A BOOK OF INFORMATION ABOUT OUR ARMY AND THE FIRST PRINCIPLES OF MILITARY SERVICE FOR BOYS

BY

VIRGIL D. COLLINS

SERGT. CO. C, 12TH INFANTRY, N.Y. G.

AUTHOR OF "A WORKING ALGEBRA,"

CO-AUTHOR "THE BOYS" BOOK OF SUBMARINES" AND

"SHOOTING FOR BOYS"

ILLUSTRATED BY THE AUTHOR

NEW YORK
FREDERICK A. STOKES COMPANY
PUBLISHERS

V 06

Copyright, 1918, by Frederick A. Stokes Company

All Rights Reserved

JUN 14 1916

©CI.A499362

1 our

то MY MOTHER



A WORD ABOUT YOUR BOY

This is not a book of militarism but a manual of prevention and defense, and one that every American boy should have. If your boy is between the ages of twelve and eighteen you should give him this book, and see that he gets the proper military training.

The Great War has proved the necessity of a large trained army too well. So long as governments continue to maintain armies, we will have war and your boy will be called to the colors some day in the defense of his country. Certainly you who have provided for him everything that is good, will not want to see him enter the army totally unfit and unprepared for military duty.

Further, a thorough military education now will enable your son to become an officer in the Army later on. It will strengthen his body as no sport can do, and it will increase the activity of his mind as no school work can do. If he gains nothing but the health that will accrue to him from the training, then it will have accomplished its purpose. Moreover, universal military training will be the

A WORD ABOUT YOUR BOY

next step in the military history of our country, and if your boy gets his training now, at some recognized school, he will not have to take it later when he needs his time most.

So it is first of all your duty to your country to see that your son gets a military training and to let him volunteer for the Army when he has it. Second, it is your duty to yourself as a parent to see that he gets the best training that you can afford. Finally, it is your duty to your boy to see that he receives the benefits of a military training which not only will enable him to serve his country best, but which will be best for him; for no one else can or will do this but you.

VIRGIL D. COLLINS

The Cromwell 600 Riverside Drive New York

CONTENTS

| HAPTER A WORD A BOUT VOUD DOY | PAGE |
|--|------|
| A WORD ABOUT YOUR BOY | vii |
| I. Why You Should Have a Military | |
| Training | I |
| The Hero of Olden Days Was Always a Trained Soldier—Why You Should Be a Trained Soldier—How Your Country Protects You—Why You Must Fight For Your Country—How a Trained Army Stopped the Germans—Our Need of Officers—Why an Officer Must be Educated—How War Changes Army Needs—Compulsory Military Training Helps You as Well as the Army—Training Now Will Help You Later—How to Serve Your Country Best. | |
| II. Where You Can Get Your Training About Military Schools—Next, Local Organizations—Then State Organizations—The Slater Law and Military Training—And Last of All, National Organizations—How to Pass the Physical Examination for the Regular Army—Your Physical Examination and How to Pass It. | 10 |

| CHAPTER | PAGE |
|--|------|
| III. THE MAKE-UP OF OUR ARMY | 21 |
| A Mistaken Idea of Our Army—The Army as It Really Is—The General Staff—The Field Army and Its Officers—The Company: Its Divisions and Officers—How to Tell an Officer's Grade—About Army Corps—The Engineer Corps—The Signal Corps—Some Other Corps—On Getting a Commission in a Corps—The Spirit of the Army. | |
| IV. The School of the Soldier Why an Officer Must Know the School of the Soldier—About Being Neatly Uniformed—How to Get into Your Uniform—About Giving Commands—Movements Executed by the Soldier — How to Practice These Drills. | 33 |
| V. The School of the Squad What a Squad Is—The Value of Drill—On Forming a Squad—How to Drill a Squad—The Execution of Squad Movements. | 48 |
| VI. THE SCHOOL OF THE COMPANY Company Movements Are Similar to Squad Movements—The Officers of the Company and Their Duties— How the Company is Formed—The Execution of Company Movements. | 63 |

| CHAPTER | PAGE |
|--|------|
| VII. THE MANUAL OF ARMS | 85 |
| VIII. How to Learn Signaling—How to Signal with Flags—Conventional Signals and Instructions for the Two-Arm Semaphore Code—The General Service Code—Sound Signaling. | 102 |
| IX. How to Become an Expert Marksman Rifle Firing Positions — The Rear Sights — How to Aim — The Right Way to Fire—Pistol and Revolver Shooting — About Estimating Distance—The First Principles of Bayonet Fighting—How to Hold the Piece —On Bayonet Practice. | |
| X. MILITARY MAP READING AND MAKING. The Value of Maps to an Army—The Kinds of Maps in Military Use—On Learning to Read Contour Maps—About Contour Lines — What You Can Tell From a Contour Map—How to Draw a Profile Map—The Value of the Profile—How to Tell the Scale of a Map—On Finding the Direction—How Hatchure Maps Are Made—The Symbols Used in Map Making—How to Make Maps—Where to Buy Contour Maps. | 139 |

| CHAPTER | PAGE |
|--|------|
| XI. How to Become an Officer Why You Must Have a High School Education—The Value of a Special Training—What You Can Do—How You Can Get a Commission in the Army—About the Aviation Section of the Signal Corps—West Point as a Means of Getting a Commission. | 156 |
| XII. ON KEEPING YOUR EQUIPMENT IN SHAPE | 164 |
| Care of the Rifle—Cleaning the Barrel—Cleaning the Receiver—Cleaning the Stock and Forearm—Cleaning the Bayonet—The Mess-kit—On Washing Sleeping-Blankets—About the Soldier's Pack—The Officer and His Equipment. | |
| XIII. FIGHTING OVER THERE | 176 |
| XIV. WAR INFORMATION AND ADVICE First Aid to the Wounded—About Your Health—Hints on Roughing It —On Keeping Your Temper—Bravery and Truthfulness at All Times— More About Insignia—War Words, Terms, and Phrases You Should Know the Meaning Of. | 192 |
| INDEX | 205 |

CHAPTER I

WHY YOU SHOULD HAVE A MILITARY TRAINING

Haven't you often felt sorry that the days of real adventure, when swarthy pirates sailed the seas, and gallant gentlemen fought for King and Country were over?

But so long as nations continue to settle their disputes by the barbarous custom of the hand-to-hand conflict, adventure will always be with us, just as much as it was in the good old days of William Kidd or Jim Bowie, and you will get your share of it.

Well, adventure is here and it is calling to you and to all red-blooded boys. Peaceful merchantmen have been attacked by pirates, perhaps not the kind that scoured the Spanish Main in buc-

caneering sloops, but even more dangerous, for they strike their booty from underneath with all of the swiftness and deadliness of the hated watermoccasin.¹ These pirates are of the underseas kind and their craft is the dreaded submarine.

As for gallant gentlemen, there has never been such a gathering before, for the noblest cavaliers of France, England, Belgium, Italy, and the United States, have fought side by side for King or Country. Truly adventure is not dead and the time is now at hand when you can show the kind of good American stuff you are made of, either by preparing now so that when your country needs you you will be able to take your place with other trained men, or by training now so that you can volunteer and fight for your flag and the country you love, when the time comes.

The Hero of Olden Days Was Always a Trained Soldier—Ever since you were old enough to read and glory in the tales of our War for Independence and of the heroes that fought then, you have felt that if the time should ever come when you could fight for or help your country you would do it as gladly as Washington or Crockett, Perry or Marion did, and you never doubted but that you could do it as well. Of course you are

¹ The water-moccasin is a deadly snake found in the Southern States and much feared.

MILITARY TRAINING

old enough now to see that the reason these and other famous Americans were able to do what they did was because they were either trained soldiers or trained frontiersmen, and that you could not do it because you have had no such training. So here you are living in the greatest age of adventure and chivalry, and yet if your country should call you to the colors you could not answer because you would not be ready.

Why You Should Be a Trained Soldier—It is plain, then, that the thing for you to do is to get a military training, for every true American should be ready to serve his country the best he can at all times, and without the training you simply can't do it. In the next chapter I shall tell you how and where to get a military training, but first of all I want to give you a few good reasons why you should get it, and of what use it will be to you after you have it.

How Your Country Protects You—As you know, it is a country's duty to its citizens or subjects to protect them from danger at all times, both in peace and in war. This it does in time of peace with its laws, backed up by the police force, which prevent theft, open murder, and other crimes, and punish the offenders. The National Guard prevents and puts down such uprisings, riots, and like disturbances to the peace and safety of citi-

zens as the police force cannot handle. In a place where there is no fixed government, or where the government is not run right, as for instance Mexico, bloodshed is a daily occurrence and property belongs to the man who is strong or cunning enough to take and hold it. A law-abiding citizen has no chance at all. So you see you are being protected every day of your life in time of peace by your country.

Why You Must Fight for Your Country—In time of war the government still protects its citizens from invading and hostile countries by means of its army and navy. But of course it can't do this if it has no army, and it can't do it well if it hasn't got a trained army, and since it protects you in time of peace you must see that it is your duty to do your bit and help provide the trained army which protects your home and your country from danger.

Now and then you will hear some fellow say that he doesn't see why he should fight for his country since it has never helped him, but he doesn't stop to think, and if he does then he has no right to be a citizen of any country, much less of the United States. Unless a fellow is going to be loyal to his country he belongs up near the North Pole somewhere, where he will never have to fight anything but cold, hunger, and walruses and where

MILITARY TRAINING

he will have no country to protect him and to help protect. A fellow of this kind is called a *slacker*, but my idea of it is that he is worse than a traitor, for his statement is treason and may keep some one else from enlisting.

How a Trained Army Stopped the Germans-But to get back to the subject, you can easily understand that a country without a trained army cannot fight another country with a trained army and hope to win. For the past twenty years or more Germany has made it her boast that her army was the best trained army on the face of the earth, and certainly the Big War has proved that it was no idle talk. England, on the other hand, has never tried to keep a large standing army, which means a trained army, but has placed her faith rather in her splendid navy which has earned for her the title "Mistress of the Seas." France has always been forced to maintain a large and efficient army, for she is a coast country and, ever since the days of the Louis's, she has had to fight to keep from being pushed off into the sea. It was the combined effort of England's navy and France's army that kept the Germans from winning at the beginning of the war as they had long planned and hoped to. But even this combination, with the forces of Italy, Belgium, and Russia helping, was

not enough to beat the Germans, and so punish Germany as she deserved.

Our Need of Officers—Now an army requires officers and while men can be found who can be trained in a short time to become good privates, men who are fit for officers are few and far between, and their course of training must naturally cover a much longer time. And so our great need is always for officers and you have every chance to become one of them.

Why an Officer Must Be Educated—To become an officer in the army you must in the first place be educated as well as if not better than the average business man, for the business of war is a far more serious and skillful proposition than any mere mercantile affair, because the lives of many men are concerned. This is one of the reasons why you who are going to school now can become an officer providing, of course, that you get the *proper military training*. You are young now and are fast learning, but by the time you are old enough to volunteer you will have a good education, and if you follow my advice you will be all that an A number one officer of the American army should be.

How War Changes Army Needs—It is a well known fact that for every year a war lasts the requirements for a commission in the army as an officer get less and still less stiff. Thus before

MILITARY TRAINING

our entry into the Big War an army officer had to be a graduate of West Point and at least twenty-one years of age. But as soon as we had declared war the Aviation Section of the Signal Corps commissioned men who were only college graduates. A few months later the age was lowered from twenty-one to nineteen years, and the last change was to enable men of high school education to get a commission.

So you can see that when an army needs men it can't be too particular. If you have studied the history of our Civil War you will remember that over half of the Confederate army was made up of boys under nineteen years of age. From all these facts it is plain that when a country is at war, and men become scarce, boys are called to fill the ranks. Certainly if you are going to be called it is up to you to do your best to get a commission, for you can if you try.

Compulsory Military Training Helps You as Well as the Army—Some time ago a law requiring military training for schoolboys from sixteen to nineteen years of age living in the State of New York was passed. Perhaps you may wonder why it named schoolboys only, and if so I will tell you. If you are a schoolboy you will soon be a college student, and college students are the material from which good officers can be picked. These same

schoolboys who are drilling now will not become ordinary privates in the army when they are needed, for the training this law will give them and the education they will have will fit them to be officers, and if you are drilling now you will be one of them. In other words the law helps the army by providing men capable of becoming officers and it helps you by giving you the training necessary for an officer. It is one of the best laws ever passed and I hope that soon every state in the Union will have a similar one.

Training Now Will Help You Later—There is still another way that getting a military training now will be of use to you. From now on compulsory military training will probably be a fixed law, but you will have had yours and you will not have to take it over again when you are a busy man making so much money that you don't know what to do with it. Furthermore, for the next ten years at least things will be done in a military way, and unless you have a military training you will be behind the times, which will keep you from making money.

How to Serve Your Country Best—And now just a word or two more about serving your country. If you are between the ages of twelve and eighteen you can serve your country and yourself best by taking a course in military training so

MILITARY TRAINING

that you will be fit and ready for the time when you are needed. If you are eighteen or over you can serve best by taking a course in military training and then applying for a commission in the army as will be told later. If you fail to receive the commission it will be because you are not fitted for an officer's work, and then the only way open to you is to enlist as a private, and to fight your hardest for Old Glory until the last enemy trench is taken, should the opportunity occur.

CHAPTER II

WHERE YOU CAN GET YOUR TRAINING

As I told you before, you should, by all means, get a military training, and I am going to tell you some of the ways for getting it. Of these methods there will most likely be one that you will be able to pursue, and you can take your pick of them.

In the first place I will suppose that you are twelve or over, have had no military training, and want one very much. If this is the case you have only two courses left open to you to follow:

About Military Schools—One of these is to go to a military school. Now all military schools are private schools, and like most schools of this kind they charge for your tuition and board. Before you can go to one you must convince your parents that this is the thing for you to do, and if you let them read the preface and first chapter of this book, I believe that they will see things your way. On the other hand if they can't, don't be disappointed but look over the rest of this chapter and

WHERE YOU CAN GET YOUR TRAINING

you will find that there is something else that you can do.

In the first place a military school will give you as good an education as any elementary and high school will, and it will at the same time provide you with a military training that you could not better except by joining the Regular Army and actually fighting. The heads and instructors in these schools are usually old and experienced army men from whom you will receive your instruction first hand. The school work is not any harder than in any ordinary school, and the military training just breaks nicely the dull monotony of school life. Further, athletics and other sports are provided for you, and a few years at a military school will go a long way toward making a man of you. There is a good military school or academy in nearly every state in the Union, and so you need not go far from home. A few of them are as follows: New York Military Academy, Cornwall-on-Hudson; Bordentown Military Academy, Bordentown, N. J.; St. John's Military Academy, Wisconsin; Junior Plattsburg Camp, Plattsburg, N. Y.; and the Virginia Military Institute. Moreover, all of the State Colleges give government military courses. You can take your pick of these schools, which are all good, or you can look in almost any

magazine and in the advertising section you will find a larger list to choose from.

Next, Local Organizations-A second but not so good a way of getting a military training is to join some local organization. Many towns, villages, and clubs have cadet corps organized very often under the able supervision of some retired army officer. If there is no such corps in your town and you want a military training real bad you will get up one of your own, enlisting the aid of an army officer or some one with military experience, and enlisting the money of some of the rich men in your town. This is never very hard to do, for there will be plenty of fellows who will want to belong and men with money always take a kindly interest in anything that will bring credit to their home town, so that they may bask in its reflected light and warmth.

Then State Organizations—The old National Guard used to be the main military organization of every state. Upon our declaration of war, however, the National Guard was mustered into the Regular Army, and as a consequence there was left no militia to quell riots, and do the other necessary things that an organization of this kind must do. As a result Home Guards were organized, but these have proved a failure, for they

WHERE YOU CAN GET YOUR TRAINING

are not authorized by the state and so have no real power.

Thus if a home guardsman strikes a citizen over the head with his club, the citizen can immediately have him arrested and charged with assault and battery. If he kills a man in the carrying out of his duty he must suffer the consequences just as any other man.

To get around all these faults of the Home Guard and to give the states a means of defense a state guard similar to the old National Guard has been organized by many states, and if you are seventeen or over you can join this branch. As the new state guard is a very recent thing there has been much difficulty in securing officers for it, and if you read this book carefully you will have no trouble in becoming an officer in it.

Admission to the state guard is very easy, the physical examination being nominal.

The purpose of the state guard is to quell riots, do guard duty, etc., during such time as it becomes necessary. The enlistment period is for two years. If after enlisting in the state guard you should make up your mind to enlist in the Regular Army, you will meet with no opposition and your name will immediately be dropped from the rolls. Should business interfere seriously with your attendance of drills, inspections and musters,

you can arrange to be absent. If you move to another state your name is automatically dropped from the rolls and you are given an honorable discharge from the guard.

You will receive a fine training in the guard from regular army officers, and taken all in all it is a fine chance for you to do your bit in an easy way, and you ought by all means to join it. Go to the nearest armory and ask for particulars. I might add that the guard never leaves the state, that is to say it is for state duty only.

The Slater Law and Military Training-Back in the last chapter I told you about the Slater law which has been passed in New York State. By the time this book comes from press, if you have not already started drilling, it will then be time for you to do so. Drills are provided for boys falling under the Slater law at nearly all the armories in the State. You will be thoroughly drilled in the school of the soldier, squad, and company, as well as in rifle and bayonet fighting, and the manual of arms. The drills are short and interesting and you should try to attend them whether you have to or not. All of the New York high schools have their own corps and have made provision so that their students can comply with the Slater law. Of the two places to drill you will find your high school easiest but the armory best.

WHERE YOU CAN GET YOUR TRAINING

And Last of All, National Organizations— There are two national organizations where you will be able to get a good military training, and these are (1) The United States Military Academy at West Point and (2) The Regular Army.¹

When you read Chapter X you will find out all about admission to West Point, for it is there that our Regular Army officers are turned out in time of peace. The Regular Army is the best place for you to get your military training, for in so doing you are serving your country in a time of need in the best way you can. Before trying to enlist in the Regular Army, however, be sure to read Chapter XI.

How to Pass the Physical Examination for the Regular Army—Now I want to give you a few tips on enlisting in our Regular Army. In the first place you must be eighteen years of age. Do not try to enlist if you are under eighteen, for you will be found out sooner or later and it will go hard with you.

The following table shows what your weight should be for your height, as well as your chest measurements both at expiration and inhalation of the breath.

¹ The Regular Army is made up of volunteers, the National Army of drafted men.

PHYSICAL PROPORTIONS

| Height | Minimum or lowest weight in pounds | Minimum or smallest chest measure | |
|--|--|--|---|
| in inches | | At expiration of breath in inches | At inhalation of breath in inches |
| 64 65 66 67 68 69 70 71 72 73 | 120 122 124 126 129 133 135 142 149 156 | $ \begin{array}{c} 30 \\ 30 \\ 30 \\ 30 \\ 1/2 \\ 31 \\ 31 \\ 31 \\ 1/2 \\ 32 \\ 32 \\ 32 \\ 32 \\ 34 \\ 33 \\ 33 \\ 4 \end{array} $ | 3^{2} 3^{2} 3^{2} 3^{2} 3^{2} 3^{2} 3^{2} 3^{2} 3^{2} 3^{2} 3^{2} 3^{2} 3^{2} 3^{2} 3^{2} 3^{2} 3^{2} 3^{3} 3^{3} 3^{3} 3^{4} 3^{4} 3^{4} 3^{5} 3^{4} 3^{6} 3^{4} |

Vision—You should be able to see clearly block letter type half an inch high at 20 feet, with both the right and left eye separately and without glasses.

Color Perception—Color blindness may disqualify you.

Hearing—You should be able to hear a whisper at 20 feet in a quiet room. Each ear should be tested separately.

Figure and General Appearance—The various parts of your body should be well developed; head symmetrical, chest developed and well formed, the abdomen lank and the limbs shapely with firm developed muscles. The face should indicate mental

WHERE YOU CAN GET YOUR TRAINING

health and vigor and should be free from eruptions.

Weight—Marked disproportion of weight to height need not be a cause for rejection.

Height-Minimum height is 64 inches.

Respiratory System—Marked evidence of deformity or disease of the lungs and of active disease may disqualify you.

Bones and Joints—Stiffness of joints sufficient to interfere with the duties of a soldier disqualifies.

Flatfoot—Complete flatfoot will disqualify you. Test the strength of your foot by walking on the toes, hopping and similar exercises.

Skin—Eruptions of the skin of a nature to be objectionable, unhealed ulcers, or very severe acne disqualifies.

Nose—Loss of the nose, malformations and deformities therefore that interfere with speech or breathing are causes for rejection.

Throat—Deformity or disease sufficient to interfere with speech disqualifies.

Teeth—You must have four serviceable double teeth, two above and two below and one over the other so as to enable you to chew your food properly.

Nervous System—Nervous diseases are disqualifying.

Heart—Organic heart disease sufficient to interfere with the duties of a soldier disqualifies.

Digestive System—Chronic diseases of the stomach, such as chronic dyspepsia, gastric ulcer, and dysentery, affecting the general nutrition, are causes for rejection. Chronic appendicitis and chronic enlargement of the liver or spleen are causes for rejection.

If you do not come quite up to these specifications do not be discouraged but try to enlist anyway. The chances are they will take you. Of course if you are under 21 you must have your parent's consent to enlist. The enlistment papers must also be signed by your parent or guardian.

Your Physical Examination and How to Pass It—The night before you are ready to enlist be sure and go to bed early and get a good night's sleep. Then get down to the enlisting station sharply at 9 o'clock the next morning. There will not be many fellows there then, the enlisting officers won't be tired out, and altogether you will do far better than you would by strolling in late in the afternoon.

You will be asked a number of questions and you must answer them all truthfully. Be prepared to give the date of your birth, the name, address, and business of your parent or guardian as well as his birthplace.

