sketch on. The back of the field-message blank is ruled and prepared for this purpose. The abbreviations and conventional signs shown on the following pages should be used in making such simple sketches.

### Field Maps and Sketches.

The following abbreviations and signs are authorized for use on field maps and sketches. For more elaborate map work the authorized conventional signs as given in the manual of "Conventional Signs, United States Army Maps," are used.

Abbreviations other than those given should not be used.

### ABBREVIATIONS.

A.	Arroyo.	L. S. S.	Life-Saving Station.
abut.	Abutment.	L. H.	Lighthouse
Ar.	Arch.	Long.	Longitude.
b.	Brick.	Mt.	Mountain.
B. S.	Blacksmith Shop.	Mts.	Mountains.

bot.	Bottom.	N.	North.
Br.	Branch.	n. f.	Not fordable.
br.	Bridge.	P.	Pier.
C.	Cape.	pk.	Plank.
cem.	Cemetery.	P. O.	Post Office
con.	Concrete.	Pt.	Point.
cov.	Covered.	q.p	Queen-post
Cr.	Creek.	R.	River.
d.	Deep.	R. H.	Roundhouse.
cul.	Culvert.	R. R.	Railroad.
D. S.	Drug Store.	S.	South.
E.	East.	s.	Steel.
Est.	Estuary.	S. H.	Schoolhouse.
f.	Fordable.	S. M.	Sawmill.
Ft.	Fort.	Sta.	Station.
G. S	General Store.	st.	Stone.
gir.	Girder.	str.	Stream.
G. M.	Gristmill.	T. G.	Tollgate.
I.	Iron.	Tres.	Trestle.
I.	Island.	tr.	Truss.
Jc.	Junction.	W. T.	Water Tank.
k.p.	King-post.	W. W.	Water Works.
L.	Lake.	W.	West.
Lat.	Latitude.	w.	Wood.
Ldg.	Landing.	wd.	Wide.

[Illustration: SIGNS--FIELD MAPS AND SKETCHES]

[Illustration]

#### MESSAGE BLANKS

[Illustration]

The heading "From" is filled in with the name of the detachment sending the information: as "Officer's Patrol, 7th Cav." Messages sent on the same day from the same source to the same person are numbered consecutively. The address is written briefly, thus: "Commanding officer, Outpost, 1st Brigade," In the signature the writer's surname only and rank are given.

This blank is four and a half by six and three quarters-inches, including the margin on the left for binding. The back is ruled in squares, the side of each square representing 100 yards on a scale of 3 inches to one mile, for use in making simple sketches explanatory of the message. It is issued by the Signal Corps in blocks of forty with duplicating sheets. The regulation envelope is three by five and one-fourth inches and is printed as follows:

#### UNITED STATES ARMY FIELD MESSAGE.

To ..... No .....  
 (For signal operator only.)  
When sent ..... No .....  
Rate of speed .....  
Name of messenger .....  
When and by whom rec'd .....  
 This Envelope will be Returned to Bearer.

[Illustration]

## CHAPTER XII.

### SIGNALS AND CODES.

(Extracts from Signal Book, United States Army, 1916.)

#### General Instructions for Army Signaling.

1. Each signal station will have its call, consisting of one or two letters, as Washington, "W"; and each operator or signalist will also have his personal signal of one or two letters, as Jones, "Jo." These being once adopted will not be changed without due authority.
2. To lessen liability of error, numerals which occur in the body of a message should be spelled out.
3. In receiving a message the man at the telescope should call out each letter as received, and not wait for the completion of a word.
4. A record of the date and time of the receipt or transmission of every message must be kept.
5. The duplicate manuscript of messages received at, or the original sent from, a station should be carefully filed.
6. In receiving messages nothing should be taken for granted, and nothing considered as seen until it has been positively and clearly in view. Do not anticipate what will follow from signals already given. Watch the communicating station until the last signals are made, and be very certain that the signal for the end of the message has been given.
7. Every address must contain at least two words and should be sufficient to secure delivery.
8. All that the sender writes for transmission after the word "To" is counted.
9. Whenever more than one signature is attached to a message count all initials and names as a part of the message.
10. Dictionary words, initial letters, surnames of persons, names of cities, towns, villages, States, and Territories, or names of the Canadian Provinces will be counted each as one word: e.g., New York, District of Columbia, East St. Louis should each be counted as one word. The abbreviation of the names of cities, towns, villages, States, Territories, and provinces will be counted the same as if written in full.
11. Abbreviations of weights and measures in common use, figures,

decimal points, bars of division, and in ordinal numbers the affixes "st," "d," "nd," "rd," and "th" will be each counted as one word. Letters and groups of letters, when such groups do not form dictionary words and are not combinations of dictionary words, will be counted at the rate of five letters or fraction of five letters to a word. When such groups are made up of combinations of dictionary words, each dictionary word so used will be counted.

12. The following are exceptions to paragraph 55, and are counted as shown:

- A. M. 1 word
- P. M. 1 word
- O. K. 1 word
- Per cent 1 word

13. No message will be considered sent until its receipt has been acknowledged by the receiving station.

The International Morse or General Service Code.

18. The International Morse Code is the General Service Code and is prescribed for use by the Army of the United States and between the Army and the Navy of the United States. It will be used on radio systems, submarine cables using siphon recorders, and with the heliograph, flash-lantern, and all visual signaling apparatus using the wigwag.

Alphabet

A .-	N -.
B -...	O ---
C -.-.	P .---
D -..	Q ---.
E .	R ..
F ..-	S ...
G --.	T -
H ....	U ...
I ..	V ....
J .----	W ...
K -.-	X -.-.
L .---	Y -.-.
M --	Z -.-.

Numerals

1 .----	6 -....
2 ..---	7 -.-..
3 ...--	8 ---..
4 ....-	9 -.-.-
5 ..... 0	-----

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	. - . . .

Visual Signaling in General.

21. Methods of visual signaling are divided as follows:

- (a) By flag, torch, hand lantern, or beam of searchlight (without shutter). (General Service Code).
- (b) By heliograph, flash lantern, or searchlight (with shutter). (General Service Code).
- (c) By Ardois. (General Service Code).
- (d) By hand flags or by stationary semaphore. (Two-arm semaphore Code.)
- (e) By preconcerted signals with Coston lights, rockets, bombs, Very pistols, small arms, guns, etc.
- (f) By flag signals by permanent hoists. (International Code.)

22. The following conventional signals, with exceptions noted, will be used in the first four classes.

		<u>Exceptions</u>
		Ardois and semaphore.
End of word.	Interval.	
End of sentence.	Double interval.	
End of message.	Triple interval.	
Signal separating preamble from address; address from text; text from signature.	- . . . -	Double interval, signature preceded also by "Sig." Interval.
Acknowledgement.	R.	
Error.	. . . . .	A.
Negative.	K.	
Preparatory.	L.	
Annulling.	N.	
Affirmative.	P.	

Interrogatory.	. . . - - . . .	O.
Repeat after word.	Interrogatory. A	
	(word).	
Repeat last message.	Interrogatory	
	three times	
Send faster.	QRQ	
Send slower.	QRS	
Cease sending	QRT	
Wait a moment	. - . . .	None.
Execute.	IX, IX	
Move to your right.	MR	
Move to your left.	ML	
Move up.	MU	
Move down.	MD	
Finished	. . . - - -	None.

Visual Signaling: By Flag (Wig-Wag), Torch, Hand Lantern, or Beam or Searchlight (Without Shutter).

#### GENERAL SERVICE CODE.

23. For the flag used with the General Service Code there are three motions and one position. The position is with the flag held vertically, the signalman facing directly toward the station with which it is desired to communicate. The first motion (the dot) is to the right of the sender, and will embrace an arc of 90 deg., starting with the vertical and returning to it, and will be made in a plane at right angles to the line connecting the two stations. The second motion (the dash) is a similar motion to the left of the sender. The third motion (front) is downward directly in front of the sender and instantly returned upward to the first position. Front is used to indicate an interval.

24. The beam of the searchlight, though ordinarily used with the shutter like the heliograph, may be used for long-distance signaling, when no shutter is suitable or available, in a similar manner to the flag or torch, the first position being a vertical one. A movement of the beam 90 deg. to the right of the sender indicates a dot, a similar movement to the left indicates a dash; the beam is lowered vertically for front.

25. To use the torch or hand lantern, a foot light must be employed as a point of reference to the motion. The lantern is most conveniently swung out upward to the right of the footlight for a dot, to the left for a dash, and raised vertically for front.

NOTE.--To call a station, make the call letter until acknowledged, at intervals giving the call or signal of the calling station. If the call letter of a station is unknown, wave flag until acknowledged. In using the searchlight without shutter throw the beam in a vertical position and move it through an arc of 180 deg. in a plane at right angles to the line connecting the two stations until acknowledged. To acknowledge a call, signal "Acknowledgment" followed by the call letter of the acknowledging station.

Signaling with Heliograph, Flash Lantern, and Searchlight (With



Shutter).

#### GENERAL SERVICE CODE.

26. The first position is to turn a steady flash on the receiving station. The signals are made by short and long flashes. Use a short flash for dot and a long steady flash for dash. The elements of a letter should be slightly longer than in sound signals.

27. To call a station, make its call letter until acknowledged.

28. If the call letter of a station be unknown, signal A until acknowledged. Each station will then turn on a steady flash and adjust. When adjustment is satisfactory to the called station, it will cut off its flash and the calling station will proceed with its message.

29. If the receiver sees that the sender's mirror or light needs adjustment, he will turn on a steady flash until answered, by a steady flash. When the adjustment is satisfactory the receiver will cut off his flash and the sender will resume his message.

[Illustration: THE TWO-ARM SEMAPHORE CODE.]

[Illustration: THE TWO-ARM SEMAPHORE CODE.]

30. To break the sending station for other purposes, turn on a steady flash.

#### SOUND SIGNALS.

56. Sound signals made by the whistle, foghorn, bugle, trumpet, and drum may well be used in a fog, mist, falling snow, or at night. They may be used with the dot and dash code.