WHERE YOU CAN GET YOUR TRAINING

When it comes to your chest measurement be sure that you get the last sign of air out for the first measurement, and all the air and a little more in for the second measurement, and you will have no trouble there.

If you find yourself a few pounds underweight eat a couple of salt mackerel for your breakfast, washing them down with a bucket of water and you will be surprised to find how much more you weigh.

There are two things that you ought to practice before you set out to enlist, and one of these is hopping. You will be asked to hop on the ball of each foot separately for a distance of from twenty to thirty feet, with your shoes off. Some fellows have a little difficulty in doing this, especially if they have never tried it before, and you should practice it at home two or three times.

The other thing that you should do is to get a regular optician's sight testing card with large letters at the top running to small letters at the bottom. You should set this card in your room at a distance of twenty feet, cover first one eye with a card and then the other, looking at the lower lines until you can read them with ease. Ten minutes' practice this way each day for a week will strengthen your sight wonderfully, and you can then pass the eye test easily.

There is one other thing that you should not do and that is to get nervous. Just remember that no one is going to ask you to do anything you can't, and you will get along famously with the enlisting officer, whom you will find to be a nice chap for all his businesslike manner.

CHAPTER III

THE MAKE-UP OF OUR ARMY

From now on through the book I shall try to tell you some of the most important things that you should know, if you are going to try to get a commission in the army as an officer.

Of course you cannot expect to learn from any book everything that a young officer should know, for as I have already told you a continued course of military training, and a little real fighting, is the only way of becoming a good officer that I know of. On the other hand you will be able to get much out of this book that will serve you well when you start training, will help you get a commission, and will make you feel quite at home in a uniform.

A Mistaken Idea of Our Army—One of the first things that you should know about is our army, and how it is run. Most boys have a badly mistaken idea of war, the army, and of an officer's duties, for they think that all an officer has to do is to lead a company of valiant soldiers on to vic-

tory, shouting orders and words of encouragement, and waving his sword the while, with an occasional shot at the enemy with his revolver. This is the popular idea and it is quite natural, for it is all we ever read about in our school histories and blood-and-thunder war stories. But to get down to cases, an officer has but little chance nowadays to do these heroic things, for there are other duties that are far more important.

The Army as It Really Is-As you know, an army is made up of a large body of picked and trained men, called privates, and about whom you will learn more later, who are commanded by men who know more about war than they do and who are called officers. Now, privates are human beings just like any of the rest of us and must be clothed, fed, taken care of when sick or wounded, and kept in the very pink of condition by every known medical, sanitary, and commissary means, for a sick soldier is a useless burden and expense to an army. In time of peace, when our standing army is small, and the men are quartered in comfortable barracks near railroads, it is easy to feed and clothe them, and there is not much sickness. But in time of war the army swells to thirty or forty times its peace size, it is almost constantly on the move, the enemy may shut it off from outside help, the men must be out-of-doors

THE MAKE-UP OF OUR ARMY

As a result of all these hardships it is a big man's job to keep the army clothed right, fed right, and in good health, and it is up to the officers to see that these things are done.

The General Staff-Now an army is like a large family, for it must have a head to scheme and provide for it. But an army is so much larger than even the largest family that Brigham Young or even Solomon ever dreamed of that one head cannot possibly manage it all, and so the duties of looking after it is split up among several heads, each of which has a department under him to carry out his orders. This body of officers is known as the General Staff. It is made up of men who are the best experts in their respective lines that can be found in the country, for it is the brains of the Army 1, and upon it depends chiefly whether or not the army will be a successful one. The officers of the General Staff study the plans of campaigns and decide other things of a like nature. The strategic moves fall to the general in command of the army and not to the Staff officers. The final re-

The *President* is *Commander-in-Chief* of our Army by the Constitution of the United States. He is at the head of the War Department, which is organized to take care of and control the army under his supervision.

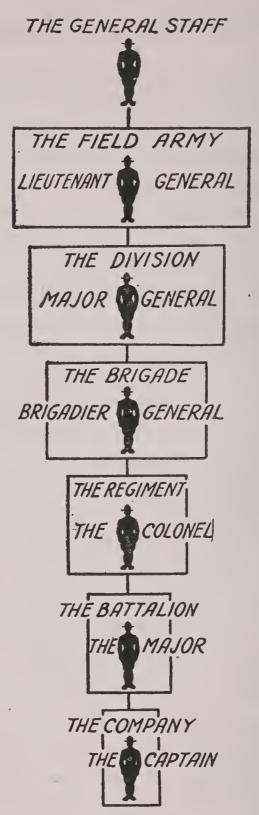


Fig. 1. Our Army; Its Divisions and Their Commanding Officers in Order of Rank

THE MAKE-UP OF OUR ARMY

sponsibility for the safety and welfare of the army rests upon the commanding officers in the field.

The Field Army and Its Officers—After the General Staff comes the field army, under the command of a Lieutenant-General. It is still further divided into divisions which are commanded by a Major-General. The division is split up into lesser units, each of which has its own headquarters. Thus a field army may contain an infantry division and a cavalry division. A division is the smallest arm of the service which is at the same time large and complete enough to serve as an army in itself.

In the infantry division are the infantry brigades, each of which is commanded by a Brigadier-General. A brigade can be either infantry, cavalry, or artillery, and the latter two may be attached to an infantry division, in which case they are called divisional brigades. The brigade, if infantry, consists of three regiments, or if cavalry, or artillery, of two regiments, each of which is under the command of a Colonel (pronounced kernel). A regiment is made up of three battalions, each of which is commanded by a Major. A battalion is again divided into four companies, each of which has a Captain at its head. The company besides its Captain has its Lieutenants (pronounced "lieutenant" in the United States and "leftenant" in Great Britain) and non-commissioned officers such as

Sergeants and Corporals, all of which is shown in Fig. 1.

The Company: Its Divisions and Officers—Since the company is the largest arm of the army in which the officer in charge—who is the Captain—handles his men directly, it is the one that concerns you most, and hence you ought to know most about it. You will learn all about the duties of the Captain, Lieutenants, and non-commissioned officers of the company, when drilling the men a little further on.

As a company is too large a body of men to be handled well by an officer single-handed, Lieutenants are appointed whose duty it is to carry out the commands of and act for the Captain, or to command portions of the company when in actual war service. To make the company still easier to handle it is divided into platoons, and each platoon is divided into squads of eight men each. At the head of each squad is a non-commissioned officer who is called a Corporal. He is an enlisted man who has been given this position by reason of his knowledge of military orders, and his ability to give orders and see that they are carried out by the men in his squad. Each platoon of squads is still further commanded by a Sergeant, who is also an enlisted man, and who sees to it that the Corporals in his platoon give their orders

THE MAKE-UP OF OUR ARMY

properly, and that the platoon executes them properly. He is also a non-commissioned officer, but he is higher in rank than a Corporal.

So you see that the army is like a big machine made of many parts, each of which must mesh with and move other parts, it being necessary for the whole to run like clockwork.

How to Tell an Officer's Grade—It is a good idea to be able to tell the grade or rank of an officer whenever you see one, and the following table gives the ranks and titles of officers, the General being the highest and the Second Lieutenant the lowest, as well as the *insignia* or devices that they wear and by which you can tell them apart. As a rule these devices will be found on the olive drab shirt collar, shoulder straps of coats, and upon the sleeves of the overcoat; thus

A General wears four silver stars.

A Lieutenant-General wears one large silver star between two smaller ones.

A Major-General wears two silver stars.

A Brigadier-General wears one silver star.

A Colonel wears a silver eagle.

A Lieutenant-Colonel wears a silver oak leaf.

A Major wears a gold oak leaf.

A Captain wears two silver bars.

A First Lieutenant wears one silver bar.

A Second Lieutenant wears one gold bar.

When you meet an officer in his overcoat there is only one way of telling his rank, and that is by the rows of braid that he wears on the sleeves. All the Generals (General, Lieutenant-General, Major-General and Brigadier-General) wear one wide and one narrow band of black braid. A Colonel wears loops having five rows of black braid; a Lieutenant-Colonel four rows; a Major three; a Captain two; a First Lieutenant one row of black braid; while a Second Lieutenant wears loops made of one row of brown braid.

About Army Corps—Besides the divisions of the army I told you about before there are other arms of the service known as *Corps* (pronounced *cores*; singular *core*). A corps consists of two or more divisions of the army which work together and it usually has a separate staff of officers from the General Staff, although they are still under the command of the General Staff.

A corps is organized for a special purpose, sometimes for fighting, but more often for providing the army with the necessary means of offense and defense.

The Engineer Corps—Thus we have the Engineer Corps which is made up largely of trained engineers, whose duty it is to construct roads, build bridges and cut trenches and other like works that an army must have but which an infantry or

THE MAKE-UP OF OUR ARMY

cavalry division would be unable to make. The Engineer Corps is not made up necessarily of trained soldiers, but of the best civilian engineers that the army can get hold of, for a civilian engineer can do all of this work without previous military training.

The Signal Corps—Another of our corps is known as the Signal Corps. This corps is used to make it possible for the General Staff to get messages to and from the field armies. In this way the master-minds of the General Staff are able to direct the movements of the army from positions of advantage. The Signal Corps is divided into Sections, there being those that take care of the wireless, or radio companies as they are called, those that take care of the wire or telegraph companies, and the Aviation Section which looks after the fliers.

Some Other Corps—There are two other corps which are important although they do not do any actual fighting, and these are the *Medical Corps* and the *Hospital Corps*. Without them hundreds of thousands of lives would be needlessly lost, and many wounded soldiers would suffer for the want of a doctor's care, or a surgeon's skill.

On Getting a Commission in a Corps—And right here I want to say that you stand a far better chance of getting a commission in the Engi-

neer Corps or Signal Corps if you are properly trained than in any other arm of the service, for the very reason that civilians without any military training are accepted, and naturally if you have one it counts in your favor.

The Spirit of the Army—Each of the officers mentioned in the table showing their rank has the right to give orders to his inferior officer who must carry them out without question. Indeed this is the spirit of the army, namely, absolute obedience to orders at all times; it is the one thing that every private and every officer must have drilled into him, and it is the thing that you must learn now if you are to become an army man at all.

In general an army is made up of two classes of men and these are (1) enlisted men or privates and non-commissioned officers and (2) commissioned officers. Besides being a fighter the enlisted man is a worker just as much as a carpenter who works upon the building of a house under the direction of a boss. If the carpenter fails to do his work well he is discharged, for the boss has his reputation and living at stake and cannot afford to lose them through the carelessness of a workman. It very often occurs that a workman will not obey the orders of his boss because he thinks that he knows the better what to do. However, this does not alter the fact that the reason that

THE MAKE-UP OF OUR ARMY

he is a workman, and the boss is the boss, is because he knows better than any workman under him what has to be done.

In the army the officers are the bosses and the privates are the workmen for exactly the same reason. But in the army disobeying an order may cause defeat or may cause many lives to be lost, and so failure to obey is punishable by death, and not simply by being fired as in ordinary civil life. Now every enlisted man knows this full well, and knowing it he does not have to be told again every time an order is given. An officer never says, "You must do this or else I'll have you shot or imprisoned." Such a statement would be an insult to any decent man. What he does say is "Do this," and then if the order is not obeyed he makes out his report and lets the military law take its course.

Obedience, then, is the rule of the army. An enlisted man may have to do things that he does not like to do, but he does them anyway because he knows that the safety of the army as well as his own rests upon his obeying orders. An officer never threatens an enlisted man, because he knows that if the man will not obey of his own free will, threatening won't make him do it. Furthermore there is a spirit of father and son between the officer and the enlisted man. For instance, in bad,

rainy weather, an officer will make the rounds of his command two or three times between midnight and morning to see that his men are as comfortable as possible, or if he is an infantry officer he will take the greatest care of his men's feet, and see that they do not suffer from bad shoes or socks on long marches. In other words, he does not let the fact that he is an officer make him forget that his men are very human, and that an act of kindness or a word of praise is returned to him by the enlisted man in a hundred different ways, but chiefly in the confidence that he will place in his officer and the instant obedience that he will give him, and obedience is the very life and blood of an army.

CHAPTER IV

THE SCHOOL OF THE SOLDIER

As you have seen from what has gone before, the private, or soldier as I shall call him from now on, is the smallest unit or part of the army, but he is nevertheless a most important one, for without him there could be no such thing as an army.

Consequently the training of the soldier must be well done, or else a poor army will naturally be the result. The movements of a company depend upon the movements of the squads, and the movements of the squads depend upon the way that each and every soldier in the squad does his part. A squad made up of bright, alert soldiers with plenty of snap or swank, as the English call it, will follow out orders or execute commands in such a way that the whole company moves like clockwork. But if the soldier is slovenly in the execution of commands the movements of his company will be worse than slovenly.

Now, say you, What has all this talk about privates got to do with me, for I am going to be an

officer. My reply is: No officer can command a company or body of men unless he can execute his own commands in A number one shape, for if he can't do so, he doesn't know the meaning of the commands, and if this is the case he is ordering his men to do something but he doesn't know what it is, nor would he know whether they did it right or not.

Why an Officer Must Know the School of the Soldier—But an officer must know the school of the soldier as well as any soldier for another reason. While the drilling of new recruits falls in a large measure to the sergeant of a company it is, as a matter of fact, a part of a commissioned officer's duty, and he is not a good officer unless he can do it.

And so if you are going to be an officer you must learn the school of the soldier until you know it both ways from the middle and back again, and, what is still more important, you must know it so that you can teach it to a lot of green fellows, or rookies as they are called, who know nothing about it.

About Being Neatly Uniformed—The first thing that you must learn is how to carry yourself, for no matter how much you may know, if you haven't got a neat, smart appearance you will look awkward. It is a curious thing but a uniform well

worn will make a fellow look about four times as smart as he really is, but if carelessly worn will make him look worse than sloppy. Now I want you to take this talk to heart and always see to it that after this when you are in uniform you are neatly and smartly dressed. As a rule a soldier who dresses badly is a bad soldier in ranks, and furthermore he shows nothing less than disrespect for his flag, country, and company, by wearing his uniform in such a way.

No matter where you take your course of training, you must have a uniform of some kind. Most military schools formerly used a full-dress uniform but it is very likely that since our joining the allies and getting into the war the olive drab service uniform of the United States will be adopted and used only. This consists of breeches, shoes, leggings, shirt, coat, and hat.

How to Get into Your Uniform—When you get into your uniform the first thing you will put on is of course your breeches, taking care to have the knee lacings down the center of the side of the leg. You will then pull the lacing up tight, so that there will not be a wrinkle in the breeches below the knee.

Now put on your shoes, lacing them up neatly and tucking the lace ends inside; polish them if

you have any polish in your kit, or if not wipe them clean with a cloth.

Your leggings come next; draw them on over your shoes and lace them up tightly, but not so much as to make them wrinkle. The lacing of the old style legging is brought up underneath, as shown in Fig. 2, but the new kind which has shoe straps must be laced up on the outside like a pair of shoes.



Fig. 2. How the Old Style Army Leggings Are Laced

When you get them on, look and see that the laces of your shoes are not hanging out—in a word, have everything snug and neat.

Put your shirt on next and tuck the tails well down into your breeches. Then draw your belt just tight enough to keep them from wrinkling, and still hold them up.

Now slip into your coat and button it up all the way. Hook the collar together at the top and see to it that your shirt collar lies smooth. The

shirt collar should just come even with the top of your coat collar, but should be underneath, and not on the outside as you may have seen soldiers wear it.

Finally, put on your hat and set it at such an angle that the brim slants from back to front and shades your eyes. The campaign hat now in common use has a strap which you can slip around the back of your head to keep the hat in place.

How to Stand at Attention—Now that you are properly dressed the next thing to do is to learn to stand like a soldier, or at attention.

This is done by standing with your heels together, and your toes turned out at an angle of about 45 degrees. You should rest your weight evenly on your feet so that you can stand easily without moving or swaying; have your legs straight but not stiff-kneed. Throw out your chest and draw in your chin, keeping your eyes straight to the front and your shoulders square. Your arms and hands should hang at your sides easily, with the thumb of each hand alongside the seam of your breeches, and the elbows near the body.

You should practice this position at every chance you get, and it will soon become natural for you. As a matter of fact it is much easier to stand at attention than to stand crooked and round-shouldered with the weight shifted all onto one leg.

About Giving Commands—And now we come to the place where commands must be given. You should always give your commands in a loud, clear, and confident voice, with special emphasis upon the last word of the command. In order to show the emphasis upon the last word the command will be printed in black-face type, the last word being in capitals. The first part of the command is merely *preparatory*; the last word is the command of *execution*.

Bear in mind that no command can be given to a soldier unless he is first standing at attention, except the command *attention* itself which will bring him to that position.

If you should desire to change your command before it is executed, give the command as you were, when the soldier will remain in his original position.

Right FACE—When this command is given (1) lift your left heel and right toe a little, and turning on your right heel by pressing with your left toe turn to the right as shown in Fig. 3. (2) Then bring your left foot to the side of your right.

This is often done to the counts (1) and (2), which are given by the officer after the command right face is given, as shown by the numbers, for

it is easier to learn in this way. The two counts are given in the time it takes a grandfather's clock to say tick-tock or one second, and when no counts

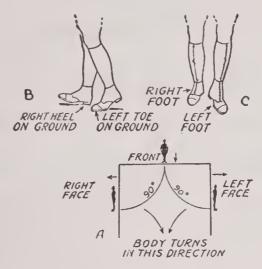


Fig. 3. How Right Face is Done

are given you should count to yourself as you do the movements.

Left FACE—Is done in the same way except that (1) the turn is made on your left heel and (2) your right foot is brought to the side of your left foot. From now on instead of telling you how to do both right and left movements every time, I shall not tell about the left except when it is an extra hard one.

Right (or Left) Half FACE—In this move you begin exactly as if you were going to do a right or left face, depending on whether the command given is right or left half face, except that you turn only

45 degrees instead of 90 as in the right face; see Fig. 4. It is done to the counts (1) and (2).

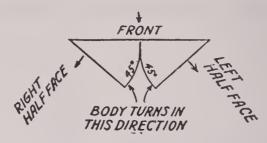


Fig. 4. How Right (or Left) Half Face is Done

About FACE—The purpose of about face is to turn you around. (1) The toe of your right foot is placed about six inches back of your left heel and to the left of it a trifle. (2) You then swing on the toe of your right foot and your left heel until you are faced about as shown in Fig. 5. If executed correctly the heels will meet exactly and it will not be necessary to bring one foot up to the other.

You are ready now to learn how to march. When starting to march always step off on the left foot.

Forward MARCH—This command is given when you are standing still, or at the halt. (1) At the word forward shift the weight of your body on to your right leg, without, however, making any movement that can be seen, and (2) at the word march step off with the left foot with a pace of 30 inches. Bear in mind that each step must be 30 inches and that you should take 120 steps to the

minute. This is called *quick time*, and is what is known as the regulation step.

Double Time MARCH—Double time march is done in the same way except that the step is 36 inches long, and you take 180 steps a minute. To

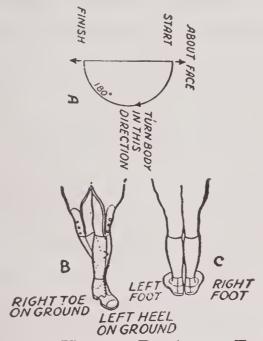


Fig. 5. How to Do About Face

- A. What the Movement Means
- B. Before the About Face
- C. After the About Face

do this it is necessary for you to break into an easy trot, with your forearms horizontal to the ground, elbows bent and close to the sides like those of a runner, and the hands closed.

Quick Time MARCH—This command will be given when you are marching at double time, and means to slow down to quick time. Do not do this

immediately on the word *march* but take one more step in double time, and then slow down to quick time on your next. Thus (1) take one more step at double time, (2) slow down to quick time and drop the arms to the sides.

Mark Time MARCH—This consists of raising and lowering each foot one after the other, about two inches from the ground, 120 times a minute, but without moving from the spot you are standing on. If given while on the march take one more step, bring the other foot up even and then do as explained above.

Half Step MARCH—The half step is 15 inches in quick and 18 inches in double time. If the command forward march is then given break into the quick-time 30-inch step, taking one more 15-inch step after the word march, before doing so.

Right (or Left) Step MARCH—This is a side step. (1) The right or left foot is carried 15 inches to the right or left 120 times to the minute and (2) the other foot is brought up alongside the right or left foot before making another side step. In this movement the command halt is given as the feet are brought together; one more step is taken and then the heels are again brought together at a halt.

Backward MARCH—Backward march is done by taking 15-inch steps to the rear.

By the Right (or Left) Flank 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 the Rear MARCH—At the command *march*, given as the right foot strikes the ground, take one more step with the left foot; turn to the right about on the balls of both feet, and at once step off with the left foot.

Change Step MARCH—At the word march (1) bring the right foot to the heel of the left foot and (2) step off with the left foot. (The change step with the other foot is done similarly.)

HALT—This command means to stop. When you hear the word *halt* (1) take one more step and (2) bring your other foot to the first and stop.

There are a few other commands that are given to a soldier only when he is halted and standing at attention and these are:

REST—You must keep one foot in place but you can talk and need not stand at attention.

At EASE—This is the same as *rest*, only you can't talk.

Parade REST—(1) Carry your right foot back six inches and hold the leg rigid. (2) Hold your left hand by the thumb with your right hand and in the center of the body, the arms hanging easily,

and the fingers of the left hand being pressed together and over those of the right. The left knee should be slightly bent as shown in Fig. 6.

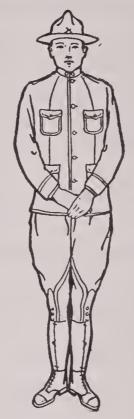


Fig. 6. How the Hands are Held at Parade Rest

Eyes RIGHT (or LEFT)—Turn your head 45 degrees from the front, the eyes turning with the head.

The last thing of all is the *hand salute*. This is a military honor and when you do it you should put all of the *pep* into it you can, for if you don't it is no longer an honor but an abomination. The command given is

Hand SALUTE—You should raise your right arm and hand with the thumb and four fingers stiffly extended and joined until the fore finger touches the brim of your hat, directly over your right eye, the forearm being at 45 degrees with the ground and the outside of the hand slanted toward the ground slightly. You must always look



FIG. 7. THE CORRECT HAND SALUTE

directly at the person you salute. The correct salute is shown in Fig. 7.

How to Practice These Drills—These drills are known as the *School of the Soldier* and are as necessary to every soldier as his rifle, for upon them depend the manner in which he will move when in a squad, and the ease and skill with which the squad, platoon, or company can be maneuvered; hence you should practice all these movements until

you can do them perfectly. There are two ways that you can do this. The first is to stand at attention, give the command to yourself, and then carry it out. The second is to get some one else to give the commands until you are able to execute them well. You should then practice on him, for in this way you will get a little training in commanding. Whichever way you do it, it is well to do the movements slowly at first, and then as you begin to know them better you can speed up until you are doing them faster. You should take particular pains, as you are doing them, to see that you get every little movement exactly right, or you will fall into the easy habit of doing them wrong.

You will find at first that counting aloud as you go through the movements will help you learn them. But after you know them you should not count except perhaps to yourself and silently, nor should you count aloud if you are drilling men who know the movements fairly well, for they will begin to depend too much on you. As soon as a soldier starts to depend upon his officer to count he begins to lose the spirit of alertness that every well-trained man must have, and by and by his drilling will become bad instead of good.

On the other hand, when drilling a man, if you see that he really does not understand what you mean, go through the movement before him slowly

and explain to him as you go along just what you are doing and why. Always insist that he be attentive and *up on his toes*, for in this way he will learn very quickly and save you much bother.

CHAPTER V

THE SCHOOL OF THE SQUAD

Having learned the *school of the soldier* so that you can give and execute the right commands, you are ready to learn about the *squad*.

What a Squad Is—The squad is made up of eight soldiers who are lined up in what is known as ranks. A rank is a number of soldiers drawn up side by side or abreast. In the squad there are two ranks, namely (1) the front rank and (2) the rear rank. There are four men in each rank, and every front and corresponding rear rank man is called a file. The men are numbered from right to left (making it left to right as the officer sees them) thus: No. 1, No. 2, No. 3 and No. 4 of the front rank; No. 1, No. 2, No. 3, and No. 4 of the rear rank.

The squad is made up of seven privates and a corporal, and the latter stands in No. 4 file of the front rank. I will tell you about the duties of the corporal a little further on, so for the present we will simply consider him as a common soldier.

The Value of Drill-Now the object of all drill

THE SCHOOL OF THE SQUAD

is not only to train soldiers to act together as a unit and smoothly but to drill obedience into them. This is why an officer is very strict, and wants to have his commands obeyed quickly and to the letter. Months of drilling in the right way will get a soldier so into the habit of obeying that, when he is under fire he will do only what he is commanded to do and very promptly at that. As a matter of fact squad and company *formation* is very seldom used on the battlefield, especially if the men are under infantry fire, for they would be so close together that they would simply be moved down. Instead the command to *deploy*, that is, spread out into open formation, is given so that there is not so much chance of casualty from shell or rifle-fire.

But notwithstanding this fact, the value of drill is so great that even when soldiers are relieved from the trenches and sent to rest billets, or stations, they are drilled six hours a day. So as a soldier of a squad you should do your part the best you know how, and as an officer you should see that your squad does its best.

Here again the appearance of the soldier in regard to dress should be as neat as possible. Since the squad is the smallest formation of soldiers which acts as a unit, you should keep the same men in the same squad, for in this way they get so that they feel at ease, and want their squad to be the

best, and will go out of their way to make it so. One of the worst things you can do is to change the men about into different squads every time you drill, for they soon see that they belong to no particular squad and don't care very much how they drill or how the squad that they are in at the time looks.

On Forming a Squad—The first thing you must do is to pick out eight men for your squad and you must then explain to them what a squad is and what it is for. Inasmuch as you will have to show each man in the squad just what to do when you give your commands you must know the movements of each man beyond the shadow of a doubt, and before attempting to teach a squad you should have all of the movements clearly in mind. In some of the squad movements Nos. 1, 2, 3, and 4, of the front and rear ranks have different things to do, and when this happens I will tell you just what each man does.

How to Drill a Squad—Before a command can be given, the men must be gathered in squad formation. If you are the officer teaching them you must stand three paces, seven and a half feet, to the front, in the center and facing the place where you want the squad to form, and give the command

Fall IN—The men will then line up in two ranks of four men each. The tallest men should be

THE SCHOOL OF THE SQUAD

on the right end of the ranks—or right flank as it is called—and the shortest men on the left flank. The ranks should be straight and parallel, and there should be 40 inches distance between the rear and front rank, each rear rank man being directly behind or covering the man in the rank in front of him. The proper formation of a squad is shown in Fig. 8, which is drawn looking down upon the

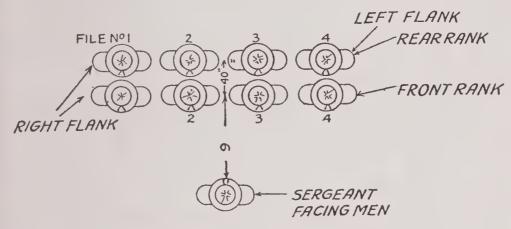


Fig. 8. How to Form a Squad

squad, as if you were directly overhead in a balloon.

The men should be at attention when they fall in and must not change this position until you give the command fall out, at ease, rest, or parade rest, all of which were told about in the last chapter.

Count OFF—(1) When this command is given every man at the word off, except the first man in the front and rear ranks on the right flank, turns

his head to the position of eyes right, and (2) immediately, starting with the first man on the right flank of each rank who will count one, the man next to him will count two and turn his head and eyes to the front; as soon as No. 2 has said two, No. 3 will count three and do eyes front, and so on. The men in the rear rank do the same, each man counting off at the same time that the man in front of him does.

As soon as the squad has counted off you will give the command

Right (or Left) DRESS—At the command dress every man places his left hand on his hip, and every one except the right flank man does eyes right (or left as the command may be). The hand should be placed with the fingers extended, tightly joined together and pointing directly downward. The whole arm should be on a line with the body and the shoulders square, as shown in Fig. 9. The man on the extreme right (No. 1), is the right guide. He remains stationary, resisting all pressure from his left. The other men close up to the right or give way to the left, taking steps of three inches as needed. Each left elbow must just touch the right arm of the next man. All rear rank men, acting in the same manner, cover their front rank men. The men will then be evenly spaced, will not be crowded

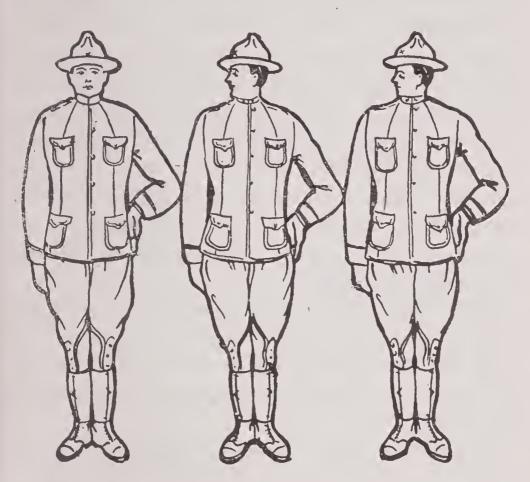


Fig. 9. How Right Dress is Done

in ranks, and the ranks should be as straight as a ruler.

When you want to bring the squad back to the position of attention you will give the command

FRONT—At this command the left arm is dropped to the side, heads and eyes are turned to the front, and the squad is ready to receive further commands. The officer commanding the squad will look down the ranks from the right flank to see that they are straight and that every man covers the man in front of him, or his file leader, as he is called. If a man is out of place he orders him to move forward, or back, to the right, or left, until he covers his file leader.

The commands forward march, to the rear march, backward march, right step march, and half step march, when executed by a squad are carried out by each soldier as explained in the school of the soldier.

Right (or Left) Oblique MARCH—At the word *march* each man half faces to the right in marching, and steps off in the new direction.

The middle of the neck of the man in front of you should be kept on a line with the middle of your neck, or otherwise the ranks will not be straight—see Fig. 10. When you want to go forward again give the command forward march. At

THE SCHOOL OF THE SQUAD

march each man half faces to the left (or right) in marching and moves to the front. If the command halt is given while marching oblique the men (1) face forward and (2) then halt.

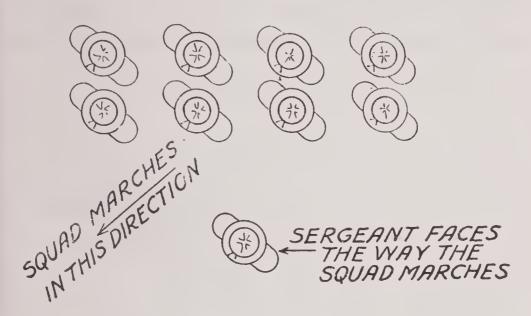


Fig. 10. Squad Marching Right Oblique

The next thing you should be able to do is to turn a squad from the *forward march* to the right or left. The command is

Squad Right MARCH—At the word march, the man on the right flank of the front rank,—No. I front rank—faces to the right as in marching and marks time in place. Nos. 2, 3 and 4 of the front rank then do a right oblique and march obliquely until they come abreast or alongside of No. I, who is still marking time and who is called

the pivot man because the others all swing around him as a wheel does on a pivot.

In the rear rank at the word march No. 3 marches straight ahead (or to the front) until directly back of No. 3 in the front rank. Nos. 2 and 1 of the rear rank face to the left at the same time that No. 3

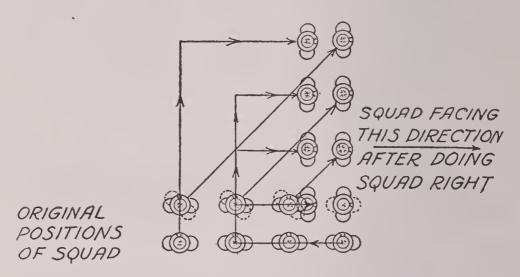


Fig. 11. How Squad Right is Done

starts to march to the front, and follow him until they come directly back of their file leaders. No. 4 rear rank, starting off with No. 3, moves four paces to the front, faces to the right, and places himself abreast No. 3, when the movement is completed. As soon as No. 4 of the rear rank is in place as shown in Fig. 11, the whole squad moves off without command to the front. If, however, the command squad right march is followed by the word

THE SCHOOL OF THE SQUAD

Squad thus, squad right march—squad, then when No. 4 is in place the whole squad marks time and awaits the next command, which is usually halt.

As this movement requires considerable practice it is best to have the front rank and the rear rank of the squad make the movements separately. Furthermore, you should have the men change places so that no matter what numbers they are in they know what to do.

It is important that the pivot man mark time exactly in place, or else the 40 inches distance between ranks will not be maintained. This movement of the squad is known as turning on a fixed pivot.

Squad Left MARCH—This is done exactly the same as squad right except that in this case the pivot man is No. 4 of the front rank, who faces to the left as in marching and *marks time* in place, when Nos. 3, 2, and I of the front rank march obliquely to the left until they come abreast of No. 4.

In the rear rank No. 2 man marches straight to the front until directly behind his file leader. Nos. 3 and 4 of the rear rank then face to the right at the same time that No. 2 starts to march to the front and follow him until directly back of their file leaders. No. I of the rear rank moves four paces to the front and places himself abreast of No. 2, when all move off without command.

When you want to turn a squad in the opposite direction, you give the following command:

Squad Right (or Left) About MARCH—This is the same as two squad rights (or lefts). As soon as the squad has done one squad right, the pivot man again faces to the right and the squad executes another squad right, and when this is done, and the last man is in place in the ranks, it marches to the front. Squad left about march is done in the same way, the squad doing two squad lefts and marching off.

When you want to turn the squad on what is known as a moving pivot you will command

Right (or Left) Turn MARCH—When the front rank has completed this movement the rear rank executes the same movement, using the same ground that the front rank started on. At the command march the pivot man of the front rank faces to the right (or left) as in marching and steps off at the half step. The rest of the front rank does a right oblique and moves off at the full step until it comes opposite its place in line and then does another right oblique, bringing it abreast the pivot man, when it moves off at the half step. The pivot man glances toward the marching flank (No. 4, rear rank) and all take the full step without command as soon as he arrives on the line.

The rear rank executes the movement in precisely

THE SCHOOL OF THE SQUAD

the same manner, first marching forward to the same ground on which the front rank has turned.

In executing this command it is the pivot man that makes or mars it. If he does not move off straight to the front at half step after facing to the right the whole movement is spoiled. A common fault of the rear rank pivot man is not to wait for the front rank pivot man to move off after facing to the right, but to push him off. This causes the front rank man to move off crooked, and as a result the whole rank looks like a rail fence.

Open Ranks MARCH—At this command the rear rank does a *backward march* for four steps of 15 inches each and halts. At the command

Close Ranks MARCH—The rear rank takes two steps of 30 inches forward and halts, when it should again be 40 inches from the front rank.

Take Interval to the Right (or Left) MARCH
—(1) At the words take interval to the right the
rear rank does an open ranks and then

(2) At the word *march* both ranks face to the right and the first man in each rank steps off. The next man of each rank waits until the front rank man has stepped off 4 paces and then follows, and so on through the rank. The command *halt* is given so that all men are spaced 4 paces apart. The squad then faces front without command.

When you want to re-form the men in squad formation from this position give the command

Assemble to the Right (or Left) MARCH—At this command the front rank man on the right flank does not move, but the rear rank right flank man takes two paces forward and this brings him 40 inches behind the front rank right flank man. The other men in the front and rear ranks close in by the shortest route, when they face to the front, and this brings them in squad formation.

After having your squad count off you should have it take distance; the command is

Take Distance MARCH—When the word march is given, 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. The squad is then as shown in Fig. 12.

To re-form the squad the command

Assemble MARCH—is given. No. I of the front rank does not move, and the other members of the front and rear rank move to the front until the squad is re-formed; that is, with rear rank 40 inches from the front.

THE SCHOOL OF THE SQUAD

I told you before about deploying a squad but not how to do it. To deploy a squad so that it

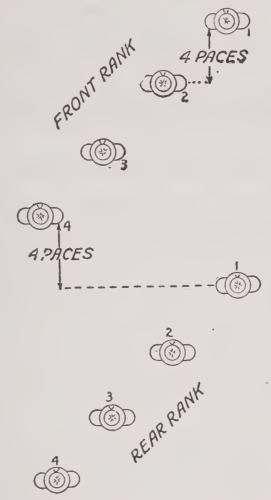


Fig. 12. How the Squad Takes Distance

can be safely used to charge, as in a light encounter, the command is

As Skirmishers MARCH—No. 4 man of the front rank, who is the *Corporal*, will place himself in front of the squad, moving at *double time*. The front rank men will then place themselves abreast

the Corporal at half-pace intervals, Nos 1 and 2 on his right and No. 3 on his left. The rear rank men

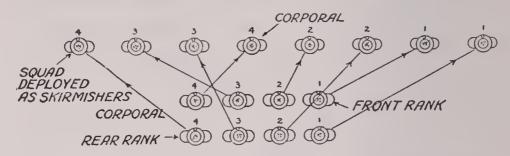


Fig. 13. How the Squad is Deployed as Skirmishers

will then place themselves on the right of their file leaders, as shown in Fig. 13.

CHAPTER VI

THE SCHOOL OF THE COMPANY

The next largest unit after the squad which must be drilled is the platoon. A platoon is made up of two, three, or four squads of eight men each, and its purpose is to group the soldiers together so that they will move as well as they did in the squad. However, the company, which is made up of two, three or four platoons, is the most important thing for you to consider, being, as it is, the smallest unit in which an officer handles his men directly.

As a matter of fact, you will very likely never have more men under you to drill than enough to form a platoon, but since the platoon and company movements are done in the same way I shall tell you about the company movements, or *school of the company*, as it is called, and then you will know how both a company and platoon work.

Company Movements Are Similar to Squad Movements—The first thought that you should fix in your mind is that the majority of platoon and

company movements are not different from the squad movements, and that those that are different use the same squad movements that you have already learned. Hence you can readily see that if your squads have learned the *school of the squad* well they will not have the slightest trouble in doing company movements under your able direction.

In company movements the squad movements are done by each squad upon the command. Thus when the command squads right march is given by the captain of a company each squad does a squad right. The men are commanded to fall in, count off, right dress, rest, parade rest, etc., as described before for you in the school of the soldier and the school of the squad, as well as any of the other commands given there.

The Officers of the Company and Their Duties—But before going into the movements that the company executes and which are different from some of the squad movements, you must know about the captain, lieutenants, sergeants, and corporals, of a company, and their duties.

The captain is in charge of the company. It is his duty to look after his men, that is to say, he must see that they are properly fed, clothed, armed, and trained. To aid him in this work he has his lieutenants, whose place it is to see that the non-

commissioned officers that the captain appoints are properly trained. The lieutenants rank as first or second and command platoons. The first lieutenant commands the right platoon and the second lieutenant commands the left platoon on the end of the company.

The non-commissioned officers are the sergeants and corporals. The sergeants see that the platoons that they command and the corporals of the squads



Fig. 14. Insignia of Non-Commissioned Officers

execute the captain's commands right. The sergeants of a four-platoon company usually command the right center and left center platoons.

The corporals, each of whom commands a squad, see that the men in their squads do the movements properly, and to do this the corporal has certain commands which he gives his squad and which make it easier for it to carry out the captain's command. It must be plain, then, that the corporal of a squad must know the school of the soldier, squad, and company perfectly if he is to do his work right. The corporal stands in No. 4 file of the front rank of his squad. Whenever, for any

reason, the corporal leaves his squad No. 4 of the rear rank steps into his place until he returns, and No. 4 file of the rear rank is left empty or blank as it is called. The insignia of sergeants and corporals are shown in Fig. 14, and are worn on the sleeve above the elbow.

How the Company Is Formed—The first thing that you must do if you are a captain is to have your company formed. This is the first sergeant's job and he will stand 6 paces to the front and in the center of the place where the captain wants the company to be formed. He will then give the command

Fall IN—At this command the right guide of the company faces the sergeant and places himself in such a position that when the company has formed abreast of him to the left, the center will be opposite the sergeant and 6 paces from him, as shown in Fig. 15. The purpose of the guide is, as the name indicates, to guide the company; that is to say, the ranks sight or guide on the guide in order to keep straight. When marching, the men in the front ranks glance occasionally toward the guide and in this way the ranks are kept straight. When the company is in a column of squads, the guide's place is in front of, or at the head of, the column. The guide is usually a non-commissioned officer.

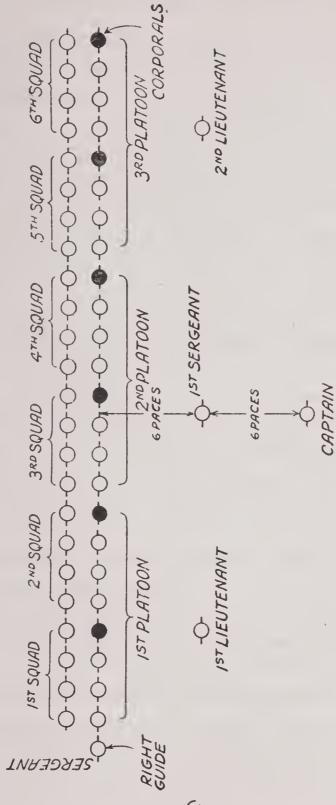


FIG. 15. THE RIGHT WAY TO FORM A COMPANY

Returning to the formation of the company: the men fall in in squads, abreast the right guide and to his left. When they have fallen in, the sergeant says report and the corporals of the squads one after the other from right to left salute, and report all present, or private or privates so-and-so absent. The sergeant then does an about face and faces the captain, salutes, and reports either Sir, all present or accounted for, or the names of those absent as reported by the corporals. The sergeant then takes his place at the head of his platoon.

The company is dismissed when the command dismissed is given by the first sergeant, after the captain has commanded him to dismiss the company. The sergeant steps 3 paces to the front of and 2 paces from the nearest end of the company or flank that he happens to be on, salutes the captain, and then gives the above command, when the men fall out.

The company is aligned, that is, the ranks are straightened by the command right dress as described before in the school of the squad. Before executing any movement the command count off is given, so that every man in the squads will know his number and what to do when further commands are given. When the command right dress has been given the captain will look down the ranks from the right flank to make sure that they are

straight, and after making any necessary corrections he will give the command *front*.

The Movements of the Company.—And now we come to the movements of the company. You should not keep the men standing at attention when they are not executing movements, but should give the command *rest*, at ease, or fall out.

Fall out means that the men may break ranks but must remain somewhere near. The following commands are carried out from either a halt, or while on the march. The first thing that you should know is how to turn the company on a fixed pivot. The command is

Company Right (or Left) MARCH—At the word march the front rank right flank man, who is the pivot, faces to the right in marching and marks time in place. The rest of the men in the front rank oblique to the right and march until they are abreast the pivot man, when they 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 first-rank man, when all three 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

and to the right, which places him at his post on the right flank of the front rank, and marks time.

This completes the movement which is shown in Fig. 16. If you want to halt the company or advance it, you will give either one of the commands

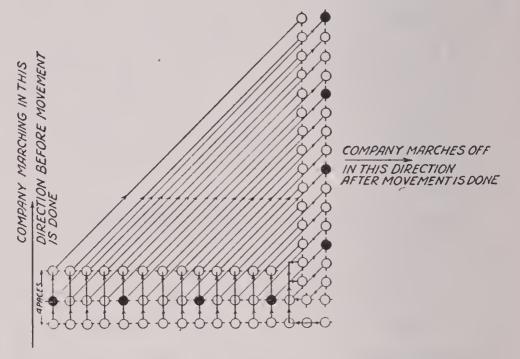


FIG. 16. How COMPANY RIGHT IS DONE

company halt, or forward march, just as the last man of the rear rank is one pace from being in place.