In applying the General Service Code to whistle, foghorn, bugle, or trumpet, one short blast indicates a dot and one long blast a dash. With the drum, one tap indicates a dot and two taps in rapid succession a dash. Although these signals can be used with a dot and dash code, they should be so used in connection with a preconcerted or conventional code.

Signaling by Two-Arm Semaphore.

#### HAND FLAGS.

43. Signaling by the two-arm semaphore is the most rapid method of sending spelled-out messages. It is, however, very liable to error if the motions are slurred over or run together in an attempt to make speed. Both arms should move rapidly and simultaneously, but there should be a perceptible pause at the end of each letter before making the movements for the next letter. Rapidity is secondary to accuracy. For alphabet see pages following.

NOTE.--In making the interval the flags are crossed downward in front of the body (just above the knees); the double interval is the "chop-chop" signal made twice; the triple interval is

"chop-chop" signal made three times. In calling a station face it squarely and make its call. If there is no immediate reply wave the flags over the head to attract attention, making the call at frequent intervals. When the sender makes "end of message" the receiver, if message is understood, extends the flags horizontally and waves them until the sender does the same, when both leave their stations. Care must be taken with hand flags to hold the staffs so as to form a prolongation of the arms.

LETTER CODES.

INFANTRY.

47. For use with General Service Code or semaphore hand flags.

Letter of alphabet	If signaled from the rear to the firing line.	If signaled from the firing line to the rear.
AM	Ammunition going forward.	Ammunition required.
CCC	Charge (mandatory at all times).	Am about to charge if no instructions to the contrary.
CF	Cease firing.	Cease firing.
DT	Double time or "rush."	Double time or "rush."
F	Commence firing.	
FB	Fix bayonet.	
FL	Artillery fire is causing us losses.	
G	Move forward.	Preparing to move forward.
HHH	Halt.	
K	Negative.	Negative.
LT	Left.	Left.
O	What is the (R. N., Ardois and etc.)? Interrogatory.	What is the (R. N., etc.)? Interrogatory.
Semaphore only.)		
. . . . .	What is the (R. N., etc.)? Interrogatory.	What is the (R. N., etc.)? Interrogatory.
but ardois and semaphore.)		
P	Affirmative.	Affirmative.
RN	Range.	Range.
RT	Right.	Right.
SSS	Support going forward.	Support needed.
SUF	Suspend firing.	Suspend firing.
T	Target.	Target.

CAVALRY.

48. For use with General Service Code or semaphore hand flags.

AM--Ammunition going forward (if signaled from the rear to the front).  
 Ammunition required (If signaled from the front).  
 CCC--Charge (if signaled rear the rear to the front).  
 About to charge if no instructions to the contrary (if signaled from the front).  
 CF--Cease firing.  
 DT--Double time, rush, or hurry.  
 F--Commence firing.  
 FL--Artillery fire is causing us losses.  
 G--Move forward (if signaled from the rear to the front). Preparing to move forward (if signaled from the front).  
 HHH--Halt.  
 K--Negative.  
 LT--Left.  
 M--Bring up the horses (if signaled from front to rear). Horses going forward (if signaled from rear to front).  
 O--What is the (R. N., etc.)? Interrogatory. (Ardois and semaphore only.)  
 . . . . .--What is the (R. N., etc.)? Interrogatory. (All methods but ardois and semaphore.)  
 P--Affirmative.  
 R--Acknowledgment.  
 RN--Range.  
 RT--Right.  
 SSS--Support going forward (if signaled from the rear to the front). Support needed (if signaled from the front).  
 SUF--Suspend firing.  
 T--Target.

FIELD ARTILLERY.

49. For use with General Service Code or semaphore hand flags.

. . . . .--Error. (All methods but ardois and semaphore.)  
 A--Error. (Ardois and semaphore only.)  
 AD--Additional.  
 AKT--Draw ammunition from combat tram.  
 AL--Draw ammunition from limbers.  
 AM--Ammunition going forward.  
 AMC--At my command.  
 AP--Aiming point.  
 B (numerals)--Battery (so many) rounds.  
 BS (numerals)--(Such.) Battalion station.  
 BL--Battery from the left.  
 BR--Battery from the right.  
 CCC--Charge (mandatory at all times). Am about to charge if not instructed to contrary.  
 CF--Cease firing.  
 CS--Close station.  
 CT--Change target.  
 D--Down.  
 DF--Deflection.  
 DT--Double time. Rush. Hurry.  
 F--Commence firing.

FCL (numerals)--On 1st piece close by (so much).  
     FL--Artillery fire is causing us losses.  
 FOP (numerals)--On 1st piece open by (so much).  
     G--Move forward. Preparing to move forward.  
 HHH--Halt. Action suspended.  
     IX--Execute. Go ahead. Transmit.  
     JI--Report firing data.  
     K--Negative. No.  
     KR--Corrector.  
     L--Preparatory. Attention.  
 LCL (numerals)--On 4th piece close by (so much).  
 LOP (numerals)--On 4th piece open by (so much).  
     LT--Left.  
     LL--Left from the left.  
     LR--Left from the right.  
 LE (numerals)--Left (so much).  
     MD--Move down.  
     ML--Move to your left.  
     MR--Move to your right.  
     MU--Move up.  
 MO (numerals)--Move (so much).  
     N--Annul, cancel.  
     O--What is the (R. N., etc.)? Interrogatory.  
         (Ardois and semaphore only.)  
     . . . .--What is the (R. N., etc.)? Interrogatory.  
         (All methods but ardois and semaphore.)  
     P--Affirmative. Yes.  
     PS--Percussion. Shrapnel.  
     QRQ--Send faster.  
     QRS--Send slower.  
     QRT--Cease sending.  
     R--Acknowledgment. Received.  
     RS--Regimental station.  
     RL--Right from the left.  
     RR--Right from the right.  
     RN--Range.  
     RT--Right.  
     S--Subtract.  
 SCL (numerals)--On 2d piece close by (so much).  
 SOP (numerals)--On 2d piece open by (so much).  
     SH--Shell.  
     SI--Site.  
     SSS--Support needed.  
     T--Target.  
 TCL (numerals)--On 3d piece close by (so much).  
 TOP (numerals)--On 3d piece open by (so much).  
     U--Up.  
     Y (letter)--Such battery station.

## CHAPTER XIII.

### FIRST AID RULES.

The bandages and dressings contained in the first-aid packet have been so treated as to destroy any germs thereon. Therefore, when dressing a wound, be careful not to touch or handle that

part of the dressing which is to be applied to the wound.

A sick or injured person should always be made to lie down on his back, if practicable, as this is the most comfortable position, and all muscles may be relaxed.

All tight articles of clothing and equipment should be loosened, so as not to interfere with breathing or the circulation of the blood. Belts, collars, and the trousers at the waist should be opened.

[Illustration: FIG. 1.]

Don't let mere onlookers crowd about the patient. They prevent him from getting fresh air and also make him nervous and excited.

In case of injury the heart action is generally weak from shock, and the body, therefore, grows somewhat cold. So don't remove any more clothing than is necessary to expose the injury.

Cut or rip the clothing, but don't pull it. Try to disturb the patient as little as possible.

Don't touch a wound with your fingers or a handkerchief, or with anything else but the first-aid dressing. Don't wash the wound with water, as you may infect it.

Don't administer stimulants (whisky, brandy, wine, etc.) unless ordered to do so by a doctor. While in a few cases stimulants are of benefit, in a great many cases they do positive harm, especially where there has been any bleeding.

The heart may be considered as a pump and the arteries as a rubber hose, which carry the blood from the heart to every part of the body. The veins are the hose which carry the blood back to the heart. Every wound bleeds some, but, unless a large artery or a large vein is cut, the bleeding will stop after a short while if the patient is kept quiet and the first-aid dressing is bound over the wound so as to make pressure on it.

[Illustration: FIG. 2.]

When a large artery is cut the blood gushes out in spurts every time the heart beats. In this case it is necessary to stop the flow of blood by pressing upon the hose somewhere between the heart and the leak.

If the leak is in the arm or hand, apply pressure as in figure 1.

If the leak is in the leg, apply pressure as in figure 2.

If the leak is in the shoulder or armpit, apply pressure as in figure 3.

The reason for this is that at the places indicated the arteries may be pressed against a bone more easily than at any other places.

Another way of applying pressure (by means of a tourniquet) is

shown in figure 4. Place a pad of tightly rolled cloth or paper, or any suitable object, over the artery. Tie a bandage loosely about the limb and then insert your bayonet, or a stick, and twist up the bandage until the pressure of the pad on the artery stops the leak. Twist the bandage slowly and stop as soon as the blood ceases to flow, in order not to bruise the flesh or muscles unnecessarily.

[Illustration: FIG. 3.]

A tourniquet may cause pain and swelling of the limb, and it left on too long may cause the limb to die. Therefore, about every half hour or so, loosen the bandage very carefully, but if the bleeding continues pressure must be applied again. In this case apply the pressure with the thumb for five or ten minutes, as this cuts off only the main artery and leaves some of the smaller arteries and the veins free to restore some of the circulation. When a tourniquet is painful, it is too tight and should be carefully loosened a little.

If the leg or arm is held upright, this also helps to reduce the bleeding in these parts, because the heart then has to pump the blood uphill.

A broken bone is called a fracture. The great danger in the case of a fracture is that the sharp, jagged edges of the bones may stick through the flesh and skin, or tear and bruise the arteries, veins, and muscles. If the skin is not broken, a fracture is not so serious, as no germs can get in. Therefore never move a person with a broken bone until the fracture has been so fixed that the broken ends of the bone can not move.

[Illustration: FIG. 4.--Improvised tourniquet.]

If the leg or arm is broken, straighten the limb gently and if necessary pull upon the end firmly to get the bones in place. Then bind the limb firmly to a splint to hold it in place. A splint may be made of any straight, stiff material--a shingle or piece of board, a bayonet, a rifle, a straight branch of a tree, etc. Whatever material you use must be well padded on the side next to the limb. Be careful never to place the bandages over the fracture, but always above and below. (Figs. 5, 6, 7, 8.)

Many surgeons think that the method of binding a broken leg to the well one, and of binding the arm to the body, is the best plan in the field as being the quickest and one that serves the immediate purpose.

[Illustration: FIG. 5.]

[Illustration: FIG. 6.]

With wounds about the body the chest and abdomen you must not meddle except to protect them when possible without much handling with the materials of the packet.

FAINTING, SHOCK, HEAT EXHAUSTION.

The symptoms of fainting, shock, and heat exhaustion are very similar. The face is pale, the skin cool and moist, the pulse is weak, and generally the patient is unconscious. Keep the patient quiet, resting on his back, with his head low. Loosen the clothing, but keep the patient warm, and give stimulants (whisky, hot coffee, tea, etc.).

#### SUNSTROKE.

In the case of sunstroke the face is flushed, the skin is dry and very hot, and the pulse is full and strong. In this case place the patient in a cool spot, remove the clothing, and make every effort to lessen the heat in the body by cold applications to the head and surface generally. Do not, under any circumstances, give any stimulants or hot drinks.

[Illustration: FIG. 7.]

[Illustration: FIG. 8.]

#### FREEZING AND FROSTBITE.

The part frozen, which looks white or bluish white, and is cold, should be very slowly raised in temperature by brisk but careful rubbing in a cool place and never near a fire. Stimulants are to be given cautiously when the patient can swallow, and followed by small amounts of warm liquid nourishment. The object is to restore the circulation of the blood and the natural warmth gradually and not violently. Care and patience are necessary to do this.

#### RESUSITATION OF THE APPARENTLY DROWNED.

In the instruction of the Army in First Aid the method of resuscitation of the apparently drowned, as described by "Schaefer," will be taught instead of the "Sylvester Method," heretofore used. The Schaefer method of artificial respiration is also applicable in cases of electric shock, asphyxiation by gas, and of the failure of respiration following concussion of the brain.

Being under water for four or five minutes is generally fatal, but an effort to revive the apparently drowned should always be made, unless it is known that the body has been under water for a very long time. The attempt to revive the patient should not be delayed for the purpose of removing his clothes or placing him in the ambulance. Begin the procedure as soon as he is out of the water, on the shore or in the boat. The first and most important thing is to start artificial respiration without delay.

The Schaefer method is preferred because it can be carried out by one person without assistance, and because its procedure is not exhausting to the operator, thus permitting him, if required, to continue it for one or two hours. When it is known that a person has been under water for but a few minutes continue the artificial respiration for at least one and a half to two hours before considering the case hopeless. Once the patient has begun to

breathe watch carefully to see that he does not stop again. Should the breathing be very faint, or should he stop breathing, assist him again with artificial respiration. After he starts breathing do not lift him nor permit him to stand until the breathing has become full and regular.

As soon as the patient is removed from the water, turn him face to the ground, clasp your hands under his waist, and raise the body so any water may drain out of the air passages while the head remains low. (Figure 9.)

[Illustration: FIG. 9.--Schaefer method of artificial respiration. Inspiration.]

[Illustration: FIG. 10.--Schaefer method of artificial respiration. Expiration.]

The patient is laid on his stomach, arms extended from his body beyond his head, face turned to one side so that the mouth and nose do not touch the ground. This position causes the tongue to fall forward of its own weight and so prevents its falling back into the air passages. Turning the head to one side prevents the face coming into contact with mud or water during the operation. This position also facilitates the removal from the mouth of foreign bodies, such as tobacco, chewing gum, false teeth, etc., and favors the expulsion of mucus, blood, vomitus, serum, or any liquid that may be in the air passages.

The operator kneels, straddles one or both of the patient's thighs, and faces his head. Locating the lowest rib, the operator, with his thumbs nearly parallel to his fingers, places his hands so that the little finger curls over the twelfth rib. If the hands are on the pelvic bones the object of the work is defeated; hence the bones of the pelvis are first located in order to avoid them. The hands must be free from the pelvis and resting on the lowest rib. By operating on the bare back it is easier to locate the lower ribs and avoid the pelvis. The nearer the ends of the ribs the hands are placed without sliding off the better. The hands are thus removed from the spine, the fingers being nearly out of sight.

The fingers help some, but the chief pressure is exerted by the heels (thenar and hypothenar eminences) of the hands, with the weight coming straight from the shoulders. It is a waste of energy to bend the arms at the elbows and shove in from the sides, because the muscles of the back are stronger than the muscles of the arms.

The operator's arms are held straight, and his weight is brought from his shoulders by bringing his body and shoulders forward. This weight is gradually increased until at the end of the three seconds of vertical pressure upon the lower ribs of the patient the force is felt to be heavy enough to compress the parts; then the weight is suddenly removed. If there is danger of not returning the hands to the right position again, they can remain lightly in place; but it is usually better to remove the hands entirely. If the operator is light and the patient an overweight adult, he can utilize over 80 per cent of his weight by raising his knees from the ground and supporting himself entirely on his



toes and the heels of his hands, the latter properly placed on the ends of the floating ribs of the patient. In this manner he can work as effectively as a heavy man.

A light feather or a piece of absorbent cotton drawn out thin and held near the nose by some one will indicate by its movements whether or not there is a current of air going and coming with each forced expiration and spontaneous inspiration.

The natural rate of breathing is 12 to 15 times per minute. The rate of operation should not exceed this. The lungs must be thoroughly emptied by three seconds of pressure, then refilling takes care of itself. Pressure and release of pressure--one complete respiration--occupies about five seconds. If the operator is alone, he can be guided in each act by his own deep, regular respiration or by counting or by his watch lying by his side. If comrades are present, he can be advised by them.

The duration of the efforts as artificial respiration should ordinarily exceed an hour; indefinitely longer if there are any evidences of returning animation, by way of breathing, speaking, or movements. There are liable to be evidences of life within 25 minutes in patients who will recover from electric shock, but where there is doubt the patient should be given the benefit of the doubt. In drowning, especially, recoveries are on record after two hours or more of unconsciousness; hence, the Schaefer method, being easy of operation, is more likely to be persisted in.

Aromatic spirits of ammonia may be poured on a handkerchief and held continuously within 3 inches of the face and nose. If other ammonia preparations are used, they should be diluted or held farther away. Try it on your own nose first.

When the operator is a heavy man it is necessary to caution him not to bring force too violently upon the ribs, as one of them might be broken.

Do not attempt to give liquids of any kind to the patient while unconscious. Apply warm blankets and hot-water bottles as soon as they can be obtained.

## CHAPTER XIV.

### LAWS AND REGULATIONS.

#### SECTION 1. GENERAL PROVISIONS.

The Army of the United States is governed by certain laws called "The Articles of War" and certain regulations called "Army Regulations."

The following list includes the offenses most often committed by soldiers, generally through ignorance or carelessness rather than viciousness. Violations of any rule or regulation should

be carefully guarded against, since they not only subject the offender to punishment, but also bring discredit on his comrades, his organization, and on the military profession:

1. Selling, pawning, or, through neglect, losing or spoiling any Government property, such as uniforms, blankets, equipment, ammunition, etc.
2. Disobedience of the orders of any officer or noncommissioned officer.
3. Disrespect to an officer or noncommissioned officer.
4. Absence from camp without leave.
5. Absence from any drill, formation, or other duty without authority.
6. Drunkenness on duty or off duty, whether in camp or when absent either with or without leave.
7. Bringing liquor into camp.
8. Noisy or disorderly conduct in camp or when absent either with or without leave.
9. Entering on private property, generally for the purpose of stealing fruit, etc.
10. Negligence or carelessness at drill or on other duty, particularly while on guard or as a sentinel over prisoners.
11. Wearing an unauthorized uniform or wearing the uniform in an improper manner.
12. Urinating in or around camp.
13. Falling to salute properly.
14. Disrespect or affront to a sentinel.
15. Abuse or neglect of his horse.

"The basic principles of the combat tactics of the different arms are set forth in the Drill Regulations of those arms for units as high as brigades," (Preface, Field Service Regulations.)

"The Drill Regulations are furnished as a guide. They provide the principles for training and for increasing the probability of success in battle. In the interpretation of the regulations the spirit must be sought. Quibbling over the minutiae of form is indicative of failure to grasp the spirit," (Paragraph 4, Infantry Drill Regulations.)

Field Service Regulations govern all arms of the Army of the United States."

## SECTION 2. THE ARMY OF THE UNITED STATES.

The Army of the United States shall consist of the Regular Army, the Volunteer Army, the Officers' Reserve Corps, the Enlisted Reserve Corps, the National Guard while in the service of the United States, and such other land forces as are now or may hereafter be authorized by law. (Sec. 1, act of June 3, 1916.)

### SECTION 3. RANK AND PRECEDENCE OF OFFICERS AND NONCOMMISSIONED OFFICERS.

The following are the grades of rank of officers and noncommissioned officers:

1. Lieutenant general.
2. Major general.
3. Brigadier general.
4. Colonel.
5. Lieutenant colonel.
6. Major.
7. Captain.
8. First lieutenant.
9. Second lieutenant.
10. Aviator, Signal Corps.
11. Cadet.
12. (a) Sergeant major, regimental; sergeant major, senior grade, Coast Artillery Corps; (b) quartermaster sergeant, senior grade, Quartermaster Corps; master hospital sergeant, Medical Department; master engineer, senior grade, Corps of Engineers; master electrician, Coast Artillery Corps; master signal electrician; band leader; (c) hospital sergeant, Medical Department; master engineer, junior grade, Corps of Engineers; engineer, Coast Artillery Corps.
13. Ordnance sergeant; quartermaster sergeant, Quartermaster Corps; supply sergeant, regimental.
14. Sergeant-major, squadron and battalion; sergeant major, junior grade, Coast Artillery Corps; supply sergeant, battalion, Corps of Engineers.
15. (a) First sergeant; (b) sergeant, first class, Medical Department; sergeant, first class, Quartermaster Corps; sergeant, first class, Corps of Engineers; sergeant, first class, Signal Corps; electrician sergeant, first class, Coast Artillery Corps; electrician sergeant, Artillery Detachment, United States Military Academy; assistant engineer, Coast Artillery Corps; (c) master gunner, Coast Artillery Corps; master gunner, Artillery Detachment, United States Military Academy; band sergeant and assistant leader, United States Military Academy band; assistant band leader; sergeant bugler; electrician sergeant, second class, Coast Artillery Corps; electrician sergeant, second class, Artillery Detachment, United States Military Academy; radio sergeant.
16. Color sergeant.
17. Sergeant; supply sergeant, company; mess sergeant; stable sergeant; fireman, Coast Artillery Corps.
18. Corporal.