The next thing you should know is how to change your line formation into column formation. That is to say, either platoons or squads are lined up one behind the other instead of one beside the

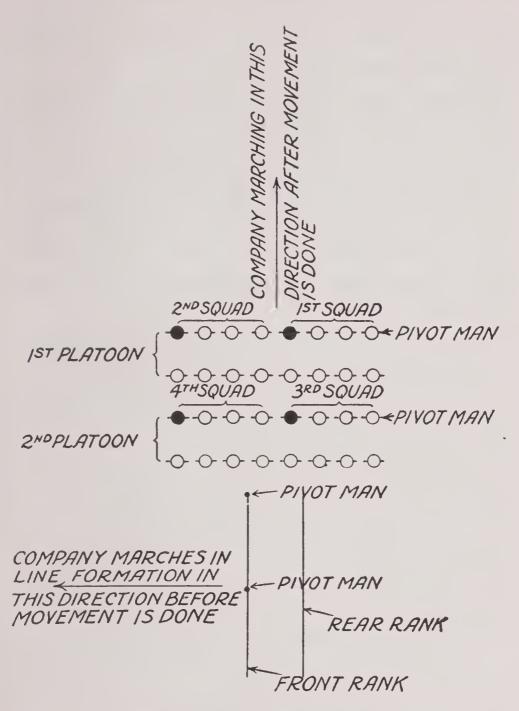


Fig. 17. Company in Column of Platoons After Doing Platoons Right

other as they are when in line formation. To form columns of platoons the command is

Platoons Right (or Left) MARCH—This command is done by each platoon and is executed the same as company right (or left) march. That is to say, at the word march the pivot man of each platoon—who is the right flank front rank man—faces to the right in marching and marks time. The rest of the front rank of each platoon oblique to the right and march until abreast their pivot man, when they mark time.

In the rear rank of each platoon, No. 3, followed in column by Nos. 2 and 1, marches straight to the front; when directly in the rear of their file leaders they face to the right and mark time. No. 4 and the rest of the rear rank of each platoon march four paces to the front, oblique to the right, and march until abreast their No. 3, when they face to front and mark time. This brings the company into column formation of platoons as shown in Fig. 17. You will notice that the column is one platoon wide.

If you want to have your column still narrower, you will change your company from line formation to column of squads formation by the command

Squads Right (or Left) MARCH—This is done by each squad just as described in the school of the squad, and will bring your company into

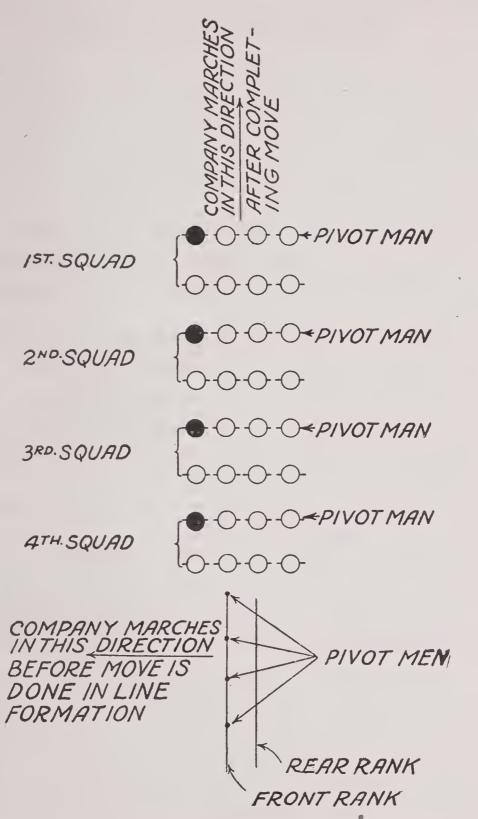


Fig. 18. Company in Column of Squads or Fours After Doing Squads Right

columns four men wide, or column of fours as it is called, as shown in Fig. 18. To bring the company into column of twos you have only to give the command right (or left) face, and you will have a column two men wide, instead of a company in line formation.

Next come the movements that are made on a moving pivot, and the object of which is to *change* the direction of the company. The first command is

Right (or Left) Turn MARCH—This is done the same as squad right (or left) turn march, except that it is done by the whole company instead of a single squad. Furthermore, the right guide, and not the right flank man of the front rank, is the pivot man. It is shown in Fig. 19.

To change the direction of a column of platoons give the following command:

Column Right (or Left) MARCH—At the words column right the leader of the first platoon of the column, or leading platoon, will command his platoon to right turn. When the word march is heard the first platoon will do a right turn as just told above, using the moving pivot. When the last man of the first platoon is in place its leader will give the command forward march, when it will move to the front. The other platoons will march to the point upon which the first platoon

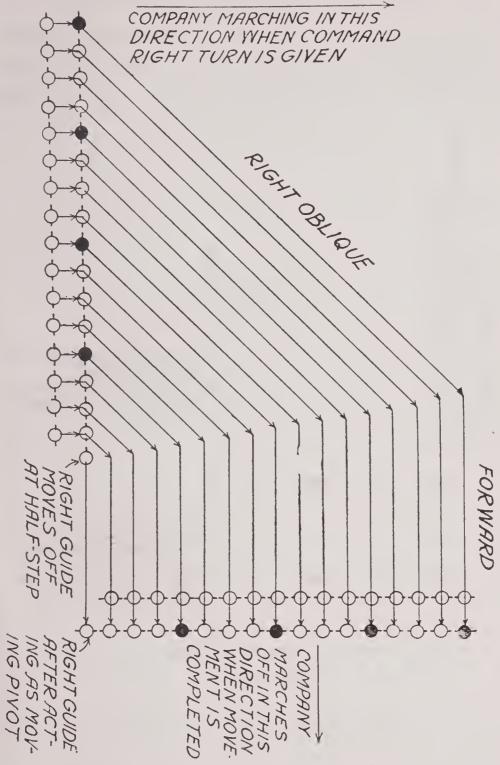


Fig. 19. How Right Turn is Done

turned and will turn and march forward upon the commands right turn and forward march, the first of which is given by their leaders just as they

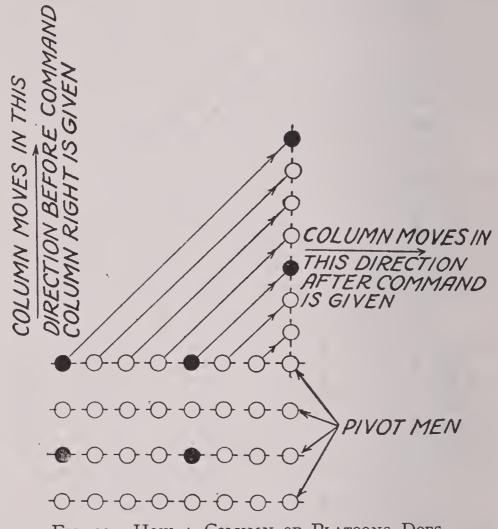


Fig. 20. How a Column of Platoons Does Column Right

reach the point where they are to turn, as shown in Fig. 20.

If you are in column of squads and give the

command column right (or left) march, at the word march the front rank of the first squad does a right turn on the moving pivot and marches on; the following ranks do the same when they reach the turning point, and this changes the direction of the column.

When you are in column of squads and want to re-form the company in line of platoons you should give the command

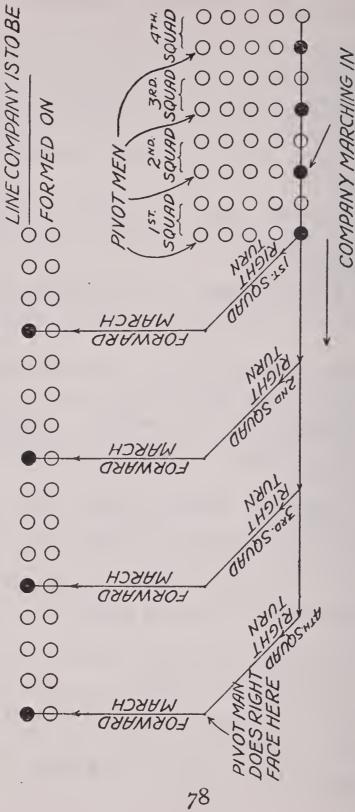
Platoons Column Right (or Left) MARCH—At the word march each platoon will do a column right.

There is one other movement executed with the moving pivot that you should know about, and this is how to change a line formation to column of squads and then change the direction of the column. The command is

Squads Right (or Left), Column Right (or Left) MARCH—When this command is given the right flank squad of the line will do a squad right, and as soon as the last man is in place it will do a column right, and the following squads will do the same.

The next thing you should know is how to change a column back to a line formation to the right or left. To change a column of squads or platoons back into line the command is

On Right (or Left) into Line MARCH—When



How On RIGHT INTO LINE IS DONE 2I. Fig.

the first four words of this command are given, the leader of the first or leading platoon, or the corporal of the first or leading squad, depending on whether you have a column of platoons or squads, will command right turn, the leaders or corporals of the following platoons or squads giving at the same time the command forward, if at a halt, or continue the march, if marching. At the captain's word march the first platoon or squad does a right turn and moves forward until on the line where the company is to be formed, when the command halt is given by the captain. The corporal or leader then commands right dress.

The following platoons or squads march straight to the front until opposite their places in line, when the leader or corporal gives the command *right turn*. They then march until abreast the preceding squad, when they are halted on the line by their leader or corporal and commanded to *right dress*. The captain then commands *front* and the move is completed—see Fig. 21.

If you want to form your new line directly in front of the column, you will give the command

Right (or Left) Front into Line MARCH—At the words right front into line the platoon leader or squad corporal of the first or leading platoon or squad will command forward if at a halt, or continue the march if marching. The following pla-

toon leaders or squad corporals will command right oblique. At the word march the first platoon or

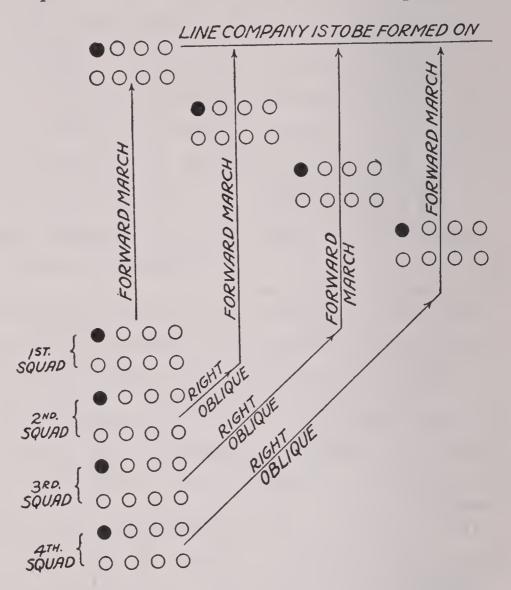


Fig. 22. How Right Front into Line is Done by a Column of Squads

squad will march straight to the front, the rear or following platoons or squads doing a right oblique,

when the captain will give the command halt just as the first squad or platoon reaches the line the company is to be formed on. The platoon leader or corporal then gives the command left dress.

The following platoons or squads will march at the *right oblique* until opposite their place in line, when the platoon leaders or corporals will give the command *forward march* and they will march into line abreast the first platoon or squad, being halted by their leaders. The platoon leaders or corporals will then give the command *left dress*, and when the company is in line, the captain will command *front*—all of which is clearly shown in Fig. 22.

When you want to march your company to the rear, whether it is in line or column, you can do it in any one of the following ways: (1) if at a halt, give the command about face, forward march; (2) if marching, to the rear march; (3) if either at a halt or marching, squads right (or left) about march. The guide will in any case place himself on the rear rank, which has now been turned into the front rank.

As I have already told you in the school of the squad, the squad is deployed when engaged in actual battle, and this holds good for the company as well. The command to deploy when marching in line is

As Skirmishers Guide Right (or Left, or Cen-

ter) MARCH—The words guide right, or left, or center mean that the skirmish line is to be formed upon either the right flank squad, left flank squad, or center squad. This squad is known as the base squad.

At the words as skirmishers guide right (or left, or center) the corporal of the base squad commands his men follow me and steps quickly in front of No. 2 front rank of his squad. At the word march the base squad moves straight to the front and as soon as it has room enough the corporal gives the command as skirmishers. When it has reached the line where the captain intends the skirmish line to be, he gives the command halt.

At the word march the other corporals step to the front of their squads, and if the command given by the captain was guide right, they move toward the left front; if the command was guide left, they move toward the right front; if, however, the guide was center, those on the right of the base squad move to the right front, and those on the left to the left front. They deploy upon their corporal's command as skirmishers march, taking their proper places one after the other on the skirmish line, when the movement is completed, as shown in Fig. 23.

If the company is in column of squads the command to deploy is the same except that if the guide

2" 3" AND 4TH SQUADS DEPLOY AS THEY REACH THE SKIRMISH LINE

ATH. SQUAD 3RD SQUAD 2NO. SQUAD IST. SQUAD. DEPLOYED DEPLOYED DEPLOYED DEPLOYED SKIRMISH LINE OF SQUADS BASE SQUAD 0 0 0 0 0 TELT OBLIGHE OF MOVEMENT LEFT ODLIQUE 3RD SQUAD

FIG. 23. COMPANY DEPLOYING AS SKIRMISHERS USING FIRST SQUAD AS BASE SQUAD

is center, squads in front of the base squad move to the right, while those in the rear move to the left. If the company is at the *halt* and the command to deploy as skirmishers is given, the base squad deploys at once where it stands, and the other squads form a skirmish line upon it.

To re-form the company in double rank, the captain will stand in front of the squad he wants it to form on and give the command.

Assemble MARCH—At the word *march* the men will move promptly to a point picked out by the captain and re-form the company as it was at first.

In Chapter XIII you will find many hints on marching and tactics employed in actual warfare in France; but these are not given here because, as I explained before, the purpose of these drills is to train the men to obedience and system, and, except for a few, they are used only when the company is on parade.

CHAPTER VII

THE MANUAL OF ARMS

Now that you know how the movements of the soldier, of his squad, and of his company are done you are ready to learn about one of the most important parts of his equipment—and that is his rifle. Now, there are certain drills or movements that a soldier must be able to do with his rifle when marching, or at the halt, which I did not tell you about before because it would have complicated things. But now you should learn them and use them in your drills.

The Regulation Army Piece—The first thing that you should know about, before you learn the rifle drills, is your rifle. And right here I want to say that you must never call your rifle a gun. In England it is called a rifle; in the United States a piece; but nowhere is it ever called a gun.

The piece now in use in the United States Army is known as the United States Magazine Rifle, Model 1903. It is .30 caliber, shoots 5 shots without reloading and weighs 8.69 pounds without its

bayonet, which weighs a pound without its scabbard or sheath. The length of the piece is 43 inches and the length of the bayonet is 20 inches, making the length of the piece with bayonet attached 5'3" altogether.

Different from the sporting rifles which are either *lever* or *pump action*, the army piece is what is known as a *bolt action*. That is to say, instead

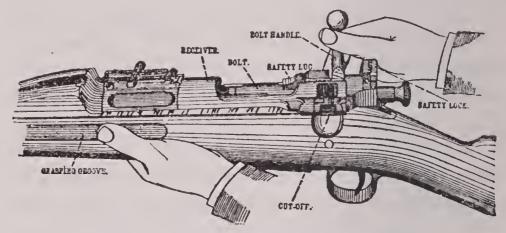


Fig. 24. The U. S. Magazine Rifle (How the Bolt is Worked)

of being loaded by means of pulling a finger lever down, or a slide handle back, the piece is loaded by means of lifting a bolt-shaped arrangement and pulling it straight back toward you, as shown in Fig. 24.

How the Piece Is Loaded and Fired—The interior mechanism and names of the parts of the piece are shown in Figs. 24, 25 and 26. Now if you will look at 25, which is a cross-section of the piece,

THE MANUAL OF ARMS

you will observe what is known as the cockingpiece, and this serves the same purpose that the hammer does on a sporting rifle. You will also see that the cocking-piece and the trigger are connected by a sear, and that the mainspring which operates the cocking-piece or hammer, is a coiled spring. The action of the gun is like this: first you put a clip containing 5 cartridges into the magazine; you then pull back the cocking-piece or lift the bolt handle and pull back the bolt, which in either case pushes back the cocking-piece, and the rifle is then cocked. While you are doing this the magazine spring in the magazine has pushed a cartridge up out of the clip and carried it into the firing-chamber of the barrel, and this completes the loading movement and makes the piece ready to fire.

You then close the bolt, take aim, and pull the trigger. The trigger causes the sear—which up to this time has held the cocking-piece cocked—to release the cocking-piece and the powerful coiled mainspring then drives it against the *firing-pin*, which strikes the cartridge and explodes it.

You now wish to get rid of, or eject, the exploded cartridge and to put or load a new one into the firing chamber. This you can do by drawing back the bolt again. As soon as you draw the bolt back a device called an *ejector* pulls the cartridge well out of the firing-chamber, and you can re-

move it from the piece with your fingers. At the same time the magazine spring forces another cartridge up and when you close the bolt again it forces the cartridge into the firing-chamber, when the piece is again ready to be fired.

The cartridges are provided with a bullet made of an alloy of nickel and tin which has a jacket or outer covering of an alloy of copper and nickel, or a cupro nickel jacket, as it is called. When a cartridge of this kind is shot from the piece, as it leaves the barrel it travels at the rate of 2,700 feet per second, or over half a mile per second. The piece shoots accurately up to 2,850 yards or a little over a mile and a half, but will shoot nearly three miles, the bullet covering this distance in 38 seconds.

The Important Parts of the Piece—The rifle consists of the following important parts which you must know the name of when handling it, and these are (I) the barrel with its front and rear sight, (2) the wooden forearm, (3) the bolt and cocking-piece, and (4) the wooden stock, the end of which is the butt and is fitted with a butt plate, the bottom of the butt plate being called the *toe* and the top the *heel*. The stock narrows down where it is joined to the barrel and firing mechanism, and this part is known as the *small of the stock*. The rear sight is usually placed at the point where the

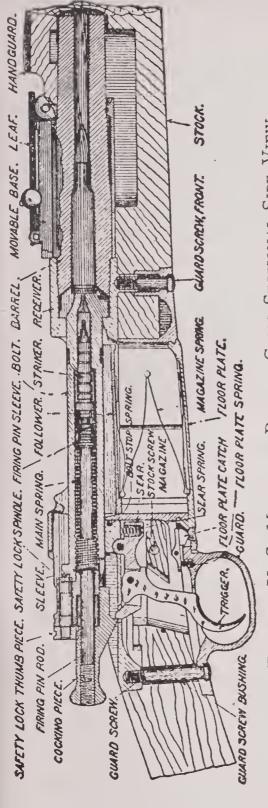


FIG. 25. U. S. MAGAZINE RIFLE. CROSS-SECTIONAL SIDE VIEW

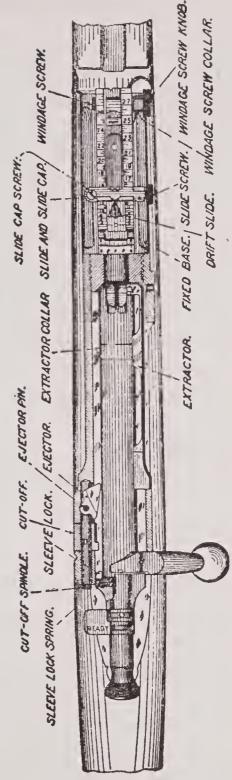


Fig. 26. U. S. Magazine Rifle. Top View

piece will just balance if you rest it on your finger there. Consequently this point where the rear sight is placed is known as the balance of the piece.

Having now a pretty good idea of what the military rifle is like, you can be trusted with one if you will remember just two things, and these are (1) not to point it at any one or any thing that you do not want to kill or shoot at, whether the piece is loaded or not, or whether you think it is or not, and (2) that the rifle is a very delicate piece of mechanism and that you will break it if you drop it or handle it roughly.

The first movement that you will want to learn is to stand at attention when holding your piece. The command is

Order ARMS—This means that you must stand in the position of attention with the butt of the piece resting evenly on the ground and with the barrel toward the rear. The toe of the butt should come even with the toe of the right shoe, and should just touch it. Your right hand should hang easily at your side and you should hold the barrel of the piece between your thumb and fingers, your thumb being alongside the seam of your breeches and the piece being held well in toward you, as shown in Fig. 27.

To change from *order arms* to what is known as *present arms* the command is

Present ARMS—You must do this in two

THE MANUAL OF ARMS

counts, namely: (1) With the right hand throw (not carry) the piece up and catch it with the left hand at the balance with the barrel to the rear and vertical to the ground, and with the left forearm horizontal to the ground. (2) With the right



Fig. 27. Position of Order Arms



Fig. 28. Position of Present Arms

hand grasp the small of the stock. The *muzzle* of the barrel should be about even with the brim of your hat—see Fig. 28.

From *order arms* you may also be called upon to execute the command

Port ARMS—You will do this in one count thus: (1) Throw the piece up and across the body, catching it with both hands at the same time, the left hand at the balance and the right hand at the small of the stock. The barrel should come across



Fig. 29. Position of Port Arms

your body just half-way between your left shoulder and neck, and the right forearm should be horizontal, the barrel being on top, as shown in Fig. 29.

You can come to this position when at present arms if you simply follow the above directions;

THE MANUAL OF ARMS

and vice versa you can come to present arms from port arms by following directions for present arms. If you are at either present or port arms you will come to order arms at the command

Order ARMS—This is done in two counts, namely: (1) Let the piece drop to the right side and catch it when the butt is just three inches from the ground, with the right hand, the right arm being at full length. Bring the left hand across the body at the same instant you catch the piece and place your left hand, with thumb and fingers joined and extended, touching the forearm of the piece just below the stacking swivel. Then at the count (2) bring the left hand smartly to the left side and drop the piece gently to the ground, when you will be at the position of order arms as explained before.