In each grade and subgrade date of commission, appointment, or warrant determines the order of precedence. (Paragraph. 9 Army Regulations, 1913.)

#### SECTION 4. INSIGNIA OF OFFICERS AND NONCOMMISSIONED OFFICERS.

The insignia of rank appearing on the shoulder straps, shoulder loops, or collar of shirt (when shirt is worn without coat) of officers are as follows:

General: Coat of arms and two stars.  
Lieutenant general: One large star and two smaller ones.  
Major general: Two silver stars.  
Brigadier general: One silver star.  
Colonel: One silver spread eagle.  
Lieutenant colonel: One silver leaf.  
Major: One gold leaf.  
Captain: Two silver bars.  
First lieutenant: One silver bar.

The grade of noncommissioned officers is indicated by chevrons worn on the sleeve.

#### SECTION 5. EXTRACTS FROM THE ARTICLES OF WAR.

(Relating to enlisted men.)

#### CERTAIN ARTICLES TO BE READ AND EXPLAINED.

ART. 110. Articles 1, 2, and 29, 54 to 96, inclusive, and 104 to 109, inclusive, shall be read and explained to every soldier at the time of his enlistment or muster in, or within six days thereafter, and shall be read and explained once every six months to the soldiers of every garrison, regiment, or company in the service of the United States.

#### DEFINITIONS.

ARTICLE 1. The following words when used in these articles shall be construed in the sense indicated in this article, unless the context shows that a different sense is intended, namely:

- (a) The word "officer" shall be construed to refer to a commissioned officer;
- (b) The word "soldier" shall be construed as including a noncommissioned officer, a private, or any other enlisted man;
- (c) The word "company" shall be understood as including a troop or battery; and
- (d) The word "battalion" shall be understood as including a squadron.

#### PERSONS SUBJECT TO MILITARY LAW.

ART. 2. The following persons are subject to these articles and shall be understood as included in the term "any person subject

to military law" or "persons subject to military law" whenever used in these articles: \_Provided\_, That nothing contained in this act, except as specifically provided in article 2, subparagraph (c), shall be construed to apply to any person under the United States naval jurisdiction, unless otherwise specifically provided by law:

(a) All officers and soldiers belonging to the Regular Army of the United States; all volunteers, from the dates of their muster or acceptance into the military service of the United States; and all other persons lawfully called, drafted, or ordered into or to duty or for training in the said service, from the dates they are required by the terms of the call, draft, or order to obey the same.

(b) Cadets.

(c) Officers and soldiers of the Marine Corps when detached for service with the armies of the United States by order of the President: \_Provided\_, That an officer soldier of the Marine Corps when so detached may be tried by military court-martial for an offense committed against the laws for the government of the naval service prior to his detachment, and for an offense committed against these articles he may be tried by a naval court-martial after such detachment ceases.

(d) All retainers to the camp and all persons accompanying or serving with the armies of the United States without the territorial jurisdiction of the United States, and in time of war all such retainers and persons accompanying or serving with the armies of the United States in the field, both within and without the territorial jurisdiction of the United States, though not otherwise subject to these articles.

(e) All persons under sentence adjudged by courts-martini.

(f) All persons admitted into the Regular Army Soldiers' Home at Washington. D. C.

#### ENLISTMENT WITHOUT DISCHARGE.

ART. 29. Any soldier who, without having first received a regular discharge, again enlists in the Army, or in the militia when in the service of the United States, or in the Navy or Marine Corps of the United States, or in any foreign army, shall be deemed to have deserted the service of the United States; and, where enlistment is in one of the forces of the United States mentioned above, to have fraudulently enlisted therein.

#### FRAUDULENT ENLISTMENT.

ART. 54. Any person who shall procure himself to be enlisted in the military service of the United States by means of willful misrepresentation or concealment as to his qualifications for enlistment, and shall receive pay or allowances under such enlistment, shall be punished as a court-martial may direct.

## OFFICER MAKING UNLAWFUL ENLISTMENT

ART. 55. Any officer who knowingly enlists or musters into the military service any person whose enlistment or muster in is prohibited by law, regulation, or orders shall be dismissed from the service or suffer such other punishment as a court-martial may direct.

## MUSTER ROLLS--FALSE MUSTER.

ART. 56. At every muster of a regiment, troop, battery, or company the commanding officer thereof shall give to the mustering officer certificates, signed by himself, stating how long absent officers have been absent and the reasons of their absence. And the commanding officer of every troop, battery, or company shall give like certificates, stating how long absent noncommissioned officers and private soldiers have been absent and the reasons of their absence. Such reasons and time of absence shall be inserted in the muster rolls opposite the names of the respective absent officers and soldiers, and the certificates, together with the muster rolls, shall be transmitted by the mustering officer to the Department of War as speedily as the distance of the place and muster will admit. Any officer who knowingly makes a false muster of man or animal, or who signs or directs or allows the signing of any muster roll knowing the same to contain false muster or false statement as to the absence or pay of an officer or soldier, or who wrongfully takes money or other consideration on mustering in a regiment, company, or other organization, or on signing muster rolls, or who knowingly musters as an officer or soldier a person who is not such officer or soldier, shall be dismissed from the service and suffer such other punishment as a court-martial may direct.

## FALSE RETURNS--OMISSION TO RENDER RETURNS.

ART. 57. Every officer commanding a regiment, an independent troop, battery, or company, or a garrison shall, in the beginning of every month, transmit, through the proper channels, to the War Department an exact return of the same, specifying the names of the officers then absent from their posts, with the reasons for and the time of their absence. Every officer whose duty it is to render to the War Department or other superior authority a return of the state of the troops under his command, or of the arms, ammunition, clothing, funds, or other property thereunto belonging, who knowingly makes a false return thereof shall be dismissed from the service and suffer such other punishment as a court-martial may direct. And any officer who, through neglect or design, omits to render such return shall be punished as a court-martial may direct.

## DESERTION.

ART. 58. Any person subject to military law who deserts or attempts to desert the service of the United States shall, if the offense be committed in time of war, suffer death or such other punishment

as a court-martial may direct, and, if the offense be committed at any other time, any punishment, excepting death, that a court-martial may direct.

#### ADVISING OR AIDING ANOTHER TO DESERT.

ART. 59. Any person subject to military law who advises or persuades or knowingly assists another to desert the service of the United States shall, if the offense be committed in time of war, suffer death, or such other punishment as a court-martial may direct, and if the offense be committed at any other time any punishment, excepting death, that a court-martial may direct.

#### ENTERTAINING A DESERTER.

ART. 60. Any officer who, after having discovered that a soldier in his command is a deserter from the military or naval service or from the Marine Corps, retains such deserter in his command without informing superior authority or the commander of the organization to which the deserter belongs, shall be punished as a court-martial may direct.

#### ABSENCE WITHOUT LEAVE.

ART. 61. Any person subject to military law who fails to repair at the fixed time to the properly appointed place of duty, or goes from the same without proper leave, or absents himself from his command, guard, quarters, station or camp without proper leave, shall be punished as a court-martial may direct.

#### DISRESPECT TOWARD THE PRESIDENT, VICE PRESIDENT, CONGRESS, SECRETARY OF WAR, GOVERNORS, LEGISLATURES.

ART. 62. Any officer who uses contemptuous or disrespectful words against the President, Vice President, the Congress of the United States, the Secretary of War, or the governor or legislature of any State, Territory, or other possession of the United States in which he is quartered shall be dismissed from the service or suffer such other punishment as a court-martial may direct. Any other person subject to military law who so offends shall be punished as a court-martial may direct.

#### DISRESPECT TOWARD SUPERIOR OFFICERS.

ART. 63. Any person subject to military law who behaves himself with disrespect toward his superior officer shall be punished as a court-martial may direct.

#### ASSAULTING OR WILLFULLY DISOBEYING SUPERIOR OFFICER.

ART. 64. Any person subject to military law who, on any pretense whatsoever, strikes his superior officer or draws or lifts up any weapon or offers any violence against him, being in the execution

of his office, or willfully disobeys any lawful command of his superior officer, shall suffer death or such other punishment as a court-martial may direct.

#### INSUBORDINATE CONDUCT TOWARD NONCOMMISSIONED OFFICER.

ART. 65. Any soldier who strikes or assaults, or who attempts or threatens to strike or assault, or willfully disobeys the lawful order of a noncommissioned officer while in the execution of his office, or uses threatening or insulting language, or behaves in an insubordinate or disrespectful manner toward a noncommissioned officer while in the execution of his office, shall be punished as a court-martial may direct.

#### MUTINY OR SEDITION.

ART. 66. Any person subject to military law who attempts to create or who begins, excites, causes, or joins in any mutiny or sedition in any company, party, post, camp detachment, guard, or other command shall suffer death or such other punishment as a court-martial may direct.

#### FAILURE TO SUPPRESS MUTINY OR SEDITION.

ART. 67. Any officer or soldier who, being present at any mutiny or sedition, does not use his utmost endeavor to suppress the same, or knowing or having reason to believe that a mutiny or sedition is to take place, does not without delay give information thereof to his commanding officer shall suffer death or such other punishment as a court-martial may direct.

#### QUARRELS, FRAYS, DISORDERS.

ART. 68. All officers and noncommissioned officers have power to part and quell all quarrels, frays, and disorders among persons subject to military law and to order officers who take part in the same into arrest, and other persons subject to military law who take part in the same into arrest or confinement, as circumstances may require, until their proper superior officer is acquainted therewith. And whosoever, being so ordered, refuses to obey such officer or noncommissioned officer or draws a weapon upon or otherwise threatens or does violence to him shall be punished as a court-martial may direct.