When the command

Parade REST is given and you are at order arms you must come to parade rest in one count, to wit: (1) Carry the right foot to the rear as explained for parade rest in the school of the soldier, and with the right hand give your piece a twist so that it turns on the toe of the butt until directly in front of the body and rests squarely on the butt. Then place your left hand above and under your right, as shown in Fig. 30.

To come back to attention, when that command

is given, you will swing the piece back to the position of order arms and bring the right foot forward, bringing at the same time the left hand smartly to the side.

When marching the piece is usually carried at



Fig. 30. Position of Parade Rest

either right or left shoulder arms. The command is Right Shoulder ARMS—This is done in three counts, as follows: (1) Take the position of port arms except with the right hand on the butt instead of the small of the stock, the heel of the butt being

THE MANUAL OF ARMS

between the first two-fingers of your hand—see Fig. 31. (2) Carry the piece to the right shoulder, the trigger-guard resting in the hollow of the shoulder and the piece at an angle of 45 degrees with the ground. The left hand should at the



Fig. 31. Count (1) in Right Shoulder Arms

same time be quickly slipped down the barrel until it reaches the small of the butt, and left there with fingers joined and extended, the forefinger touching the cocking-piece, as shown in Fig. 32, until (3) the third count is given, when you will carry

the left hand smartly to the left side and the movement is completed.

To come from this position to *order arms* you must (1) press down on the butt and bring the piece back to the position of count (1) in *right shoulder*



Fig. 32. Count (2) in Right Shoulder Arms

arms, taking care not to move the head as you do it, (2) drop the piece to the same position as count (2) of order arms, and (3) drop it to the ground as in count (3) order arms.

If you are at port arms and want to come to

THE MANUAL OF ARMS

right shoulder arms, (1) slide the right hand from the small of the stock to the butt, (2) carry the piece to the right shoulder as in count (2) of shoulder arms, and (3) carry the left hand smartly to the left side.

To port arms from right shoulder arms (1) press down on the butt and bring the piece to the position of count (1) of right shoulder arms, and (2) change the right hand from the butt to the small of the stock.

To present arms from right shoulder arms you must do port arms in two counts, and then on the third count you must with one motion give the piece a quarter turn around in your hands, bringing it to the position of present arms, with the barrel toward you.

The next thing is to be able to execute *left* shoulder arms from the position of port arms at the command

Left Shoulder ARMS—(1) With the right hand place the piece on the shoulder, grasping the butt as in *right shoulder arms*, and (2) carry the right hand smartly to the right side.

To execute port arms from left shoulder arms you must grasp the piece at the small of the stock with the right hand, press down on the butt with the left, and come to port arms.

To change from right to left shoulder arms, or

the other way around, come to the position of port arms first and then do a left or right shoulder arms.

When you are at *order arms* and the command *forward march* is given you come to *right shoulder arms* without command, doing so in three counts but counting to yourself and making one count to a step. Thus you will have finished the movement in the first three steps. When the command *halt* is given you come back to *order arms* in three counts *after* you have executed the halt.

Another position that the piece is carried at when marching is known as

Trail ARMS—To come to this position from order arms, raise the piece about 4 inches from the ground, incline the muzzle forward so that the barrel will make an angle of about 30° with the vertical, the right arm being slightly bent.

When on long marches the *sling* of the piece, that is the strap whose ends are attached to the butt and forearm, is used to carry it by either the right or left arm being slipped through the sling, the forearm of the piece resting against the back of the shoulder and the butt projecting from under the arm. However, in squad, platoon, or company movements, the piece will be carried at *right shoulder* unless otherwise commanded.

When a squad, platoon, or company is formed

THE MANUAL OF ARMS

the men will be at the position of *order arms*, and it is the custom both before and after drilling them to hold an *inspection* of *arms*. The command is

Inspection ARMS—(1) At the word arms you do port arms, and (2) then grasp the bolt handle of the piece with the right hand, and turn it up out of its notch, when you can draw it back. Now glance into the firing-chamber and if there is a cartridge there take it out and slip it into your belt; if not, raise the head and eyes to the front, keep your right hand on the bolt, and await the next command. It may be order arms. At the preparatory command (order) push the bolt forward, turn the handle down, and resume the position of port arms; at the command of execution (arms) complete the movement.

After drill the squad is dismissed by the commands (1) Inspection Arms, (2) Port Arms and (3) Dismissed.

The last piece movement that you should learn is the *rifle salute*. The command is

Rifle SALUTE—If you are at order arms you must (1) bring your left hand smartly to the right side, with the palm down, thumb and fingers joined and extended, forefinger against the piece near the muzzle; look toward the person saluted. (2) Carry your left hand back to your side snappily, and turn the head and eyes to the front.

If you are at right shoulder arms (1) bring your left hand with the thumb and fingers joined and extended to the cocking-piece of the rifle. Your left arm should be parallel with the ground, the hand should be palm down and you must look straight at the person you are saluting; when (2) you must drop your left hand to your side snappily, and turn head and eyes to the front.

Finally you should learn the movements that are done with the bayonet. As I explained before, the bayonet is 20 inches long, having a grip 4 inches long and a blade 16 inches long. It has a ring on the back of the blade which slips over the muzzle of the barrel and a spring in the handle which still further holds it on the barrel when once in place. The scabbard is made of metal and is worn on the belt on the left side. In the course of your drills you will probably be given the command

Fix BAYONET—To do this you will come to the position of parade rest, draw the bayonet from its scabbard with the palm of your hand away from your body, and fix it to the barrel of your rifle as quickly as possible; next come back to order arms.

When you want to return the bayonet to its scabbard the command given is

Unfix BAYONET—At the word bayonet you come to parade rest and with your right hand press

THE MANUAL OF ARMS

the spring on the bayonet down. This will release the handle from the piece and you can draw it off the barrel until a foot above the muzzle, when you can return it to the scabbard. While doing this the piece is held in the left hand. When the bayonet is sheathed you again take the position of order arms and hold the piece in your right hand.

The above movements with the rifle and bayonet are the chief ones and all that it is necessary for you to know until you actually get into the army. Of course all of them are infantry drills, but if you learn them you will find that they will serve you well, no matter what branch of the service you volunteer for.

CHAPTER VIII

HOW TO LEARN SIGNALING

One of the most interesting and helpful things you can learn in the army is military signaling. There are many different kinds of signaling in use but they all fall under the head of either visual or sight signaling and sound signaling. Visual signaling is done by several different methods, of which there are two kinds that are largely in use in the army. The first way is to signal by your arms certain marching and firing commands. The second is to signal by means of flags, using different positions of the flags to represent letters of the alphabet. Furthermore there are two kinds of flag signaling and these are (1) the General Service method and (2) the two arm semaphore method.

In the first method but one flag is used and the message is sent by means of an alphabet made up of dots and dashes, or code as it is called. In the second two flags are used and each different position of the arms represents a letter of the alphabet.

Sound signaling is done as follows: (1) By

means of the telephone, (2) by means of the telegraph, and (3) by means of the wireless telegraph or radio as it is called. The last two systems use the General Service or *International Morse Code* of dots and dashes that is used for General Service flag signaling.

About Arm Signaling—The first thing that you should learn is arm signaling, and the movements made with your hands and arms to give commands to infantry. When you give these commands the officer receiving them on the firing line should repeat them so that you can make sure he understood you.

Forward MARCH—To give this signal you will

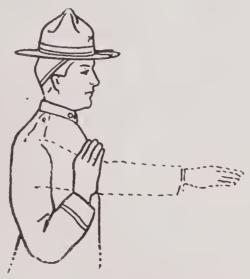


Fig. 33. Forward March

carry your right hand to your right shoulder with the fingers extended and joined, and the palm to

the front. You will then thrust the arm forward in the direction you are going to march as shown in Fig. 33. If you do this signal when marching at double time it will indicate that the step is to be slowed down to quicktime. It can also be used to signal a detached scout to move forward.

Halt—To signal halt, bring your hand to your



Fig. 34. Halt

shoulder as in Forward march; then raise your arm to its full height as shown in Fig. 34, keeping the palm to the front. When this signal is rapidly repeated several times while marching at quick

time it indicates that the step is to be advanced to double time. It is also used to halt the detached scout or advance guard.

Squads Right, MARCH—You should raise your arm sideways until on a line with your shoulders; then swing it several times from this position until

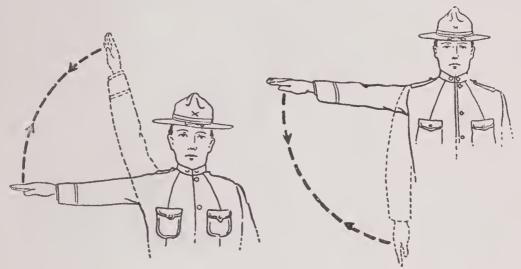


Fig. 35. Squads Right

Fig. 36. Squads Left

it is directly above your shoulder and at full length, as shown in Fig. 35. When signaled to a detached scout it means to move by the right flank, until further signals are given.

Squads Left, MARCH—This is done the same as squads right, except that the arm is swung downward to the side instead of upward. Upon receiving this signal the detached scout will move to the left flank until further signals are received. See Fig. 36.

Squads Right About, MARCH—When in close order the signal is given by carrying the arm to its full height above the head, and swinging it downward several times to the side as shown in Fig. 37. If the signal is given when in skirmish formation it means *To the rear march*. At this

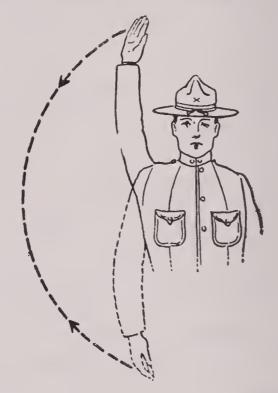


Fig. 37. Squads Right About

signal a detached scout will move to the rear and await further command.

Column Right (or Left), MARCH—If you want to signal Column right, bring the right hand across the body to the left shoulder, keeping it in the same line with your shoulders; then swing it back

across the body, until it is at full length, with the hand pointing in the new direction the column is to march. If it is desired to signal *Column left*, use the left arm in a similar manner. See Fig. 38.

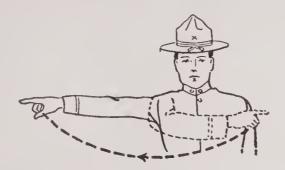


Fig. 38. COLUMN RIGHT

As Skirmishers, MARCH—Both arms should be raised sideways until on a line with the shoulders. When a detached scout either sends or receives this

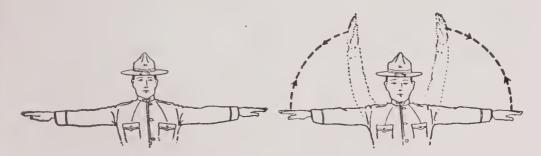


Fig. 39. As Skirmishers

Fig. 40. As Skirmishers
Guide Center

signal it means "Have important information." See Fig. 39.

As Skirmishers Guide Center, MARCH—Raise the arms in the same manner as told above, then swing both at the same time until directly above

the head, palms out, and repeat several times, as shown in Fig. 40.

As Skirmishers Guide Right (or Left), MARCH—Raise the arms sideways to the shoulders, as in Skirmishers march; if the guide is left



Fig. 41. As Skirmishers Guide Right

swing the *right* arm until directly above the head and repeat several times; if the guide is *right* swing the *left* arm in a similar fashion, as shown in Fig. 41.

Assemble, MARCH—Raise the arm to its full



Fig. 42. Assemble 108

height and swing circles with the tips of the fingers, as shown in Fig. 42.

Commence Firing-Extend the arm downward



Fig. 43. Commence Firing

with the hand out, fingers extended and joined, and the palm down, then move across the body several times. If done very rapidly this signal means to fire faster, while if done slowly it means to fire slower. It is shown in Fig. 43.

Firing Range—To signal the firing range, ex-

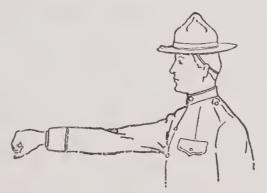


Fig. 44A. Range of Battle Sight 100

tend your arm toward the soldiers for whom the signal is intended, with the fist closed as in Fig. 44A. If you keep the fist closed the range is battle sight, while by opening the thumb and fingers you can show that the range is so many hundreds of yards, the thumb and each finger representing 100 yards of range. Decrease of range is shown by

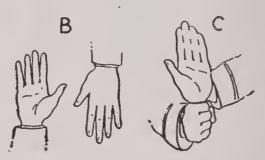


Fig. 44B. Increasing and Decreasing Range by 500 Yards
Fig. 44C. What is the Range?

pointing the fingers downward; increase by pointing them upward, as shown at B.

To find the range that is being used, extend the arms toward the person whom you are signaling to, and rest one hand with the palm to the front and fingers open and joined, upon the closed fist of the other hand, as shown in Fig. 44C.

To find out whether the person is ready to fire or to indicate to him that you are, extend the arm with palm toward the front and fingers open and joined.

To Swing the Cone of Fire to the Right (or Left)—Extend the right arm at full length in front

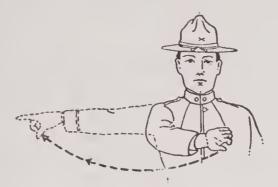


Fig. 45. Swing Cone of Fire to Right

of your body and swing it to the right. To swing the cone of fire to the left use your left arm in a similar manner. The signal is shown in Fig. 45.

Suspend Firing—Raise your arm and hold your hand in front of your face, palm to the front, as

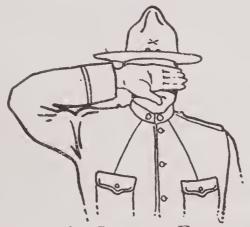


Fig. 46. Suspend Firing

shown in Fig. 46. To signal *Cease firing*, repeat this signal several times, by swinging the forearm up and down in front of the face.

Fix Bayonet—Pretend to grasp the handle of a bayonet with your right hand, back toward the body, then pretend to draw it from the scabbard and fix it on the rifle.

These are the chief arm signals and with a little practice you will be able to do them all, for they are easy.

How to Signal with Flags—The first kind of signaling that you should learn about is the two-arm semaphore flag system. Two small signal flags are used and each different position of the flags represents a letter and sometimes a number, as you will see by looking at Fig. 47. Considerable practice will be necessary before you will be able to send and receive well, and you will find that, as in all other kinds of signaling, *practice* is the keynote of success. There are, however, a few useful hints that I can give you that will make your practice easier.

You will notice that there are both a letter and a number in some of the squares in Fig. 47. This means that the position of the flags shown in the square represents either a letter or the number. Thus the signal for H may also mean δ . In order that the receiver of the message can tell whether you are sending letters or numbers, you will always give the signal shown in the square with the word numerals over it, before sending any numbers,

FIG. 47. THE TWO-ARM SEMAPHORE CODE

otherwise it is understood that you are sending letters.

You will also note the words, error, negative, interrogatory, affirmative, and acknowledge in the squares. Error means that the sender has made a mistake and wishes to correct it. Negative means no, interrogatory means that a question is to be sent, affirmative means yes, while acknowledge means that the sender wishes you to give that signal and thus indicate that you understand, or else when he gives the signal it shows that he understands.

When learning the different positions you should first learn letters A to G, as you will notice that in these movements one arm is held stationary while the other travels in regular order around the body, beginning with *right low* position for A and ending with *left low* position for G.

The following letters are opposites, that is to say, the signal for one is just the opposite of the other, and hence if you learn one you will instantly know the other. They are H—Z, I—X, J—P, K—V, M—S, N—U, O—W, and Q—Y. This leaves L, R, and T which have no opposites and which you will have to trust to memory for.

You will find a pair of field-glasses necessary to receive messages clearly over long distances. Further, you should always use dark flags to send with when standing against a light background, and light

flags when standing against a dark background, otherwise it will be impossible for the receiver to distinguish your signals.

You should also learn the following conventional signals and instructions, for they are in reality short-cuts and will save you much time when sending messages.

Conventional Signals and Instructions for the Two-Arm Semaphore Code—

To call of "Answer": "Attention" followed by call letter of station called. Repeat as necessary.

Both stations then make "Interval."

Repeat last word: C C "Interval" twice.

Repeat last message: C C C "Interval" three times.

Repeat after (word): C C "Interval" A (word). End of word: "Interval."

End of sentence: "Chop-chop" signal (made by placing both arms at the right horizontal and moving them up and down in a cutting motion).

End of message: Two successive "chop-chop" signals and withdrawing flags from view.

Error: A A "Interval" then repeat word.

To break in: "Attention."

Acknowledgment or understood: R.

"Negative," "Affirmative," or "Interrogatory," followed by "Interval" gives corresponding meaning to the following signal.

Receiver acknowledges "Attention" whenever made, also "Repeat," etc., and "End of message," when latter is understood.

While waiting for "Acknowledgment," or in case of delay, remain at "Interval."

Words not in code are spelled out.

| Letters of alphabet | If signaled from the rear to the firing line | If signaled from the firing line to the rear |
|---|--|--|
| A M | Ammunition going for- | Ammunition required |
| CCC | Charge (mandatory at all times) | Am about to charge if no instructions to the contrary |
| CF DT FB FL GHHH KT OP RNT SSS SUF | Cease firing Double time or "rush" Commence firing Fix bayonets Artillery fire is causing us losses Move forward Halt Negative Left What is the R. N., etc. Affirmative Acknowledgment Range Right Support going forward Suspend firing | Cease firing Double time or "rush" Commence firing Fix bayonets Artillery fire is causing us losses Preparing to move forward Halt Negative Left What is the R. N., etc. Affirmative Acknowledgment Range Right Support needed |
| T M | Target Horses going forward | Suspend firing Target Bring up horses |

| Letters of alphabet | Meaning of signals | | | |
|-----------------------------------|--|--|--|--|
| A | Error | | | |
| A D | Additional | | | |
| AKT | Draw ammunition from combat train | | | |
| A L | Draw ammunition from limbers | | | |
| AMC | At my command | | | |
| AP | Aiming point | | | |
| B (numerals) | Battery (so many) rounds | | | |
| B S (numerals) | (Such) battalion station | | | |
| BL | Battery from the left | | | |
| BR | Battery from the right | | | |
| C S C T | Close station | | | |
| D | Change target Down | | | |
| DF | Deflection Deflection | | | |
| FCL (numerals) | On first piece close by (so much) | | | |
| FOP (numerals) | On first piece open by (so much) | | | |
| IX | Execute. Go ahead. Transmit | | | |
| JI | Report firing data | | | |
| KR | Corrector | | | |
| L | Preparatory attention | | | |
| LCL (numerals) | On fourth piece close by (so much) | | | |
| LOP (numerals) | On fourth piece open by (so much) | | | |
| LL | Left from the left | | | |
| LR LF (numerals) | Left from the right | | | |
| LE (numerals) M D | Less (so much) Move down | | | |
| ML | Move to your left | | | |
| MR | Move to your right | | | |
| MU | Move up | | | |
| M O (numerals) | Move (so much) | | | |
| N | Annul. Cancel | | | |
| PS | Percussion. Shrapnel | | | |
| ORQ | Send faster Send slower | | | |
| Q R S Q R T | Cease sending | | | |
| ŘS | Regimental station | | | |
| RL | Right from left | | | |
| RR | Right from right | | | |
| S | Subtract | | | |
| S C L (numerals) | On second piece close by (so much) | | | |
| S O P (numerals) | On second piece open by (so much) | | | |
| SH | Shell | | | |
| SI TCI (mumanala) | Site On third piece close by (so much) | | | |
| T C L (numerals) T O P (numerals) | On third piece close by (so much) On third piece open by (so much) | | | |
| U (Indinerals) | Up | | | |
| Y (letter) | (Such) battery station | | | |
| | | | | |

"Numerals" precedes every number sent, and indicates numerals until "Interval" is made, after which letters appear without any further indication. When numerals follow letters no intervening "Interval" is necessary.

The numerals are the first ten letters in order.

When communicating with the Navy, numerals must be spelled out.

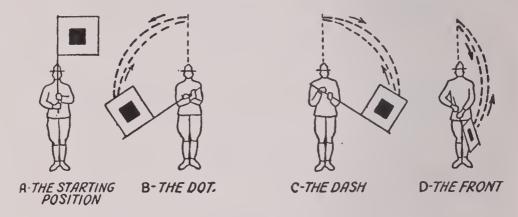


Fig. 48. Positions of Flag in General Service Dot-Dash Code

For communication between the firing line and the reserve or commander in the rear, the following 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.

The General Service Code—You are now ready to learn the General Service or International Morse

LETTERS

R • 1828 •

F O DESIGN OF THE O

NUMBERS

Fig. 49. The General Service Code Simplified 119

Code as it is called. The code is made up of dots and dashes, and it is used for General Service Flag Signals and for sound signaling of all kinds.

Different from the two-arm semaphore system of flag signaling, the General Service system uses only one flag, and instead of each position of the flag representing a letter, there are only two positions, and these represent the dot and dash of the code. Fig. 48 (A, B, C and D) shows the positions the flag is held. The first illustration shows the starting position, the second the dot, the third the dash, and the fourth the front. When doing these positions you should take great care to make your

| Signal | Meaning of signal |
|---|---|
| Front Front Front Front Front Front Front Sig. Front A A Front M M Front M M M Front C C Front A Front (word) C C Front Front C C C Front Front U C Front D D Front F F Front B K Front | End of word End of sentence End of message Signature follows Error Acknowledgment Cease signaling Repeat after (word) Repeat last word Repeat last message Move a little to the right Move a little to the left Move a little uphill Move a little downhill Signal faster Break or stop sending |

| Period | |
|--|---------|
| Semicolon | |
| Comma | |
| Colon | |
| Interrogation | 0 0 000 |
| Exclamation point | |
| Apostrophe | |
| Hyphen | |
| Bar indicating fraction | |
| | |
| Inverted Commas | |
| Underline | |
| Double Dash | |
| | |
| Attention call to precede every transmission | |
| General inquiry call | |
| From (de) | |
| Invitation to transmit (go ahead) | |
| Warning high power | |
| Question (please repeat after)inferrupting long messages Wait | |
| Break (Bk.) (double dash)_ | |
| Understand | |
| Error | |
| | |
| Received (O. K.) | |
| Position report to precede all position messages) | |
| End of each message (cross) | |
| Transmission finished (end of work) (conclusion of correspondence) | |

Fig. 50. General Service Punctuation and Abbrevations in Code

movements plain, otherwise you will run your dots and dashes together.

Fig. 49 shows the code, and the letters are so arranged that you will find it easy to memorize them. Fig. 50 gives the punctuation-marks used in sending messages, and you should learn them as well.

Below are some of the signals used in the General Service Code. All of the conventional signals



Fig. 51. Length of Dot and Dash and Spacing Between Letters and Words

used in two-arm semaphore flag signaling are also used except O.—What is the range? In the General Service Code this signal consists of two dots, two dashes, and then two more dots.

Sound Signaling—Having discussed all the methods of sight or visual signaling I shall now say a few words about sound signaling.

When the telephone is used of course all that is necessary is to talk as plain English into it as you can, and unless the listener is a Dutchman he'll know what you mean.

The wire and wireless telegraph systems both use the General Service Code and its conventional signals as given before. The main thing you must bear in mind in sending is that a dash is just three

times as long in sound as a dot, and you should make it a particular point to make your dots and dashes the right length, and to keep them so. See Fig. 51.

The telegraph used in the army is slightly different from the regular kind, for instead of a sounder, a buzzer is connected in, and this is much easier to distinguish dots and dashes on than the regular sounder.

If you bear all of the pointers in mind that I have given you in this chapter, and practice faithfully besides, it will not be long before you are an expert signalman.

CHAPTER IX

HOW TO BECOME AN EXPERT MARKSMAN

In this chapter I shall give you the first principles of marksmanship for rifle and pistol or revolver shooting. As with everything else, the art of being a good marksman, with a rifle or pistol, depends almost entirely on getting the first principles down to your finger-tips right on the jump. If you start to practice and use wrong methods, or fail to know just why you do certain things, you will probably never become a sharpshooter.

There is one other kind of marksmanship that I am going to tell you about and that is bayonet fighting. Although you may think that this is a strange name for it, nevertheless to get so that you can use the bayonet well is just as much a matter of marksmanship, and requires just as steady a hand, as clear an eye, and as swift a judgment, as rifle or pistol shooting.

You will not only be a poor soldier if you don't do your best to become a crack-shot, but you will be taking your life in your own hands, for every day in the trenches calls for all the skill with pistol, rifle, or bayonet, that you can muster.

As I said before, bad habits in the beginning will ruin your chances of becoming a good marksman, and so you should make up your mind to do whatever you do right, and not to try anything new, or be satisfied until you can do it right.

Rifle Firing Positions—The first thing that you must do to become a good rifle shot is to learn the correct ways to hold your rifle. These methods and positions have been worked out by riflemen of long experience, and as they are impossible to better they are the ones now in use in our army.

There are three positions from which a rifle is fired in actual battle and these are (1) standing, (2) kneeling, and (3) lying down, or prone, as it is called.

The standing position is as follows: Stand with your right foot about twelve inches from your left and with your left side nearest the target. Rest your weight evenly on both feet so that you have no inclination to sway forward or back, or to one side or the other. In a word, you should be as steady as a rock.

Hold the rifle with the butt pressed firmly against your right shoulder, with your right arm horizontal to the ground, the fingers of the right hand clasped

smoothly around the stock, and the fore or trigger finger crooked over the trigger. Your cheek should rest on the raised part or *comb* of the stock, and your left hand should grasp the forearm of the piece, the fingers being in the grasping groove. The left elbow will be directly under the rifle, and the



FIG. 52. CORRECT STANDING FIRING POSITION

muscles of the body must not be strained, otherwise your aim will be wabbly. This is clearly shown in Fig. 52.

The kneeling position is shown in Fig. 53. Kneel on your right knee and have it making an angle of about 45 degrees with the target. Hold the rifle as

HOW TO BECOME AN EXPERT MARKSMAN

shown in the figure, with the flat of the left elbow resting firmly on the left knee. The flat of the el-



Fig. 53. Correct Kneeling Firing Position .

bow is just back of the point. The right elbow should be on the same line as the shoulders.

The prone position is shown in Fig. 54. It is the one that you will use most in actual fighting and

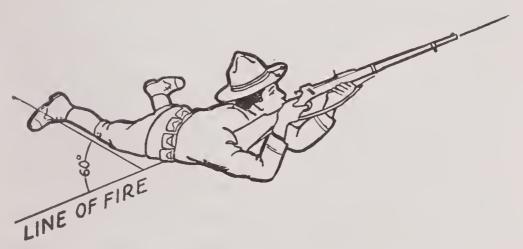


Fig. 54. Correct Prone Firing Position

it is consequently the one that you should practice most. The whole secret of success in this position is to lie so that you are absolutely comfortable. To

take the prone position, lie down on your stomach with your legs spread wide apart and at an angle of about 60 degrees to the left of the line of sight. Place both elbows on the ground, in slight hollows that you have scooped out for this purpose. Raise the right shoulder a little higher than the left and bring the piece up to it as shown in the figure.

You should practice these positions until you can drop into them in a moment's time with ease. A good drill is to go from the standing to the kneeling, kneeling to the prone, prone to the standing, and from the standing back to the prone position. Having learned these moves so that they are second nature to you, you are ready to learn about the sights on the piece.

The Rear Sights—The rear sight on the rifle is the important one, for it is so made that you can adjust it to shoot right for any distance, or *elevation* as it is called, up to the range of the piece. You can also allow for the *drift*, or sideways error of the bullet caused by its rotary motion on its long axis, and for any wind that might blow the bullet out of its course, or path. If you will look back at the top view of the piece shown in Fig. 26 you will see the windage screw and the *drift slide* labeled on the drawing.

You should not monkey with the drift slide, at least until you become an expert rifleman, for the

HOW TO BECOME AN EXPERT MARKSMAN

drift of a bullet is so small at ordinary shooting ranges as to be scarcely noticeable.

The windage, as the effect of the wind is called, is a different matter; but you should not set it until you have tried two or three shots to see where the bullet hits. Suppose that each of your trial shots hits 16 inches left of the bull's-eye or black spot in the center of the target. If you have aimed correctly, this will show that the wind has blown the bullet 16 inches to the left of the path it would otherwise have followed. Look at the windage scale and you will notice marks upon it. Each mark is called a point, and the windage screw can be turned so that the rear sight will move to the right or left until it reaches the mark or point where it will correct the effect of the wind on the bullet by making you aim to the left or right. Every time you move the sight one point it changes the place where the bullet will strike 4 inches in 100 yards of range. Consequently if you are shooting over a 100-yard range and you hit your target 16 inches to the left every time, you must shift your sight 4 points to the left, and since each point will throw the bullet 4 inches to the right, 4 points will throw it over the full 16 inches, when it will strike the target in the bull's-eye.

There are two chief rear sights on your rifle

that you will use most and these are (1) the battle sight, and (2) the peep sight.

The battle sight is what is known as an *open sight*, that is, you see the bull's-eye and the target over the top of the sight. The peep sight is a *closed sight* and you see the bull's-eye only, through a tiny hole in its center. As it keeps too much light from

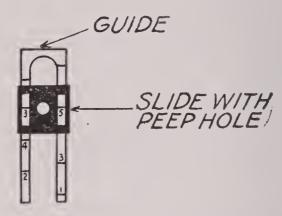


Fig. 55. A PEEP SIGHT

entering the eye it is useful for very accurate shooting. The battle sight is fixed for accurate shooting at 547 yards, while the peep sight can be adjusted to shoot at various ranges or elevations as follows:

On the guide that the peephole slide works upon you will find lines with the range in hundred yards marked upon them. Thus the number 5 above a line means that when the sight is set to that line, you will be doing accurate shooting at 500 yards. Slide the peephole slide up or down on the guide

HOW TO BECOME AN EXPERT MARKSMAN

until the center of the peephole is opposite the range you are going to shoot at, and then screw the slide up tight. It is shown in Fig. 55. When setting the peep sight, you should take great pains to set it accurately to the range, for a slight mistake will throw your shots away out, and if you are shooting at a long range you will be lucky if you hit the target at all.

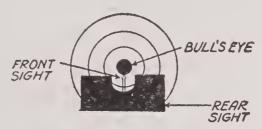


Fig. 56. How the Two Sights are Aligned with the Bull's-Eye

How to Aim—Now that you know about the positions and sights, and how to adjust them, you are ready to aim at the target. You are at the standing, kneeling, or prone position, and are in a good comfortable attitude so that you should be able to aim fairly steadily.

If you are using your battle sight, look through the notch in it until you see the bull's-eye just above the top of the sight, as shown in Fig. 56. Then raise the muzzle of the piece until the tip or bead of the front sight is a hair's-breadth below the bull's-eye. You must never center the bead of the front-sight on the center of the bull's-eye, or

you will overshoot. When you are using the peep sight you do exactly the same as with the battle sight, getting the bull's-eye just above the center of the peephole, and bringing the bead of the front sight up to it. You must not look at the front sight but rather look through the rear sight at the target and you will then see the front sight without shortening your vision any.

The Right Way to Fire—Now comes the most important part of shooting. This is known as the trigger squeeze. Grip your hand firmly around the small of the stock of the piece, but not so tightly as to cause your aim to waver, with the first joint of the trigger finger on the trigger.

Now, as a matter of fact, no matter how steady your nerves are, the piece will waver from side to side slightly. You must hold your breath just as you get ready to fire, wait until the front sight again comes just under the bull's-eye, and then squeeze the small of the stock, contracting the trigger finger at the same time, when the piece will go off. This squeeze is much better than a violent pull on the trigger from one finger alone, and you must by all means cultivate it if you have hopes of becoming a sharpshooter.

Just as you squeeze the trigger you should see how the sights appear on the target, so that you can find out if your shot hit it where you think it

HOW TO BECOME AN EXPERT MARKSMAN

should have. Unless you do this every time your practice will be of no value whatever. When you find that you are not hitting where you aim, if you are sure of your aim, try setting the elevation and windage sights more accurately as explained before, instead of changing your aim. But whatever you do, use your head, and don't go around firing blindly, and changing your sights without having the least idea where the trouble is.

Pistol and Revolver Shooting—You will find pistol and revolver shooting even more fascinating and difficult than rifle practice. In the first place, you steady a rifle with both hands, whereas the pistol is steadied with one hand only. As a result you will find it much harder to hold a pistol on a mark than a rifle. What I have just said about aiming and trigger squeeze applies to the pistol, and in aiming and firing you must carry out the rules laid down for rifle practice to the letter.

Grip the revolver or pistol in your right hand, with your fingers clasped tightly around the stock, and the first joint of your trigger finger on the trigger. Hold your right arm out at full length and on a level with your shoulders. Just as the front sight crosses below the bull's-eye, hold your breath, give the trigger the squeeze, and your bullet should find its way to the bull's-eye. Since there are no sight corrections on a pistol you cannot make it

shoot as accurately as you can a rifle. If, however, you find that you are not coming near the bull'seye do not shift your aim but try holding the pistol steadier. As a rule, the pistol will be accurate enough and your aim will be all right, but you will spoil everything at the last moment by a poor trigger squeeze, or by *flinching*.

Cavalrymen are encouraged to point their unloaded pistols at various objects, aim them, and squeeze the triggers. You should do the same, for next to actual shooting this is the best kind of practice you can get, that is, if you do it well every time. When shooting at long ranges with a pistol or revolver, raise or elevate the muzzle about one-half inch for every one hundred yards that you are shooting over 100 yards; if you don't do this the bullet will drop and you will undershoot. Most revolvers will shoot accurately up to 100 yards.

About Estimating Distance—For shooting over long ranges it is necessary that you should be able to estimate distances fairly well. You should take a three-foot rule and lay off 50 yards some day, and get this length firmly fixed in your mind. Then when you are shooting at a distant target you can judge how many times farther than 50 yards it is and set your sights accordingly.

You must remember, however, that objects seen from a hill-top, or in a very bright light, always look nearer than they really are. Also keep in mind that when looking uphill, across a valley, through a woods, or in a dim light objects seem farther away than they really are. You must allow for these conditions when setting your sights.

When shooting downhill at an object, you will have to aim quite low to keep from overshooting; and, vice versa, when shooting uphill you will have to aim high on the target to prevent undershooting, both of which are very common faults.

With the hints that I have given you so far, you ought to be able to give a good account of yourself with either rifle or revolver on the firing range or in battle.

The First Principles of Bayonet Fighting— There is one more thing that I want you to know about and that is bayonet fighting.

In the first place, when you meet an enemy in the trenches he is going to do his best to kill you, and you on the other hand are going to do better than his best to prevent it. It is clear that there is only one way to do this, and that is to jab him with your bayonet. Of course you have to be very quick and sure or he will get you first. Now the purpose of bayonet practice is to give you a quick eye and sure hand and foot, which will save your life when you meet an opponent hand to hand.

In bayonet fighting you must remember (1) that whoever strikes the first blow is the victor, for there is only chance for one blow; and (2) to strike your opponent in a vital spot, where (3) your bayonet will go in easily and can be pulled out easily or else you will find yourself defenseless.

How to Hold the Piece—Now as to the method of holding the piece. A great many bayonet manuals go on to give absolute directions for holding the piece and for its actual use, but this is all tommyrot. In the first place, all pieces and bayonets are of the same size and length, while every soldier differs in build. Consequently it is impossible to tell you just exactly the places to hold on the piece, for the spots that I would find very easy would be decidedly uncomfortable for you. Further it is your piece that you are using and your life that you are fighting for, and no one has a better right to use that piece as he likes than you.

In general the piece should be grasped at the small of the stock with the right hand, the left hand catching the piece somewhere along the forearm, as near the muzzle as possible, for this is the hand you guide the bayonet with when you thrust. It then makes an excellent stabbing weapon, for by letting go of it entirely with the left hand you can reach an opponent even though he be eight

HOW TO BECOME AN EXPERT MARKSMAN

feet or more from you. By giving your arms a full swing you can down any one who is six feet from you, and with a very slight movement can run him through at three feet.

In Fig. 57 the crosses show the most vital spots where you can get your bayonet in easily and out

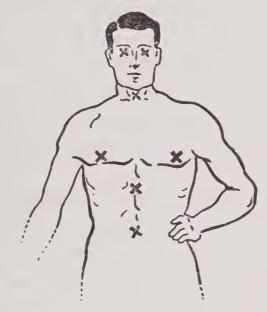


Fig. 57. Parts of the Body Where Bayonet Thrust is Most Effective

quickly. In order to hit one of these spots you must have trained yourself so that you can aim at and puncture a spot the size of a silver dollar under all conditions.

On Bayonet Practice—The best way to practice this is to get an old potato sack and stuff it full of old rags and papers. Hang it up by a rope so that it is about the same height as a man's

body, and paint on it, with black paint, spots which correspond to the vital spots on a man.

Practice charging bags such as this, uphill and down, until you can, while on the run, pass your bayonet through the spot you aim at and pull it out without stopping. You should not try to run your bayonet clear through the bag, for if you did this to a live man you would never be able to get it out. From four to six inches is plenty far enough to stick the bayonet into the bag, for you can then pull it out easily. At the same time, though, you should make your thrust snappy and powerful.

Of course, going out now and then and taking a half-hearted poke at the bag won't make you a good bayonet fighter, any more than taking an occasional shot at the moon will make a man an expert rifleman. You must practice for at least one solid hour every day, and you must do your practice well. You want to remember, too, that you are not doing this simply for the fun of the thing, but that you are practicing so that you will be able to defend yourself, and this thought ought to be enough to encourage you to work as well as you know how.

CHAPTER X

MILITARY MAP READING AND MAKING

Before a trapper goes into a new territory he buys a map of the country where he intends to snare the wily fur-bearer, and he studies it until he knows every foot of the land. Then when he arrives on the scene of action he knows exactly where he is going, and how to go. Now a military campaign is very much like a trapping campaign, in that good, accurate maps of the territory where the operations are going to take place are the first essentials of success, and to be a successful soldier you should be able to read and make military maps.

The Value of Maps to an Army—But by maps I do not want you to think I mean the kind that are printed in railroad time-tables and school geographies, for these are of the crudest kind imaginable, and though they serve their purpose they are not intended to show accurately any of the things that you would need to know in order to march and feed an army safely on that ground. Fur-

ther, these maps are usually very small, and even if made fairly well there would be no room on them to show anything other than a few large ranges of mountains, great rivers, and big cities. Of course you can easily see that such a map as this, upon which an inch represents a hundred miles or so, would be of no value to the commander of a large army which moves only fifteen miles a day on forced marching, for it would not show the places where food, or forage as it is called, could be had, or ambushes and other dangers of a like kind might be hidden. Only a large map showing plainly every hill, river, road, tree, house, and path, would be of service to such an army.

This kind of map is known as a *topographic map*, and to be of the greatest value it must also show the exact shape—or *contour*—of every hill and valley and its height or depth as well.

If you stop to think for a minute, this will all be very clear to you. Suppose you had a map which showed all the important landmarks but did not tell their heights. You would look at it and make up your mind to march twelve miles across what seemed to be a range of small hills and valleys on the map. Upon reaching them you would discover that they were impassable mountains and cañons, and your army would have made a tiresome march to no purpose.

Finally, a good map must have the scale or size it is drawn to, and the directions marked upon it, otherwise if you want to reach a certain town on the map you can't tell how far away it is, or which way to march to get there.

The Kinds of Maps in Military Use—Having these things in mind you are ready to begin to read maps. There are two kinds of topographic maps in use and these are (1) contour maps and (2) hatchure maps.

Contour maps are the most useful, for they show the heights of the hills and the depths of the valleys and are used by an army for engineering work and all other kinds that call for the most accurate map that can be had.

Hatchure maps show the hills and valleys, but as they do not tell their heights they are of less value from an engineering standpoint of view, although much easier to make.

A contour map can be made only by actually walking or riding over the ground you are mapping, and measuring and estimating distances and heights, while a hatchure map can be made from a tree top, mountain, observation balloon, or airplane, and so for this reason finds nearly as great a use as the contour map. You can easily learn to read and make both kinds, and you will find that knowing how to do so will be of the greatest

service to you on scouting expeditions, and, what is of still more importance, to your commander.

On Learning to Read Contour Maps-The first kind of map that you should learn to read is the contour map. If you will turn to Fig. 60, which is a contour map of a part of Maryland and West Virginia known as the Pawpaw Quadrangle, you will have before you a typical contour map. To an untrained eye all that can be seen is the large and meandering river running diagonally across the map, and numerous other smaller rivers and streams, but to a trained eye there is much more to it. For see you now, above and directly to the right of the point marked A on the map, a small and nearly round ring with the number 900 printed on the line which makes it. Above that you will find other rings with the numbers 800, 700, and 600, on them. These rings and numbers show the shapes and heights of hills or mountains and you will observe that the whole map is covered with them.

To understand just what they mean turn back to Fig. 58, which is a perspective view of two islands in the Pacific Ocean. Suppose at one time that these islands were completely covered with water and that the water began to go down, and finally the top of the big hill stuck out above the surface of the sea twenty feet. For a long time

nothing happened until years later the water went down another twenty feet and left a ring or water mark around the hill which I have numbered I. This happened again and again until there were five rings around the hill, each twenty feet apart, and the hill stuck up out of the water one hundred feet. The little hills on the right had

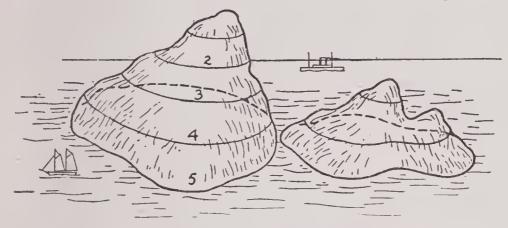


Fig. 58. Islands Drawn in Perspective

only two rings and so only stuck up a little over forty feet.

About Contour Lines—This is exactly what we suppose when we want to make a contour map of a hill; the rings are called *contour lines* and the space between two of them, which is 20 feet, is called the *contour interval*. Of course they are not round rings, because the hills are not exactly round. Twenty feet is the contour interval used on almost all maps, although you can use a larger or smaller interval as you like.