#### ARREST OR CONFINEMENT OF ACCUSED PERSONS.

ART. 69. An officer charged with crime or with a serious offense under these articles shall be placed in arrest by the commanding officer, and in exceptional cases an officer so charged may be placed in confinement by the same authority. A soldier charged with crime or with a serious offense under these articles shall be placed in confinement, and when charged with a minor offense he may be placed in arrest. Any other person subject to military law charged with crime or with a serious offense under these



articles shall be placed in confinement or in arrest, as circumstances may require; and when charged with a minor offense such person may be placed in arrest. Any person placed in arrest under the provisions of this article shall thereby be restricted to his barracks, quarters, or tent, unless such limits shall be enlarged by proper authority. Any officer who breaks his arrest or who escapes from confinement before he is set at liberty by proper authority shall be dismissed from the service or suffer such other punishment as a court-martial may direct; and any other person subject to military law who escapes from confinement or who breaks his arrest before he is set at liberty by proper authority shall be punished as a court-martial may direct.

#### INVESTIGATION OF AND ACTION UPON CHARGES.

ART. 70. No person put in arrest shall be continued in confinement more than eight days, or until such time as a court-martial can be assembled. When any person is put in arrest for the purpose of trial, except at remote military posts or stations, the officer by whose order he is arrested shall see that a copy of the charges on which he is to be tried is served upon him within eight days after his arrest, and that he is brought to trial within 10 days thereafter, unless the necessities of the service prevent such trial; and then he shall be brought to trial within 30 days after the expiration of said 10 days. If a copy of the charges be not served, or the arrested person be not brought to trial, as herein required, the arrest shall cease. But persons released from arrest, under the provisions of this article, may be tried, whenever the exigencies of the service shall permit, within 12 months after such release from arrest: Provided, That in time of peace no person shall, against his objection, be brought to trial before a general court-martial within a period of five days subsequent to the service of charges upon him.

#### REFUSAL TO RECEIVE AND KEEP PRISONERS.

ART. 71. No provost marshal or commander of a guard shall refuse to receive or keep any prisoner committed to his charge by an officer belonging to the forces of the United States, provided the officer committing shall, at the time, deliver an account in writing, signed by himself, of the crime or offense charged against the prisoner. Any officer or soldier so refusing shall be punished as a court-martial may direct.

#### REPORT OF PRISONERS RECEIVED.

ART. 72. Every commander of a guard to whose charge a prisoner is committed shall, within 24 hours after such confinement, or as soon as he is relieved from his guard, report in writing to the commanding officer the name of such prisoner, the offense charged against him, and the name of the officer committing him; and if he fails to make such report he shall be punished as a court-martial may direct.

#### RELEASING PRISONER WITHOUT PROPER AUTHORITY.

ART. 73. Any person subject to military law who, without proper authority, releases any prisoner duly committed to his charge, or who, through neglect or design, suffers any prisoner so committed to escape, shall be punished as a court-martial may direct.

#### DELIVERY OF OFFENDERS TO CIVIL AUTHORITIES.

ART. 74. When any person subject to military law, except one who is held by the military authorities to answer, or who is awaiting trial or result of trial, or who is undergoing sentence for a crime or offense punishable under these articles, is accused of a crime or offense committed within the geographical limits of the States of the Union and the District of Columbia, and punishable by the laws of the land, the commanding officer is required, except in time of war, upon application duly made, to use his utmost endeavor to deliver over such accused person to the civil authorities, or to aid the officers, of justice in apprehending and securing him, in order that he may be brought to trial. Any commanding officer who upon such application refuses or willfully neglects, except in time of war, to deliver over such accused person to the civil authorities or to aid the officers of justice in apprehending and securing him shall be dismissed from the service or suffer such other punishment as a court-martial may direct.

When under the provisions of this article delivery is made to the civil authorities of an offender undergoing sentence of a court-martial, such delivery, if followed by conviction, shall be held to interrupt the execution of the sentence of the court-martial, and the offender shall be returned to military custody, after having answered to the civil authorities for his offense, for the completion of the said court-martial sentence.

#### MISBEHAVIOR BEFORE THE ENEMY.

ART. 75. Any officer or soldier who misbehaves himself before the enemy, runs away, or shamefully abandons or delivers up any fort, post, camp, guard, or other command which it is his duty to defend, or speaks words inducing others to do the like, or casts away his arms or ammunition, or quits his post or colors to plunder or pillage, or by any means whatsoever occasions false alarms in camp, garrison, or quarters, shall suffer death or such other punishment as a court-martial may direct.

#### SUBORDINATES COMPELLING COMMANDER TO SURRENDER.

ART. 76. If any commander of any garrison, fort, post, camp, guard, or other command is compelled by the officers or soldiers under his command to give it up to the enemy or to abandon it, the officers or soldiers so offending shall suffer death or such other punishment as a court-martial may direct.

#### IMPROPER USE OF COUNTERSIGN.

ART. 77. Any person subject to military law who makes known the parole or countersign to any person not entitled to receive it according to the rules and discipline of war, or gives a parole or countersign different from that which he received, shall, if the offense be committed in time of war, suffer death or such other punishment as a court-martial may direct.

#### FORCING A SAFEGUARD.

ART. 78. Any person subject to military law who, in time of war, forces a safeguard shall suffer death or such other punishment as a court-martial may direct.

#### CAPTURED PROPERTY TO BE SECURED FOR PUBLIC SERVICE.

ART. 79. All public property taken from the enemy is the property of the United States and shall be secured for the service of the United States, and any person subject to military law who neglects to secure such property or is guilty of wrongful application thereof shall be punished as a court-martial may direct.

#### DEALING IN CAPTURED OR ABANDONED PROPERTY.

ART. 80. Any person subject to military law who buys, sells, trades, or in any way deals in or disposes of captured or abandoned property, whereby he shall receive or expect any profit, benefit, or advantage to himself or to any other person directly or indirectly connected with himself, or who falls whenever such property comes into his possession or custody or within his control to give notice thereof to the proper authority and to turn over such property to the proper authority without delay, shall, on conviction thereof, be punished by fine or imprisonment, or by such other punishment as a court-martial, military commission, or other military tribunal may adjudge, or by any or all of said penalties.

#### RELIEVING, CORRESPONDING WITH, OR AIDING THE ENEMY.

ART. 81. Whosoever relieves the enemy with arms, ammunition, supplies, money, or other thing, or knowingly harbors or protects or holds correspondence with or gives intelligence to the enemy, either directly or indirectly, shall suffer death, or such other punishment as a court-martial or military commission may direct.

#### SPIES.

ART. 82. Any person who in time of war shall be found lurking or acting as a spy in or about any of the fortifications, posts, quarters, or encampments of any of the armies of the United States, or elsewhere, shall be tried by a general court-martial or by a military commission, and shall, on conviction thereof, suffer death.

#### MILITARY PROPERTY--WILLFUL OR NEGLIGENT LOSS, DAMAGE, OR WRONGFUL

#### DISPOSITION OF.

ART. 83. Any person subject to military law who willfully or through neglect suffers to be lost, spoiled, damaged, or wrongfully disposed of any military property belonging to the United States shall make good the loss or damage and suffer such punishment as a court-martial may direct.

#### WASTE OR UNLAWFUL DISPOSITION OF MILITARY PROPERTY ISSUED TO SOLDIERS.

ART. 84. Any soldier who sells or wrongfully disposes of or willfully or through neglect injures or loses any horse, arms, ammunition, accouterments, equipments, clothing, or other property issued for use in the military service shall be punished as a court-martial may direct.

#### DRUNK ON DUTY.

ART. 85. Any officer who is found drunk on duty shall, if the offense be committed in time of war, be dismissed from the service and suffer such other punishment as a court-martial may direct; and if the offense be committed in time of peace he shall be punished as a court-martial may direct. Any person subject to military law, except an officer, who is found drunk on duty shall be punished as a court-martial may direct.

#### MISBEHAVIOR OF SENTINEL.

ART. 86. Any sentinel who is found drunk or sleeping upon his post, or who leaves it before he is regularly relieved, shall, if the offense be committed in time of war, suffer death or such other punishment as a court-martial may direct; and if the offense be committed in time of peace he shall suffer any punishment, except death, that a court-martial may direct.

#### PERSONAL INTEREST IN SALE OF PROVISIONS.

ART. 87. Any officer commanding in any garrison, fort, barracks, camp, or other place where troops of the United States may be serving who, for his private advantage, lays any duty or imposition upon or is interested in the sale of any victuals or other necessaries of life brought into such garrison, fort, barracks, camp, or other place for the use of the troops, shall be dismissed from the service and suffer such other Punishment as a court-martial may direct.

#### INTIMIDATION OF PERSONS BRINGING PROVISIONS.

ART. 88. Any person subject to military law who abuses, intimidates, does violence to, or wrongfully interferes with any person bringing provisions, supplies, or other necessaries to the camp, garrison, or quarters of the forces of the United States shall suffer such punishment as a court-martial may direct.

## GOOD ORDER TO BE MAINTAINED AND WRONGS REDRESSED.

ART. 89. All persons subject to military law are to behave themselves orderly in quarters, garrison, camp, and on the march; and any person subject to military law who commits any waste or spoil, or willfully destroys any property whatsoever (unless by order of his commanding officer), or commits any kind of depredation or riot, shall be punished as a court-martial may direct. Any commanding officer who, upon complaint made to him, refuses or omits to see reparation made to the party injured, in so far as the offender's pay shall go toward such reparation, as provided for in article 105, shall be dismissed from the service or otherwise punished as a court-martial may direct.

## PROVOKING SPEECHES OR GESTURES

ART. 90. No person subject to military law shall use any reproachful or provoking speeches or gestures to another; and any person subject to military law who offends against the provisions of this article shall be punished as a court-martial may direct.

## DUELING.

ART. 91. Any person subject to military law who fights or promotes or is concerned in or connives at fighting a duel, or who having knowledge of a challenge sent or about to be sent fails to report the fact promptly to the proper authority, shall, if an officer, be dismissed from the service or suffer such other punishment as a court-martial may direct; and if any other person subject to military law shall suffer such punishment as a court-martial may direct.