Now look at Fig. 59 A, which is a side view or profile of the hills. The rings are the straight lines and as you can now plainly see from the figures on the left they are 20 feet apart. If you now drop lines from each end of the contour

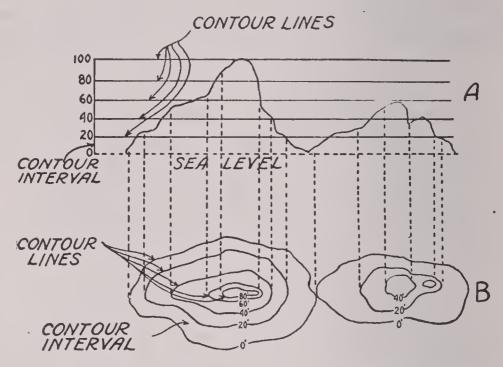


Fig. 59. How a Contour Map is Made
A. Profile View of Islands
B. Contour Map of Islands

lines in A and draw in between these lines the actual shape of the hill at that point you will have a picture or top view of the hill that will look like B, and this is exactly how the map shown in Fig. 60 was made. The contour lines in B are numbered with their heights just as they were

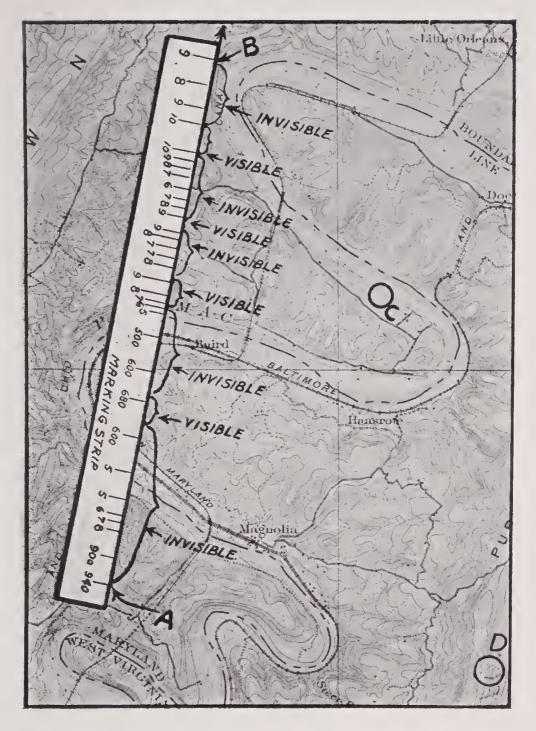


Fig. 60. How the Marking Strip is Used (Observer at A)



in A, and you can at once see that since there are 5 of them and the contour interval is 20 feet, the big hill is 100 feet high. However, we have supposed that the hill was an island and so the lowest contour line was at sea-level or o feet. In the map in Fig. 60 the river naturally flows at the lowest level possible and as you will see by looking at the place I have marked with a circle and called C this is about 500 feet above sea-level. From this you can see that on the map the hills start not at sea-level as did our island but at 500 feet above it and rise at 20-foot intervals to as high as 1900 feet as shown by the circle at D. To make the map easier to read, every fifth contour line is made heavier than the others and is numbered. Since the contour interval is 20 feet, every five lines show a rise in height of 100 feet.

Knowing these things, you should now be able to look at the map and without much studying pick out the mountains and valleys, and you can see that the reason the river follows such a meandering course is because it is running in the only valley in the region. You will also observe that the streams, as you might expect, start up in the mountains and flow down into the river valley where they empty into the river.

What You Can Tell From a Contour Map— But suppose now that you are standing on the

summit of the mountain marked A, which is 940 feet high, and are looking out over the country in the direction shown by the line to B. You would see a large number of hills, but on the other hand some hills would be so large as to prevent you from seeing smaller hills behind them, and the only way for you to tell what you could see when you look at the map is to get the *visibility* as it is called as follows:

How to Draw a Profile Map—Draw a line from the point where you are standing along the map in the direction you are looking, as at AB. Now cut out a strip of paper or marking strip as I shall call it, and lay it along the line. With your pencil make a mark on the marking strip at each place where the line AB crosses a heavy contour line on the map, and by looking at the number on the contour line find its height and write it down on the marking strip under the mark. Continue in this way until you have gone as far as you wish to. Fig. 60 shows the marking strip in place with the marks and heights or elevations as they are called of the contour lines.

Now either rule a piece of paper as shown in Fig. 61 or get a *Standard Profile* Plate 4 x 20 inches from a dealer in drawing material. Look for the lowest elevation on your map—in this case it

¹ Keuffel and Esser, 103 Fulton Street, New York.

is about 400 feet—and starting with it mark the left-hand edge of the profile sheet, as shown in Fig. 42, going from the lowest to the highest contour on the map.

Next take your marking strip and lay it along the bottom of the profile sheet, as shown in the

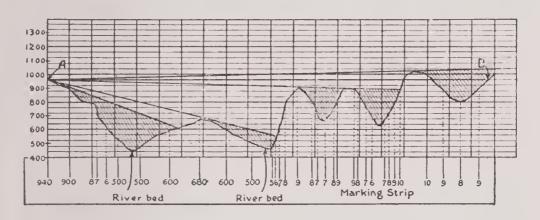


Fig. 61. How the Profile View is Laid Out on Plotting Paper. The Shaded Sections are Those that Cannot be Seen

figure. Draw a dotted line straight upward from the first mark until it has reached a height on the profile paper equal to the elevation written under it on the marking strip. Thus I drew upward from the 940 mark until I came opposite the 940 on my profile sheet. Do this with all the marks and then connect the ends of all the dotted lines, when you will have an outline of the mountain or *profile*, as it is called, as shown in the figure. You can now easily see which parts of the hills

would be visible to you if you were standing at A, by drawing lines as shown in the figure and shading the parts which lie back of a hill and cannot be seen.

If you now want to show on your original map just what parts can be seen or are visible, and those that cannot be seen or are invisible, lay a clean marking strip under the profile and drop a straight line from the end of each shaded or invisible section to the strip. The space between these lines will be the part that is invisible. If now you take this strip and lay it on your original map along the line AB you can see just what parts can be seen and what cannot, as shown in Fig. 60.

The Value of the Profile—As you can see by looking at the figure, an army would have a hard time marching straight from A to B, and would do far better to follow the river-bed, which is flat and level, even though it would be marching many miles out of its way. From this you can see the value of being able to make profile maps from a contour map, for by means of them you can pick out the easiest and quickest route for your army to march.

There are still two other things that you must know about contour maps if you are to use them

well but these are easy compared with what you have just learned.

How to Tell the Scale of a Map—The first is about the *scale*, that is the size the map is drawn to. As I explained before, a map must be drawn so that you can tell distances on it. Thus you can take a piece of country five miles long and draw it one inch long. The scale will then be *one inch equals five miles*, or as it is usually written, I inch—5 miles or I in:5 mi.

On the bottom of the map in Fig. 60 you will find the words scale 1:62,500. This means that 1 inch on the map equals 62,500 inches of land. Now 62,500 inches of land is equal to $5,208\frac{1}{3}$ feet, and since a mile is equal to 5,280 feet you can see that one inch on the map is equal to nearly one mile of land. Occasionally you will find the scale written this way, $\frac{1}{62500}$ but it means the same as 1:62,500.

On Finding the Direction—The other thing I want to tell you about is direction. On a map intended for travel you will find an arrow in the lefthand corner thus



The arrow shows which way north is on the map. In order to use the map you must have an accurate compass (and you can buy one of the *New York Sporting Goods Company* at 17 Warren St., New York, for \$1.50, that will serve your purpose). Lay your compass on the map just to one side of the direction arrow, and wait until the

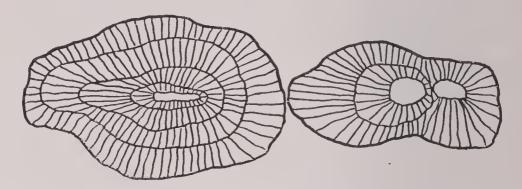


Fig. 62. HATCHURE MAP OF ISLANDS

needle comes to rest and is pointing north. Now hold the compass and gently turn—or *orient* as it is called—the map until the arrow on it points in the same direction as your compass needle. The map is then in a position so that you can see where you are and which way to travel if you want to reach some town or other landmark on the map.

How Hatchure Maps Are Made—As I told you before, the other kind of map is known as the hatchure map. Although drawn to scale and direction it does not show elevations accurately. Fig. 62 shows a hatchure map of the islands, and you

can easily see that although it stands out better and looks better to the eye, still it has small merit as an accurate map. From the figure you can see how the hills are shaded. Lines close together indicate a steep hill, while those far apart show a gentle slope. This type of map is used to a great extent by the Germans, who are past masters in the art of making them, and by means of the information they put on them, can make them a pretty good substitute for our contour maps. As a matter of fact the hatchure map is a European scheme, while the contour map is strictly an American invention although it has recently been adopted by the Japanese.

The Symbols Used in Map Making—To be of greatest service a map should have on it the towns, villages, roads, and bridges, and other like things that are known as *culture features*, since they are put there by the hand of man. Fig. 63 shows the symbols that are in use to represent these features on a map. If you look at the map in the figure you will see that many of these symbols are used. You should, however, be sure to make symbols of all kinds very small when mapping, or otherwise the whole appearance of the map will be ruined.

Still other important things are the lakes, streams, marshes, etc., or what are known as the water fea-

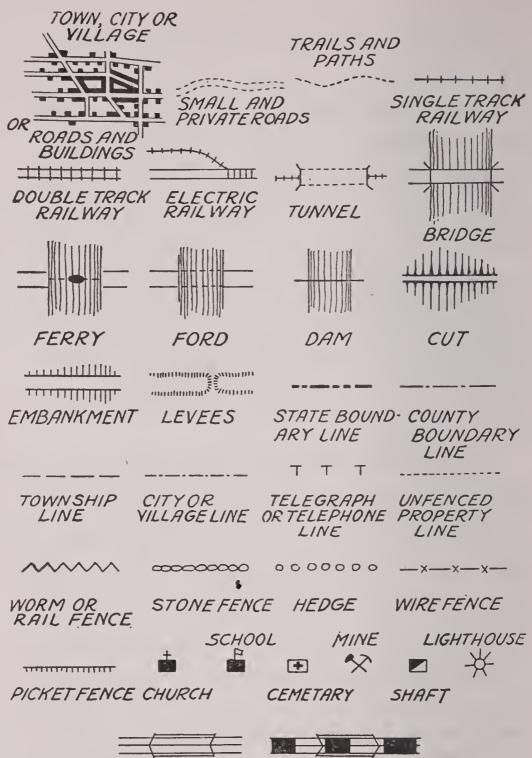




FIG. 63. CULTURE SYMBOLS FOR MAPS

tures, and the symbols for these are shown in Fig. 64.

In Fig. 65 you will find the symbols used to represent *vegetational features*. These are especially useful to you if you are making a map for a foraging party.

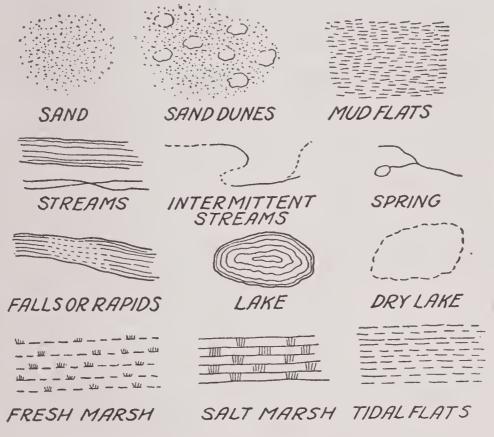


Fig. 64. Water Features

How to Make Maps—And now in regard to map-making. I have told you so much about how maps are made and how to read them that you should without much further help be able to make

such simple maps as you may be called upon for. All you need for map-making is a compass, a sheet of paper, pencil, eraser, ruler, and also a watch.

As you start out to make your map mark your

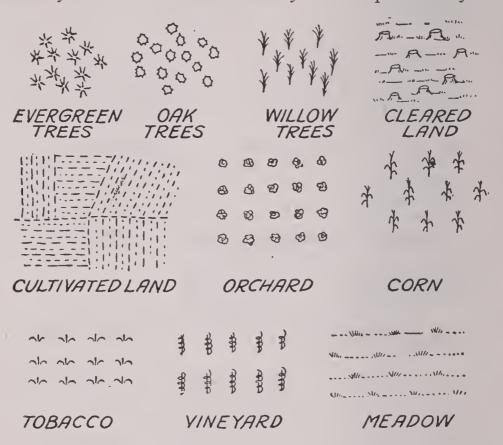


Fig. 65. Vegetational Features

starting-point on the paper clearly, so that you or any one else can easily find it again, and look at your watch and mark down the time. You should then move steadily on until you reach some important feature that you must stop to map.

Look at your watch again before you start to draw. You can estimate the heights of trees and hills with your eye. The distance that you walk you will be able to figure out, knowing that when you walk at a normal rate you walk about one mile in twenty minutes.

For observation purposes you should make the map as large as possible and mark in all of the important culture, water and vegetational features, but remember to look at your watch every time you stop to draw them in, and just before you start on again, so that you can calculate the distances you walk by the time taken to travel them.

It is a fine idea to practice map-making some nice Sunday afternoon when you have nothing else to do, for in two hours' actual practice you will be able to get more out of it than I could tell you if I were to talk for a week and you were simply to sit and listen.

Where to Buy Contour Maps—If you want some contour maps of the kind shown in Fig. 60, write to the *Director*, *United States Geological Survey*, *Washington*, *D. C.*, and ask for the *Index Catalogue of Maps* published for your state. You will then be able to send and get the map of that part of the quadrangle of the state that you live in, for the small sum of ten cents.

CHAPTER XI

HOW TO BECOME AN OFFICER

It is quite natural for you to want to be an officer in the army, and there is no reason why you shouldn't become at least a non-commissioned officer, if you are old enough to enlist, have a little training, and are bright and alert to opportunities. While there is a possible chance for you to get a commission and enter the army as a full-fledged officer, it would be better for you not to try it, for there are at this time so many men of experience and ability who are applying for commissions, that unless you are an exceptional young man, your application will not be considered.

If you are looking forward to being an officer the first thing that you must have or get is a high school education, the second is a military training, and the third is a special training that will fit you for some branch of the service.

Why You Must Have a High School Education—The high school education is an absolute

HOW TO BECOME AN OFFICER

necessity, for without it your brain will not have developed sufficiently for you to take the special training which will fit you for the service.

The Value of a Special Training—About the time of the Civil War the man who was a Jack-of-all-trades was in great demand. For instance, the doctor was at the same time a dentist, a surgeon and a veterinary surgeon all rolled into one. He could cure a case of measles, cut out a fellow's gizzard, and set the off hind leg of a cow, all in the same breath, or at least he was supposed to be able to do these multifarious things.

Since those days we have made great progress, and it has been proved over and over again that the Jack-of-all-trades is master of none. To-day we have doctors and surgeons, ear, nose, eye, and nerve specialists, as they are called, and each one has a certain job to do and no other, and because he has centered all of his time, energy and study upon this one thing he is an expert in it, and he is the kind of man you don't feel afraid to go to to get fixed up.

The same thing holds good in the army: we have reached the point where we must have officers who are highly trained in one branch of the service only, and this is where you can fit in. If you are old enough to enlist and have a high school education you can take up some particular end of

army work that you like, and become a specialist in it in a short time.

What You Can Do-As you will see by looking at Appendix F, there are several branches of the service, and you can take your pick, letting your own taste decide which branch you would like to join. On the other hand the branch known as the Signal Corps is the one in which you stand the best chance of becoming a non-commissioned officer, and in which you stand the best chance of receiving a commission later. This is because the Corps has grown so fast since our entry into the war that it has been impossible to supply officers enough to command the corps. Moreover, as you will see later on, you will be able to enlist in a section which will give you an opportunity to do the kind of work you want to. So you can't do better than to make up your mind to join the Signal Corps.

How You Can Get a Commission in the Army—Now you can become a non-commissioned officer in the Signal Corps in two ways. The first is to enlist as a private, and work your way up; the second is to take the examination given to men who expect to enlist as non-commissioned officers.

If you go about it the first way, your high school education alone will be enough to get you into the service as a private. You will then be sent to one

HOW TO BECOME AN OFFICER

of the instruction schools at Fort Wood, New York Harbor, or to Fort Leavenworth, Kansas, and you can there make a study of the thing that you are going to specialize in, at the government's expense. The following courses are given for you to choose from: wireless or radio telegraphy, telegraphy, military signaling, electricity, photography, and telephone and telegraph line construction. If you want to study aviation, which includes the construction and repair of airplane engines and planes, you will be sent to the aviation school at San Diego, California. Having completed the course at one of these schools you can then take an examination for the non-commissioned rank of Master Signal Electrician, First-class Sergeant, Sergeant, or Corporal, and be sure that you will pass it.

If you get a First Sergeancy and go to France you can be almost sure of promotion and commission, if you do your duty well, for there are no other conditions that make for such rapid advancement as actual warfare.

This is one way of getting a commission in the army, and you will never regret having gone about it in this way, for you will get a thorough military training, and at the same time learn some paying branch of engineering which you will put to good use in future life.

The other way of getting a commission is first to take before enlisting the examination given for Master Signal Electrician, First Sergeant, Sergeant, or Corporal. To pass such an examination you must have a good knowledge of the following things: (1) electricity, (2) wireless, (3) telegraphy, (4) photography and (5) gasolene engines—their operation and repair. A mere slight knowledge of each will not do. You must know considerable about the theory of these things and a great deal more about their practical side. Of course you must provide this training for yourself, and the best way that I know of to do this is to take them up at some good practical school.

Nearly all of the branches of the Young Men's Christian Association give such courses at reasonable prices. Their schoolroom is the shop, and you could not get a more practical grounding in these subjects than the Y. M. C. A. will give you. You should in a year or less of this kind of study be able to pass the examination you are going to take.

After getting your non-com, it is only a question of time until you can work yourself up to the point where you can apply for a commission and get it.

About the Aviation Section of the Signal Corps

—There is still another branch of the Signal Corps

HOW TO BECOME AN OFFICER

where fellows from nineteen up can receive a commission, and this is the Aviation Section. You can get a second lieutenancy as a flier, non-flier, or balloon observer, if you have had the proper training to enable you to pass the stiff examinations that are given in this branch. As a matter of fact, unless you are going to college, or have actually designed or made gasolene engines, there is little use in applying for a commission, for, as I said before, there are so many men of high ability applying that you must prove that you can do things exceptionally well for a fellow of your age, before your application will even be considered. Still if you think that you are qualified for a commission don't hesitate to make application.

If you contemplate applying for a commission and live in or near New York you should arrange first to take the course given for airplane mechanics by the West Side Y. M. C. A., at 318 West 57th Street, of that city. It is endorsed by the Aero Club of America and has the active coöperation of that club. The course will give you a thorough working knowledge of airplane construction, operation, and repair, and will prove of the greatest service to you in getting a commission. I might add, however, that it is not a flying course.

For further information about enlisting in the Signal Corps as a private or non-commissioned

officer, write to the office of the Chief Signal Officer of the U. S. Army, and ask for a pamphlet on the service. Information regarding courses at the Y. M. C. A. can be had by writing to the one located in your town. To apply for a commission in the Aviation Section of the Signal Corps write to the Office of the Chief Signal Officer, for an application blank, or to the Adjutant General, U. S. Army, Washington, D. C.

The above hints should be useful to you if you are very near military age now and want to enter the service right away. If you are younger, then your age will prevent you not only from becoming an officer, but from joining the army as well. But this does not mean that you should not prepare yourself to become an officer so that when you reach the right age you will have no difficulty in getting a commission.

West Point as a Means of Getting a Commission—In the first place you can go to a good military school until you graduate, when you will then have the equivalent of a high school education, together with a fine military training. You should then try to get an appointment to the *United States Military Academy* at West Point, New York. You must go about this as follows: Write to the Adjutant General and ask to have your name placed upon the register. The Senator of your state or

HOW TO BECOME AN OFFICER

Congressman of your district will then recommend you for appointment, if he finds that you are worthy. If you are appointed you will be required to take an examination in reading, writing, spelling, English grammar, English composition, English literature, arithmetic, algebra, plane geometry, descriptive geometry, physical geography, geography, and history of the United States, and finally physiology and hygiene.

When you pass this examination, which is based on the work done by the average student in four years at high school, you are admitted to West Point Military Academy. Upon graduation from the Academy you will be commissioned as second lieutenant in the army. This is the surest and best way of becoming an officer, and, indeed, it is the only way you can get a commission in time of peace.

CHAPTER XII

ON KEEPING YOUR EQUIPMENT IN SHAPE

One of the things that you must pay particular attention to when you are a soldier is your uniform and other equipment. A poor soldier can always be told by his untidy appearance, and it is your duty to see that you look your best at all times. As to equipment, it is often the means of saving the soldier's life and it would indeed be foolish to let it fall into a state of ill-repair and so make it next to useless.

What I have just said here applies to both the private and the officer, but inasmuch as their equipments are different, I will first tell you about that of the private.

About Your Uniform—If you are a private you will be given two uniforms when you enlist in the army. One of these you will wear every day, and the other you will reserve for special occasions, such as company parades, musters, inspections, and the proud eyes of your lady friends.

ON KEEPING YOUR EQUIPMENT IN SHAPE

How to Clean Your Uniform—Naturally your uniforms are bound to become soiled and wrinkled by constant wearing, and you must know how to keep them in repair. As a rule nearly every company has a tailor who will take and fix your uniform up for you as good as new, and at small cost. If, however, a tailor is not handy you can inspect and fix up your uniform as follows:

- (1) With a needle and olive drab silk thread go over all the pieces of your uniform and sew any tears that you find, or buttons that are loose.
- (2) With a piece of rag soaked in gasolene, you can rub off any grease spots that are noticeable. If you can get no gasolene you can do a fair job by laying a piece of blotting paper over the spot and rubbing it with a hot flatiron. The grease will melt and be soaked up by the blotting paper. Should the spot refuse to come out, the chances are it is old paint, in which case if you scrape it gently with a dull knife, and then rub it with turpentine it will probably come off.

On Washing Your Leggings—Wash your leggings with soap and cold water. The regular army soap used is known as *H* and *H* soap. If you can get no army soap Ivory, castile, or any other well-known non-injurious soap will do the trick.

Get a hand brush with stiff bristles, and make a solution of one cake of soap in about one-half a

bucket of cold water. Scrub your leggings well with this solution, rinse off with clean cold water, and dry them in the shade without wringing them out. Your canvas woven web belt can also be washed with the same solution.

Another preparation used is known as *Khaki Blanco*, or whitening. To apply it you simply moisten a sponge, rub it on the Blanco cake, and then rub it lightly over the equipment to be cleaned. It acts very much the same as shoe whitening and you have only to wait until it dries.

If your outfit has become muddy you should first allow it to dry, and then brush it carefully off before washing.

About Your Shoes—Shoes are one of the most important parts of an infantryman's equipment. If they gall or hurt him he is likely to be as useless as a cavalryman without his horse. Therefore it behooves you to learn how to take care of your shoes now, and save your feet trouble later on.