## MURDER-RAPE.

ART. 92. Any person subject to military law who commits murder or rape shall suffer death or imprisonment for life, as a court-martial may direct; but no person shall be tried by court-martial for murder or rape committed within the geographical limits of the States of the Union and the District of Columbia in time of peace.

## VARIOUS CRIMES.

ART. 93. Any person subject to military law who commits manslaughter, mayhem, arson, burglary, robbery, larceny, embezzlement, perjury, assault with intent to commit any felony, or assault with intent to do bodily harm, shall be punished as a court-martial may direct.

## FRAUDS AGAINST THE GOVERNMENT.

ART. 94. Any person subject to military law who makes or causes to be made any claim against the United States or any officer

thereof, knowing such claim to be false or fraudulent; or

Who presents or causes to be presented to any person in the civil or military service thereof, for approval or payment, any claim against the United States or any officer thereof, knowing such claim to be false or fraudulent; or

Who enters into any agreement or conspiracy to defraud the United States by obtaining, or aiding others to obtain, the allowance or payment of any false or fraudulent claim; or

Who, for the purpose of obtaining, or aiding others to obtain, the approval, allowance, or payment of any claim against the United States or against any officer thereof, makes or uses, or procures, or advises the making or use of, any writing or other paper, knowing the same to contain any false or fraudulent statements; or

Who, for the purpose of obtaining, or aiding others to obtain, the approval, allowance, or payment of any claim against the United States or any officer thereof, makes, or procures, or advises the making of, any oath to any fact or to any writing or other paper, knowing such oath to be false; or

Who, for the purpose of obtaining, or aiding others to obtain, the approval, allowance, or payment of any claim against the United States or any officer thereof, forges or counterfeits, or procures, or advises the forging or counterfeiting of any signature upon any writing or other paper, or uses, or procures, or advises the use of any such signature, knowing the same to be forged or counterfeited; or

Who, having charge, possession, custody, or control of any money or other property of the United States, furnished or intended for the military service thereof, knowingly delivers, or causes to be delivered, to any person having authority to receive the same, any amount thereof less than that for which he receives a certificate or receipt; or

Who, being authorized to make or deliver any paper certifying the receipt of any property of the United States furnished or intended for the military service thereof, makes or delivers to any person such writing, without having full knowledge of the truth of the statements therein contained and with intent to defraud the United States; or

Who steals, embezzles, knowingly and willfully misappropriates, applies to his own use or benefit, or wrongfully or knowingly sells or disposes of any ordnance, arms, equipments, ammunition, clothing, subsistence stores, money, or other property of the United States furnished or intended for the military service thereof; or

Who knowingly purchases or receives in pledge for any obligation or indebtedness from any soldier, officer, or other person who is a part of or employed in said forces or service, any ordnance, arms, equipment, ammunition, clothing, subsistence stores, or other property of the United States, such soldier, officer, or other person not having lawful right to sell or pledge the same;

Shall, on conviction thereof, be punished by fine or imprisonment, or by such other punishment as a court-martial may adjudge, or by any or all of said penalties. And if any person, being guilty of any of the offenses aforesaid while in the military service of the United States, receives his discharge or is dismissed from the service, he shall continue to be liable to be arrested and held for trial and sentence by a court-martial in the same manner and to the same extent as if he had not received such discharge nor been dismissed.

#### CONDUCT UNBECOMING AN OFFICER AND GENTLEMAN.

ART. 95. Any officer or cadet who is convicted of conduct unbecoming an officer and a gentleman shall be dismissed from the service.

#### GENERAL ARTICLE.

ART. 96. Though not mentioned in these articles, all disorders and neglects to the prejudice of good order and military discipline, all conduct of a nature to bring discredit upon the military service, and all crimes or offenses not capital of which persons subject to military law may be guilty shall be taken cognizance of by a general or special or summary court-martial, according to the nature and degree of the offense, and punished at the discretion of such court.

#### DISCIPLINARY POWERS OF COMMANDING OFFICERS.

ART. 104. Under such regulations as the President may prescribe, and which he may from time to time revoke, alter, or add to, the commanding officer of any detachment, company, or higher command may, for minor offences not denied by the accused, impose disciplinary punishments upon persons of his command without the intervention of a court-martial, unless the accused demands trial by court-martial.

The disciplinary punishments authorized by this article may include admonition, reprimand, withholding of privileges, extra fatigue, and restriction to certain specified limits, but shall not include forfeiture of pay or confinement under guard. A person punished under authority fit this article who deems his punishment unjust or disproportionate to the offense may, through the proper channel, appeal to the next superior authority, but may in the meantime be required to undergo the punishment adjudged. The commanding officer who imposes the punishment, his successor in command, and superior authority shall have power to mitigate or remit any unexecuted portion of the punishment. The imposition and enforcement of disciplinary punishment under authority of this article for any act or omission shall not be a bar to trial by court-martial for a crime or offense growing out of the same act or omission; but the fact that a disciplinary punishment has been enforced may be shown by the accused upon trial, and when so shown shall be considered in determining the measure of punishment to be adjudged in the event of a finding of guilty.

## REDRESS OF INJURIES TO PERSON OR PROPERTY.

ART. 105. Whenever complaint is made to any commanding officer that damage has been done to the property of any person or that his property has been wrongfully taken by persons subject to military law, such complaint shall be investigated by a board consisting of any number of officers from one to three, which board shall be convened by the commanding officer and shall have, for the purpose of such investigation, power to summon witnesses and examine them upon oath or affirmation, to receive depositions or other documentary evidence, and to assess the damages sustained against the responsible parties. The assessment of damages made by such board shall be subject to the approval of the commanding officer, and in the amount approved by him shall be stopped against the pay of the offenders. And the order of such commanding officer directing stoppages herein authorized shall be conclusive on any disbursing officer for the payment by him to the injured parties of the stoppages so ordered.

Where the offenders can not be ascertained but the organization or detachment to which they belong is known, stoppages to the amount of damages inflicted may be made and assessed in such proportion as may be deemed just upon the individual members thereof who are shown to have been present with such organization or detachment at the time the damages complained of were inflicted, as determined by the approved findings of the board.

## ARREST OF DESERTERS BY CIVIL OFFICIALS.

ART. 106. It shall be lawful for any civil officer having authority under the laws of the United States, or of any State, Territory, District, or possession of the United States, to arrest offenders, summarily to arrest a deserter from the military service of the United States and deliver him into the custody of the military authorities of the United States.

## SOLDIERS TO MAKE GOOD TIME LOST.

ART. 107. Every soldier who in an existing or subsequent enlistment deserts the service of the United States or without proper authority absents himself from his organization, station, or duty for more than one day, or who is confined for more than one day under sentence, or while awaiting trial and disposition of his case, if the trial results in conviction, or through the intemperate use of drugs or alcoholic liquor, or through disease or injury the result at his own misconduct, renders himself unable for more than one day to perform duty, shall be liable to serve, after his return to a full-duty status, for such period as shall, with the time he may have served prior to such desertion, unauthorized absence, confinement, or inability to perform duty, amount to the full term of that part of his enlistment period which he is required to serve with his organization before being furloughed to the Army Reserve.

## SOLDIERS--SEPARATION FROM THE SERVICE.



ART. 108. No enlisted man, lawfully inducted into the military service of the United States, shall be discharged from said service without a certificate of discharge, signed by a field officer of the regiment or other organization to which the enlisted man belongs or by the commanding officer when no such field officer is present; and no enlisted man shall be discharged from said service before his term of service has expired, except by order of the President, the Secretary of War, the commanding officer of a department, or by sentence of a general Court-martial.

#### OATH OF ENLISTMENT.

ART. 109. At the time of his enlistment every soldier shall take the following oath or affirmation: "I, ----, do solemnly swear (or affirm) that I will bear true faith and allegiance to the United States of America; that I will serve them honestly and faithfully against all their enemies whomsoever; and that I will obey the orders of the President of the United States and the orders of the officers appointed over me, according to the Rules and Articles of War;" This oath or affirmation may be taken before any officer.

#### CHAPTER XV.

#### ENGLISH-FRENCH VOCABULARY.

#### COMMON WORDS.

Afternoon (this) . . . . .	Cet apres-midi.
Army (an) . . . . .	Une armee.
Bandage . . . . .	Un bandage.
Bath . . . . .	Un bain.
Bayonet . . . . .	Une baionnette.
Bed . . . . .	Un lit.
Blanket . . . . .	Une couverture
Boy . . . . .	Un garçon.
Bullet . . . . .	Une balle.
	un pruneau (soldier slang).
Camp . . . . .	Un camp.
	Un campement.
Cartridge . . . . .	Une cartouche.
Child . . . . .	Un enfant.
	Une enfant.
Cook . . . . .	Un cuisinier.
	Un cuistot (slang).
	Une Cuisiniere (fem.).
Dance . . . . .	Un bal.
	Une danse (one dance).
Dark . . . . .	Obscur.
Day . . . . .	Un jour.
Dead . . . . .	Mort.
Deserter . . . . .	Un deserteur.
Door . . . . .	Une porte.



Sword . . . . . Une epee.  
Tent . . . . . Une tente.  
Shelter tent . . . . . Une tente-abri.

#### NUMERALS.

One . . . . . Un, une.  
Two . . . . . Deux.  
Three . . . . . Trois.  
Four . . . . . Quatre.  
Five . . . . . Cinq(pronounce \_sank\_).  
Six . . . . . Six (pronounce \_cease\_).  
Seven . . . . . Sept (pronounce \_set\_).  
Eight . . . . . Huit (pronounce \_weet\_).  
Nine . . . . . Neuf.  
Ten . . . . . Dix (pronounce \_deess\_)  
Eleven . . . . . Onze.  
Twelve . . . . . Douze.  
Thirteen . . . . . Treize.  
Fourteen . . . . . Quatorze.  
Fifteen . . . . . Quinze.  
Sixteen . . . . . Seize.  
Seventeen . . . . . Dix-sept.  
Eighteen . . . . . Dix-huit.  
Nineteen . . . . . Dix-neuf.  
Twenty . . . . . Vingt (pronounce \_vant\_.)  
Twenty-one . . . . . Vingt-et-un.  
Thirty . . . . . Trente.  
Thirty-one . . . . . Trente-et-un.  
Thirty-two . . . . . Trente-deux.  
Forty . . . . . Quarante.  
Fifty . . . . . Cinquante.  
Sixty . . . . . Soixante.  
Seventy . . . . . Soixante-dix.  
Seventy-one . . . . . Soixante-et-onze.  
Seventy-two . . . . . Soixante-douze.  
Eighty . . . . . Quatre-vingt.  
Eighty-one . . . . . Quatre-vingt-un.  
Ninety . . . . . Quatre-vingt-dix.  
Ninety-one . . . . . Quatre-vingt-onze.  
One hundred . . . . . Cent.  
One hundred and one . . . . . Cent un.  
Two hundred . . . . . Deux cents.  
Two hundred and one . . . . . Deux cent un.  
One thousand . . . . . Mille.  
Two thousand . . . . . Deux mille.  
One thousand one hundred . . . Mille cent; onze cents.  
Thousands of soldiers . . . . . Des milliers de soldats.  
A million . . . . . Un million.  
Two million men . . . . . Deux millions d'hommes.  
A score . . . . . Une vingtaine.  
About forty men . . . . . Une quarantaine d'hommes.  
Hundreds of men . . . . . Des centaines d'hommes.

#### CURRENCY, MEASURES, AND WEIGHTS.

1 cent . . . . . Un sou; cinq centimes.

10 cents . . . . . Dix sous; cinquante centimes.  
20 cents (about) . . . . . Un francs.  
1 dollar . . . . . Cinq francs.

(The French have gold pieces of 10 francs and 20 francs; bank notes of 50 francs, 100 francs, and higher. The gold pieces are probably replaced by bank notes now.)

1 meter (1.0936 yards) . . . Un metre.  
1 kilometer (0.62138 mile) . Un kilometre.

NOTE:--For all ordinary purposes, the "kilometre" = 5/8 of a mile; the "centimetre"--4/10 of an inch.

1 league (2.48552 miles) . . Une lieue.  
1 hectare (2.4711 acres) . . Un hectare.  
1 gram (15.43239 grains troy) Un gramme.  
1 kilogram (2.204621 pounds avoirdupois) . . . . . Un kilogramme.  
220.46 pounds avoirdupois . . Un quintal; 100 kilos.  
2,204.6 pounds avoirdupois . Une tonne; 1,000 kilos.

(Coal is sold by the tonne; grain and hay by the quintal. Dix quintaux de ble, de foin = 10 quintals of grain, of hay.)

1,0567 quart (liquid) . . . . Un litre.  
26.417 gallons . . . . . Un hectolitre.  
0.9081 quart (dry) . . . . . Un litre.  
2.8379 bushels . . . . . Un hectolitre.

(The litre, which is the principal unit of both fluid and dry measures, is the contents of 1 cubic decimetre (decimetre = 1/10 metre).)

#### DAYS, MONTHS, AND SEASONS.

Sunday . . . . . Dimanche.  
Monday . . . . . Lundi.  
Tuesday . . . . . Mardi.  
Wednesday . . . . . Mercredi.  
Thursday . . . . . Jeudi.  
Friday . . . . . Vendredi.  
Saturday . . . . . Samedi.  
January . . . . . Janvier.  
February . . . . . Fevrier.  
March . . . . . Mars.  
April . . . . . Avril.  
May . . . . . Mai.  
June . . . . . Juin.  
July . . . . . Juillet.  
August . . . . . Aout (pronounce oo).  
September . . . . . Septembre.  
October . . . . . Octobre.  
November . . . . . Novembre.  
December . . . . . Decembre.  
The seasons . . . . . Les saisons.  
Winter . . . . . L'hiver.







Un factionnaire.  
 On post . . . . . En faction.  
 De faction.  
 Guard mounting . . . . . La garde montante (also \_new\_  
\_guard\_).  
 The sentinel challenges: \ La sentinelle crie: "Halte!  
 "Halt! Who's there?" / Qui vive?"  
 The answer is "France" . . . La reponse est: "France".  
 Advance with the countersign Avance au ralliement.

(The person challenged gives the \_mot\_d'ordre\_, which is the  
 name of some general, and the sentinel replies with the \_mot\_de\_  
\_ralliement\_, which is the name of a battle or a city).

Go away; you can't pass . . . (Passe) au large.  
 Halt, or I fire . . . . . Halte, ou je fais feu.  
 Put down your arms . . . . . Deposez vos armes.  
 Hands up! . . . . . Levez les bras.  
 Face about . . . . . (Faites) demi-tour.  
 Come here . . . . . Venez ici.  
 A spy . . . . . Un espion.  
 A flag of truce . . . . . Un drapeau blanc.  
 Un drapeau parlementaire.

#### UNIFORM, ARMS, CLOTHING, AND EQUIPMENT.

Clothing . . . . . Les vetements, l'habillement.  
 Change your clothes . . . . . Changez de vetement.  
 Overcoat (worn by French  
 infantry) . . . . . Une capote.  
 Trousers . . . . . Un pantalon.  
 Breeches . . . . . Une culotte.  
 Shirt . . . . . Une chemise.  
 Blouse . . . . . Un dolman, une vareuse.  
 Cap . . . . . Un kepi.  
 Campaign hat (United States) Un (chapeau de) feutre.  
 Helmet . . . . . Un casque (de tranchee).  
 Cap without visor worn by  
 French off duty . . . . . Un bonnet de police.  
 Tam-o'-Shanter worn by Alpine  
 chasseurs . . . . . Un beret.  
 Shoes in general . . . . . Des chaussures.  
 Service shoes . . . . . Des brodequins.  
 Leggins . . . . . Des guetres.  
 Wrap putties . . . . . Des bandes molletieres.  
 Leather putties . . . . . Des houseaux (or housseaux).  
 Full-dress uniform . . . . . La grande tenue.  
 Dress uniform . . . . . La petite tenue.  
 Field uniform . . . . . La tenue de campagne.  
 Overcoat (mounted men) . . . Un manteau.  
 Overcoat (officers) . . . . . Un manteau.  
 Un manteau-capote.  
 Fatigue coat . . . . . Le bourgeron.  
 Fatigue trousers (overalls) . Un pantalon de treillis.  
 Fatigue uniform . . . . . La tenue de corvee.  
 Magazine rifle . . . . . Un fusil a repetition.  
 The barrel . . . . . Le canon.  
 The bolt . . . . . Le verrou.





(auto trucks) \ camions-automobiles)?  
 Is this road practicable for / Cette route est-elle praticable  
 artillery? . . . . . \ pour l'artillerie?  
 Can infantry march on the / L'infanterie peut-elle marcher  
 sides of the roads? . . . . \ sur les cotes de la route?  
 Is the ground practicable? . Le terrain est-il praticable?  
 Is the ground marshy? . . . . Le terrain est-il marecageux?  
 What is the nature of the  
 ground? . . . . . Quelle est la nature du sol?  
 Does the telegraph line / Est-ce que la ligne telegraphique  
 follow this road as far | (le telegraphe) suit cette  
 as X \ route jusqu'a X?  
 Where does your railroad come  
 from? . . . . . D'ou vient votre chemin de fer?  
 Where does it go to? . . . . Ou va-t-il?  
 Is it single tracked or / Est-il a une voie ou a deux voies  
 double tracked the whole | sur tout le parcours?  
 way? . . . . . \  
 Where is the station? is it  
 Far? . . . . . Ou est la gare? Est-elle loin d'ici?  
 How can the river be crossed? Comment peut-on passer la riviere?  
 Is there a bridge? a ferry? . Y a-t-il un pont? un bac?  
 Are there fords? . . . . . Y a-t-il des passages a gue  
 (des gues)?  
 Can we get boats? . . . . . Peut-on trouver des bateaux?  
 In that wood are there / Dans ce bois, y a-t-il des  
 clearings, ravines, brooks, | clairieres, des ravins, des  
 marshes, pools? . . . . . \ ruisseaux, des mares?  
 Are there any places near / Y a-t-il des endroits pres d'ici  
 here for watering horses? . \ pour abreuer les chevaux?  
 Is the water good? . . . . . L'eau est-elle bonne?  
 Is this water drinkable? . . Est-ce de l'eau potable?  
 Are there watering troughs? . Y a-t-il des abreuvoirs?  
 Where is there good grass for / Ou y a-t-il de bonne herbe pour  
 animals? . . . . . \ les animaux?  
 Can we buy provisions? . . . Peut-on acheter des vivres?  
 Is there a field where we / Y a-t-il un champ ou nous pouvons  
 can camp? . . . . . | camper (installer notre  
 \ campement)?  
 Can you give me any / Pouvez-vous me donner des  
 information about the enemy? \ renseignements sur l'ennemi?  
 Please find me a guide who / Veuillez me trouver un guide qui  
 knows the country? . . . . \ connaisse le pays.  
 We are going to follow this  
 trail (tracks) . . . . . Nous allons suivre cette piste.  
 Crossroads . . . . . Un carrefour.

## TOWNS.

Where is the post-office and / Ou est le bureau des postes et  
 telegraph office? . . . . . \ telegraphes?  
 The postmaster . . . . . / Le directeur des postes et  
 \ telegraphes.  
 The mail . . . . . Le courrier.  
 When was the last mail / A quelle heure a-t-on fait la  
 distributed? . . . . . \ derriere distribution?  
 General delivery . . . . . Poste restante.  
 Are there any letters for --? Y a-t-il des lettres pour --?

I should like to send a     / Je voudrais expedier un  
 telegram . . . . . \ telegramme.  
 Have you received a telegram / Avez-vous recu un telegramme  
 for ----? . . . . . \ (une depeche) pour ----?  
 A telegraph instrument . . . Un appareil (telegraphique).  
 Can you tell me where the     / Pourriez-vous me dire ou se  
 mayor's office is? . . . . \ trouve la mairie?  
 I couldn't tell you; I am a     / Je ne saurais vous renseigner;  
 stranger here . . . . . \ je ne connais pas la ville.  
 Good-morning, sir, are you     / Bonjour, Monsieur, etes-vous  
 the mayor? . . . . . \ le maire?  
 No, sir, I am his assistant . Non, Monsieur, je suis son adjoint.  
 I should like to speak to     / Je voudrais parler au maire  
 the mayor himself . . . . . \ lui-meme.  
 Listen, sir. A detachment     / Ecoutez, monsieur; Un detachement  
 will arrive here to-morrow | arrivera ici demain matin a  
 morning at 5 o'clock . . . \ cinq heures.  
 Can you arrange to lodge     / Povez-vous prendre de  
 2,000 men for two days? . . | dispositions pour loger 2,000  
                                   \ hommes pendant deux jours?  
 A policeman . . . . . Un sergent de ville, un agent de  
                                   la paix.

#### RAILROADS.

The station agent . . . . . Le chef de gare.  
 The conductor . . . . . Le conducteur.  
 The engineer . . . . . Le mecanicien.  
 The fireman . . . . . Le chauffeur.  
 The brakeman . . . . . Le serre-freins.  
 The telegraph operator . . . Le telegraphiste.  
 An engine . . . . . Une locomotive.  
 Passenger cars . . . . . Des wagons (de voyageurs).  
 Flat cars . . . . . Des trucks.  
 Box cars . . . . . Des wagons de marchandises.  
 Stock cars . . . . . Des wagons a bestiaux.  
 An express train . . . . . Un train express.  
 A through train . . . . . Un train direct.  
 A local train . . . . . Un train omnibus.  
 A passenger train . . . . . Un train de voyageurs.  
 A freight train . . . . . Un train de marchandises.  
 To entrain the troops . . . . Embarquer les troupes.  
 To detrain the troops . . . . Debarquer les troupes.  
 To get on a train . . . . . Monter dans un train.  
 To get off a train . . . . . Descendre d'un train.  
 The railroad track . . . . . La-voie (ferree).  
 A side track . . . . . Une voie de garage.  
 A ticket . . . . . Un billet.  
 A round trip ticket . . . . . Un billet d'aller et retour.  
 One way only . . . . . Aller seulement.  
 The ticket window . . . . . Le guichet.  
 At what time does the Paris     / A quelle heure part le train  
 train start? . . . . . \ pour Paris?  
 It is late (15 minutes late) Il est en retard (de quinze  
                                   minutes).  
 Do we have to change cars? . Faut-il changer de train?  
 The train stops . . . . . Le train s'arrete.  
 All aboard! . . . . . En voiture!

The train starts . . . . . Le train s'embranle.

## RATIONS AND FOOD.

Provisions (in general) . . . Les vivre.  
The ration . . . . . La ration.  
Fresh beef . . . . . De la viande fraiche.  
Bacon . . . . . Du lard.  
Flour . . . . . De la farine.  
Soft bread . . . . . Du pain frais.  
Hard bread (crackers) . . . . Du biscuit.  
Field bread . . . . . Du pain de guerre.  
Corn meal . . . . . De la farine de mais.  
Coffee . . . . . Du cafe.  
Sugar . . . . . Du sucre.  
Eggs . . . . . Des oeufs.  
Chickens . . . . . Des poulets.  
Potatoes . . . . . Des pommes de terre.  
Peas . . . . . Des pois.  
String beans . . . . . Des haricots verts.  
Vegetables (in general) . . . Des legumes.  
An apple . . . . . Une pomme.  
A pear . . . . . Une poire.  
A cherry . . . . . Une cerise.  
A peach . . . . . Une peche.  
Cheese . . . . . Du fromage.  
Wine . . . . . Du vin.  
Beer . . . . . De la biere.  
A glass of beer . . . . . Un bock.  
I am hungry . . . . . J'ai faim.  
Bring me something to eat please . . . . . Apportez-moi quelque chose a manger, s'il vous-plait.  
I am thirsty . . . . . J'ai soif.  
Please give me a glass of water . . . . . Veuillez me donner un verre d'eau.  
Waiter, I'll take a beefsteak . . . . . Garcon, je desire un bifteck.  
Some black coffee . . . . . Du cafe noir.  
Coffee with milk . . . . . Du cafe au lait.  
Rolls . . . . . Des petits pains.  
Crescent rolls . . . . . Des croissants.

## HOSPITALS.

A field hospital . . . . . Une ambulance.  
A hospital (in general) . . . . Un hopital (plural: des hopitaux).  
A dressing station . . . . . Un poste de secours.  
A first-aid dressing . . . . . Un pansement sommaire.  
Red Cross . . . . . La Croix Rouge.  
A doctor . . . . . Un medecin.  
Un docteur.  
A surgeon . . . . . Un chirurgien.  
A military surgeon . . . . . Un (medecin) major.  
Assistant surgeon . . . . . Un aide-major.  
A male nurse, hospital corps man . . . . . Un infirmier.  
A female nurse . . . . . Une infirmiere.  
An ambulance . . . . . Une ambulance.



Une cagna (slang).  
Un gourbi (slang).  
Une guitoune (slang).

NOTE.--In addressing an officer of grade superior to his own, an officer must use the possessive adjective; a senior addressing a junior uses the title of the grade only. Thus: A major to a colonel says "Mon colonel," but the colonel to the major would say "Commandant."

APPENDIX.

FORM FOR LAST WILL AND TESTAMENT.

List Will and Testament

OF .....

I, .....  
of .....  
do make, publish, and declare this my last will and testament.

I give, devise, and bequeath to[15] .....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

And I do give, devise, and bequeath all the rest and residue of my estate, both real and personal, to .....

.....  
.....  
.....  
heirs and assigns forever[16] .....  
.....  
.....

I hereby appoint .....  
..... executor of  
this my last will and testament, and I desire that .....  
shall not be required to give bond for the performance of that office.

Witness my hand this[17] .....  
day of ....., 191

.....  
Signed, published, and declared by .....  
..... the  
above-named testator, as and for his last will and testament,  
in the presence of us, who, at his request and in his presence,  
and in the presence of each other, have subscribed our names

as witnesses thereto.[18]

.....  
Residence: .....

.....  
Residence: .....

.....  
Residence: .....

[Footnote 15: Here insert specific legacies and devises.]

[Footnote 16: If the residue of the estate is given to several persons, add here the manner in which it is to be divided, as "in equal shares as tenants in common."]

[Footnote 17: If the will is made in Nevada, or if the testator has real estate in that State, he should affix his seal.]

[Footnote 18: If the will is made in Louisiana, unless it is wholly in the handwriting of the testator, there should be seven witnesses and a notary at the "sealing up." If wholly in his handwriting no formalities are required.]

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  - Recipes
- Infantry Drill Regulations, extracts from:
  - Company inspection
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  - Manual of the bayonet
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  - Orders, commands, and signals
  - School of the company
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- Infantry equipment, assembling
- Infantry training principles
- Insignia:
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- Interior guard duty, Manual of. (See Guard duty.)
- International Morse code
- Intrenching tools
- Kit. (See Field kit; Service kit; Surplus kit.)
- Laws governing Army
- Line of observation
- Line of resistance
- Loading and firings
- Loyalty
- Making maps
- Manual of arms
- Manual of the Bayonet. (See Bayonet, Manual of.)
- Manual of Interior Guard Duty. (See Guard duty.)
- Manual of Tent Pitching. (See Tent Pitching, Manual of.)
- Maps:
  - Abbreviations
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  - Making (sketching)
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- Marching
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- Marksmanship, preliminary training
- Message blanks
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  - Saber
  - Sentinels
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- School of the soldier. (See Soldier, school of.)
- School of the squad. (See Squad, school of.)
- Semaphore, two-arm signaling code
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  - Of outpost
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- Sergeant of the guard
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- Sights:
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  - Open sight
  - Peep sight
  - Table of sight corrections
- Signalling, general instructions

Signal flags

Signals:

Arm

Bugle

Enemy in sight

Firing line and reserve

Flag

Other signals

Sound

Take cover

Two arm semaphore

Whistle

Wig-wag

Sketching

Slopes on maps

Small-arms firing course

Socks

Soda solution for cleaning rifle

Soldier, school of:

Duties of instructor

Eyes right or left

Facings

Instruction without arms

Manual of arms

Position of the soldier on attention

Rifle salute

Salute with the hand

Salute with saber

Steps and marchings

Back step

Change step

Quick time

Side step

The half step

To halt

To march by the flank

To march to the rear

To mark time

The bayonet

The inspection

The rests

To dismiss the squad

Solutions for cleaning rifle

Squad, school of:

Alignments

Instruction

Kneeling and lying down

Loadings and firings

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The use of cover

To cease firing

To deploy as skirmishers

To fire at will

To fire by clip

To fire by volley

To follow the corporal

To form squad

- To increase or diminish intervals
- To load
- To set the sight
- To stack and take arms
- To suspend firing
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- To turn on moving pivot
- To unload
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- Steps and marchings
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- Subsistence. (\_See\_ Rations.)
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  - Advance guard
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- Target practice:
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  - Calling the shot
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  - Firing positions
  - Preliminary training in marksmanship
  - Sight adjustment
  - Table of sight corrections
  - Targets
  - The course in small-arms firing
  - Trigger squeeze
- Targets
- Tent Pitching, Manual of:
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  - Folding tents
  - Pitch all type Army tents (except shelter and conical wall tents)
  - Shelter tent
  - Sleeping bags
  - Striking tents
- Toilet articles
- Trenches, rifle
- Trigger squeeze
- Two-arm semaphore code
- Uniforms
  - Care of
  - Disposing of
  - Dress
  - Full dress
  - How worn
  - Service
- Use of cover
- Valleys on maps
- Vertical intervals on maps
- Visual signaling (\_See\_ Signals):
  - In general
  - Flag
- Vocabulary--English-French
- Whistle signals

Wig-wag signaling  
Will, form for last will and testament  
Windage corrections  
Wind gauge

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