In the first place you should see to it that the shoes issued to you are at least half a size larger than the kind you wear ordinarily and that when you walk in them they feel perfectly comfortable, because if mere walking hurts you, marching with a heavy pack will nearly kill you.

Having made sure that they are large enough, see that there are no defective stitchings in them

ON KEFPING YOUR EQUIPMENT IN SHAPE

which might cause them to rip or come apart unexpectedly.

Next get two pairs of the heaviest woolen socks you can buy and never fail to have both pairs on when you are going on a march, be it long or short. This is the only way you can be reasonably sure that your feet won't hurt you. Moreover, I have found that you must have at least two changes of socks and that at both the noon and evening halt you should change. If you have only the socks you are wearing on your feet, take them off and put them on again with the outer pair inside and the inner pair outside. All of these precautions may sound rather funny to you, but just believe me when I say you will have lots of time for regret but none to stop and rest your smarting, aching feet, if you don't follow them.

When in cantonment it is considered good form to have your shoes brightly polished, and while this is all right as long as you are doing no actual fighting, it is all wrong during a real campaign. It is argued first that the polish makes your shoes look neat and second that it preserves the leather. The first premise is undeniably true, but be it known that nearly all shoe polish has turpentine in it and that if there is any one thing that will ruin a pair of good shoes it is turpentine. Hence you can readily see that as long as you are fixed so that

you have simply to ask for another pair of shoes to get them, polish is all right, but when you go over the top no one will expect your shoes to be polished, and besides they will wear out a great deal quicker.

The proper dressing for leather of all kinds is neatsfoot oil. The shoes should first be cleaned of all mud and dust, and should then be rubbed with neatsfoot oil until you think that the skin on your fingers is worn down to the bone. The shoes will then be extremely pliable and will be as water-proof as it is possible to make them.

The Care of the Rifle—Next to shoes, in line of importance to the infantryman, is his rifle. As you know, your rifle is made up of a metal barrel, a metal receiver or part containing the firing mechanism, and a wooden stock and forearm.

Cleaning the Barrel—The barrel is the first thing you must learn to clean. Moisture will rust both the inside, or bore, of your rifle, and the outside. If this rust is allowed to break off of its own accord the result will be a pitted appearance which not only causes the outside of the barrel to look bad, but seriously interferes with the shooting properties of the bore. You can remove it from the outside of the barrel by rubbing it vigorously with a woolen rag moistened with kerosene oil. You

ON KEEPING YOUR EQUIPMENT IN SHAPE

must then wipe all of the oil off and rub it to a high polish with 3-in-1 oil or pure sperm oil.

The cleaning of the bore of your rifle is another proposition entirely, for if you do not do it properly you will ruin the accuracy with which the piece shoots forever. The first thing that you should do before trying to clean a rifle is to get a piece of brass and have stamped on it, Never clean a firearm from the muzzle, and you should rivet this on the front of your hat. I doubt if ever a firearm was spoiled by any other means than shoving a cleaning rod down the bore from the muzzle end. The reason is plain. The muzzle is rifled,1 and the cleaning rod blunts the rifling and so causes the bullet to leave the piece and fly crooked. You must always clean a firearm from the breech, for the rifling does not start directly at the breech but about two inches in front of it, leaving the firingchamber or place where you slip the cartridge into the barrel smooth.

Naturally, when the piece is fired particles of burnt powder are bound to remain in the bore and to lodge in the crevices or lands of the rifling. To remove this *powder fouling*, as it is called, dissolve in a quart of water all of the *sal soda* you can. Now run a small flannel patch into the slot pro-

¹ Spiral grooves cut in the bore of the barrel to make the bullet revolve rapidly and go straighter.

vided for this purpose in your cleaning rod, and dip the patch into the solution of sal soda. Starting the rod at the breech, run it up and down the bore several times, and do this with three or four patches or until the bore appears to be clean. Wipe it dry with clean patches and stand it in a dry, warm place.

This treatment will remove all powder fouling, but the bore usually contains after firing what is known as *metal fouling*. This is caused by small particles of lead and copper with perhaps nickel from the bullet being smeared onto the rifling. You can make a preparation that will remove metal fouling as follows:

To two tablespoonfuls of ammonium persulphate (finely powdered) mix one tablespoonful of ammonium carbonate. To this mixture add slowly a solution of one-half pint of ammonia in one-quarter pint of water, stirring the while until the ammonium salts are completely dissolved. The salts can be bought at any drug store. Let the solution stand for half an hour, and then plug up the breech of the barrel with a cork and pour it full of the cleaning solution. Loosely cork up the muzzle and stand the barrel in a corner on the breech for half an hour. Then remove the solution, wash thoroughly by pouring warm water through the barrel and dry absolutely.

ON KEEPING YOUR EQUIPMENT IN SHAPE

Cleaning the Receiver—The receiver and firing mechanism can be cleaned the same as the outside of the barrel, but you should never put kerosene on the firing mechanism and leave it there long. The firing mechanism should be oiled with sperm oil. Kerosene oil is a good rust remover but a bad lubricant, and should never be used as such.

Cleaning the Stock and Forearm—The stock and the forearm should be cleaned and polished with linseed oil, applied with a flannel and backed by plenty of elbow-grease.

Cleaning the Bayonet—The blade of the bayonet should never be scoured with sandpaper or coarse emery cloth. Wash it with the sal soda solution, and then wash it off with water and dry it thoroughly. Make a scouring paste of either fine emery dust and oil or rottenstone and oil. Scour the blade, wash, and wipe off, and then give it a thin coat of 3-in-1 oil to keep it from rusting.

The Mess-kit—The mess-kit is of a peculiar importance, for it is one of the most abused articles in the average soldier's outfit, being used three times a day and seldom cleaned properly. It consists chiefly of a frying or meat pan with a lid and folding handle. The pan and lid should be well scoured after each meal with soap and boiling water, and should if possible be set in the sun to dry, for the sun is a great destroyer of disease

germs. Further, it is much pleasanter to eat from clean utensils than from dirty ones.

You should scald your canteen once a day in hot weather by pouring boiling water containing a little sal soda into it, or once every two days in cool weather. It should then be washed clean, and when not in use it should be left uncorked. The belt and canvas covering should be scrubbed with H and H soap frequently, for they provide a fine breeding-place for germs.

On Washing Sleeping-Blankets—If possible you should wash your sleeping-blankets once a week. Do not make the mistake of washing them, or any other woolen goods, such as underwear, sweater or socks, in hot water. Wash them in clear cold water, using Ivory or castile soap; do not wring them out, and hang them in a cool place to dry. If you do not follow these instructions your fine big woolen blankets will soon shrink to the size of a baby's washcloth.

About the Soldier's Pack—The last piece of the private's equipment that you should know about is the pack. The pack is made up of four parts and these are (1) the shoulder-straps, (2) the haversack, (3) the carrier, and (4) the cartridge belt.

The shoulder-straps are made of web woven canvas and slip over the arms and onto the shoulders when the pack is put on. You should keep them

ON KEEPING YOUR EQUIPMENT IN SHAPE

clean and pliable, so they will not gall your shoulders.

In the haversack is placed (1) a small can of food for use as an emergency ration only, (2) a knife, fork, and spoon, (3) tent pegs or pins for the shelter tent, (4) frying or meat pan, (5) first aid kit, (6) toilet articles such as soap, comb, washcloth, toothbrush and toothpaste, (7) extra underwear and socks, and (8) any special articles, such as field glasses and compass, that may be given the soldier to help him fulfill his duty. When the pack is made up the cartridge belt becomes a part of the pack and helps you to carry it. The hard things are placed so that when the pack is made they will be farthest away from the back. Soft things such as underwear, etc., are packed next to the back, where they form a pad which keeps the hard things from rubbing sores on your back.

The last thing of all to be packed is your canteen and entrenching tool, for you will need them most often. The canteen is hung on the cartridge belt while the entrenching tool is strapped to the back of the pack where it won't interfere with you. I might add here that the entrenching tool is merely a stout spade with which the soldier scoops a hole that he can lie in when under fire or "dig himself in."

The Officer and His Equipment—And now having covered the important features of the infantryman's outfit, let us learn a little about that of his officer.

The first thing is his uniform. It is expected of an officer that he appear neat and natty at all times, and in order to do this his uniform must be of the most expensive material and must have an extra amount of care spent on it. While an officer receives far better pay than a private, he is expected with this extra pay to dress himself in first-rate style, for an army is always judged by the appearance of its officers.

You must therefore, when you become an officer, cultivate somewhat the methods of a gentleman of means, and you should be very generous with your money in the matter of clothes. While they should be of the best material possible, it is not necessary that you have a uniform for every day in the week, because this is indeed an extravagance. If you get two service uniforms and one full dress uniform you will be doing your full duty. But above all you must learn to keep them nice and neat.

You should wash your leather belt on the rough side with castile soap, rubbing the lather into it well. It must then be dried carefully and the smooth side polished with russet leather polish.

ON KEEPING YOUR EQUIPMENT IN SHAPE

Regarding your puttees and shoes, see that they always have the highest polish that can be given them.

Your revolver will bear practically the same kind of treatment as described for the rifle; while the saber can be cleaned the same as the bayonet.

And now just one thing more about an officer's equipment. Many fellows have the idea that an officer has a moving van to carry around his personal duffle, or equipment in. This is entirely wrong. He is lucky if he is able to carry an extra uniform and pair of boots, for one small truck is assigned to the thirty or more officers of a division. Consequently you will do well not to accept from any one, or give to any soldier, a trench periscope weighing fifty pounds or more, for it will simply be thrown away, if indeed it ever reaches the person it is intended for. Taking this lesson to heart, you will boil your equipment down to the lowest possible amount, and both you and your back whereon you carry your pack will be happier therefor.

CHAPTER XIII

FIGHTING OVER THERE

You have most likely noticed that the preceding chapters dealt almost entirely with the workings of certain parts and operations of the war machine known as the army, and that I have not told you anywhere in the book about how these parts worked when actually welded together or the practical end of fighting.

However, all that I have told you about has a definite use and it is my purpose in this chapter to show you in a measure just how an army operates, and just how fighting is carried on in France. I shall in a word try to nickel-plate you in the bath of war experience gained by Captain John Hodder Williams, who fought valiantly for King and Country in the Canadian Regiment known as Princess Pat's,¹ and from whom I received my military training.

¹ Captain Williams was one of the few officers to survive from the ill-fated Regiment of Princess Pat which was, in the early part of the war, wiped out by the Germans.

FIGHTING OVER THERE

Of course I cannot give you a complete account in a single chapter of the operations of the Allies as carried on in France, but I shall try to hit the high spots, and for the great mass of detail in between ask you to use your imagination.

About Marching—If you have ever looked through a copy of the London Illustrated Weekly or the Picture Section of the New York Sunday. Times, you have noticed that the French roads, over which the contending armies march, are hardly like a well paved speedway. The constant string of huge motor trucks, big field pieces, and heavily armored tanks, which pass over them day and night, have worn them down until in many places they are scarcely passable. These are the kinds of roads that you will have to march over when you go to the front, and you can see now that what I told you about your shoes in the last chapter is of the utmost importance.

As a rule a division is the smallest part of an army that is moved from one place to another, although sometimes a brigade will be so moved. The reason for this is simple: a division is the smallest part of an army which can operate alone as an army in itself and which has all of the fighting arms necessary for the protection and convenience of an army.

The division will march in column of fours and

will keep as far in to the right-hand side of the road as possible when marching on French soil. This makes it possible for the unceasing stream of supply trains, etc., which are moving in the opposite direction, to pass unhindered. In England the traffic rule is just the opposite and the army will march in column of fours as far in to the left of the road as possible, all of which is shown in Fig. 66 A and B.

When the command to march is first given, each man has on his pack and steps off. It is the custom at the end of the first twenty minutes of marching to call a five-minute halt. This enables the men, who by this time have found out just where their packs gall them, to adjust them so they won't hurt. At the end of every fifty minutes a tenminute halt is called and the command Rest is given. If you are a rookie you will walk around with your pack on your back, hands in your pockets, and pass the time of day with other rookies. If you know anything about the ways of an old soldier who has been seasoned by the wars you will drop your pack instantly the command Rest is given, lie down, and sleep for eight or nine minutes if possible. In this way you will be able to march farther and still feel alive and kicking at the finish.

When marching in column you should keep just

FIGHTING OVER THERE

forty inches back of the man in the rank in front of you; no more nor less. You should get the habit

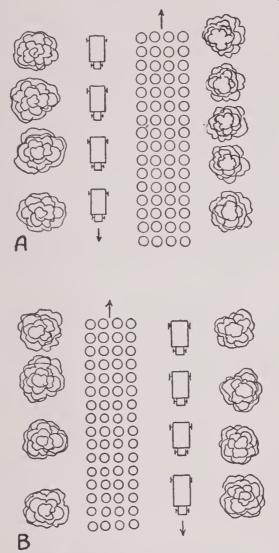


Fig. 66. (A) Army Marching on French Road in Column of Fours to the Right. (B) Same Army Marching on English Road Keeping to Left

of keeping this distance at all hazards and never get farther behind. For see you now, a division

marching in column of fours with forty-inch distance between ranks is about a mile long. Let us suppose that you are in one of the rear ranks and that the men in front of you keep lagging behind more and more as they march. At the end of the fifty minutes, when *Rest* is called you will have fallen back a couple of hundred yards behind the front ranks of the division, and finally you will have to march the entire ten minutes to make these lost distances up. As a result you will get no rest at all, and at the end of a day of such marching you will feel as if you had been pulled through a knothole.

On even a cool day you will get very thirsty on the march, but you should not drink except at the noon halt, and then but very little, or else you will feel as heavy as a water-soaked log. If you feel that you must drink moisten your mouth and then spit the water out. A small, clean round pebble placed in the mouth will cause your saliva to flow freely and you will not feel the need for water.

When on a long march it used to be the custom in the United States Army to let the men march at route step, or just as they pleased. But it has been found that men march easier and better at the regular quick time step and so route step has been done away with. In order to help the men keep step

FIGHTING OVER THERE

they are encouraged in every possible way to sing snappy marching songs, for this also takes their minds away from their tired feet. The non-coms also help the men who are not as strong as the others and who find their loads too heavy, by relieving them of a part of it and cheering them along. Otherwise they would drop out of the ranks, and this must be prevented if there is any way to do it.

The Advance Guard—An advance guard is always sent out before an advancing army, to gain information as to the enemy's position. The advance guard may consist of a regiment, company, platoon, or squad, depending on the size of the army for which it is acting. The guard places itself in a triangular formation and will march several thousand yards ahead of the main body of the army, as shown in Fig. 67. From this position it is able to discover better routes, ambuscades, and the position and size of enemy forces, all of which it signals back to the main body. An advance guard should always keep a uniform distance in advance of the army and should never get out of range of communication. A similar rear guard protects the army from surprise from the rear.

The Trenches—In the olden days of warfare the trenches were dug to safeguard the army from infantry and cannon fire. Those were the days

before the high-power rifle and explosive shell were invented and the trench was a very shallow, very wide, and very crude affair. With the invention of larger field pieces which threw a heavy shell for miles, trenches were deepened and narrowed, and *dugouts* were provided. As you know,

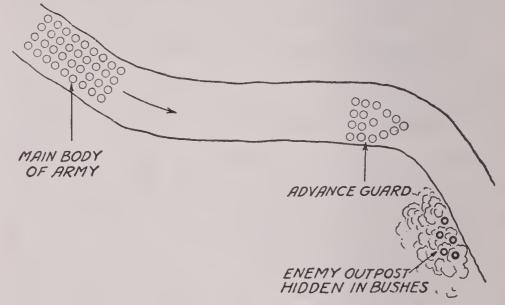


Fig. 67. How the Advance Guard Proceeds Ahead of the Army

a dugout is simply a cave which opens into a trench.

Then came what is known as the *shrapnel shell*. This is shot from a cannon like any other shell, but it is filled with a high explosive and several hundred bullets. It is timed to explode over a certain spot, when it blows a veritable hail of bullets downward upon the earth which will kill everything in a circle of one hundred yards diame-

FIGHTING OVER THERE

ter—see Fig. 68. This new shell made the oldstyle trench doubly dangerous, for it was possible to burst a shell over it and wipe out a whole section, and the shrapnel would penetrate even down into the dugouts.

So the trenches were made still deeper and nar-

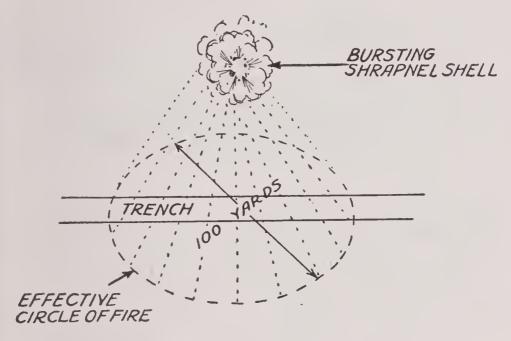


FIG 68. How a Shrapnel Shell Rains a Cone of Fire Upon a Trench as it Bursts

rower and the dugouts were dug down to a depth of twenty feet or more under the ground, their roofs being armored with steel heavy enough to keep shrapnel out. A cross-section of a typical trench is shown in Fig. 69. The *firing step* is necessary for observation and rifle fire on account of the depth of the trench. It is just at the right

height so that a soldier can stand upon it and fire over the top.

In France the trenches are laid out as shown in Fig. 70. First of all are the first line trenches. In these are the men who are on the actual firing line, who are first to go over the top in an attack

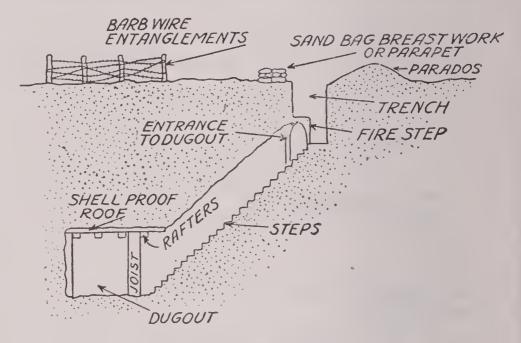


Fig. 69. Cross-Section Through Typical Trench AND DUGOUT

upon the enemy, and likewise are first to be attacked when the Germans attack. Back of these are the second line or support trenches. In these the support troops stay. Their purpose is to aid the first line trenches in case of attack upon or from the Germans. So that they can reach the first line trenches safely and quickly, communica-

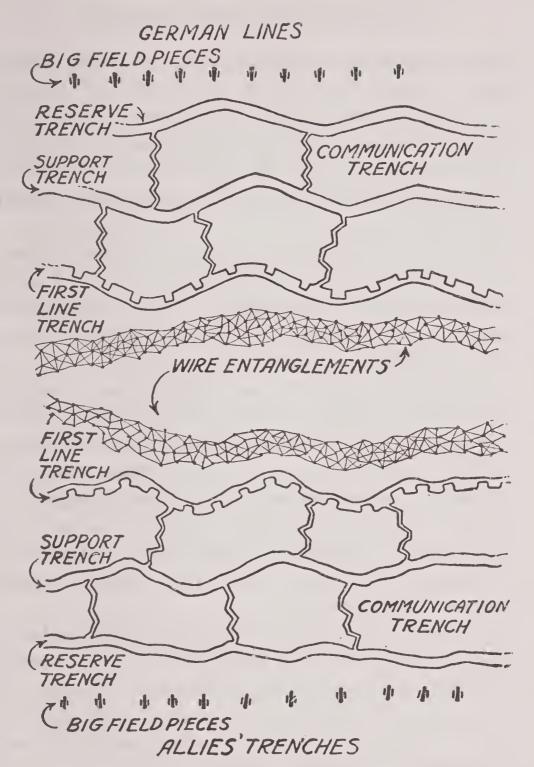


Fig. 70. How the Trenches of the Opposing Armies are Laid Out

tion trenches are cut between the first and second line, as shown in the figure. The reserve trenches make up the third line. The reserve troops stay in these trenches and are called upon by the first and second line only in case of dire necessity. Communication trenches also connect the second and third lines.

Of course you must understand that my drawings of the trenches are much too nice, for in France they dig them from one old shell hole to another and naturally they are not laid out along the straight lines shown in the drawing.

To stop the Germans, barbed wire entanglements are erected all along in front of the trenches. This is woven in and out so many times that even shrapnel fire cannot destroy it so that troops can pass through. Indeed the only way to get through it is to cut it (each soldier carries a pair of snipers for this purpose) or else it is crushed down to the earth by means of the huge tanks that we have heard so much about lately.

Further, the ground in front of the trenches looks like the old ocean on a rough day, with thousands of volcano craters thrown in for good measure. It is simply a combination of a mess of shell holes ten or fifteen feet deep and twenty or thirty feet in diameter with huge waves of dirt thrown up between by the big shells.

FIGHTING OVER THERE

Over the Top—And now that you have a clear idea of the trenches and ground about them I will tell you how a typical attack is conducted. The figure shows the first, second, and third line trenches of both the Allies and the Germans. Back of the third line trenches of the Allies, in well-placed and protected positions, is the heavy artillery. Now these guns are so big and throw so explosive a shell that when trained on a trench they will completely blow it away; but they will, however, not penetrate down into a well-constructed dugout.

For days before the attack on Fritz—as the English call the Germans—is to start, the big guns far to the rear of the Allied trenches keep up an incessant shell fire or *barrage* on the first line, support and reserve trenches of the Germans. When this fire starts, Fritz knows enough to duck down into his dugout and there he stays safe and snug while the shells blow his trench to pieces about his ears. This heavy fire is known as watering.

Finally the commander in charge of the attack decides that the German trenches are so badly damaged as to make an attack possible, and the hour at which it will begin is passed down the lines. As a rule the time set for such an attack is in the early hours of the morning, say between four and five o'clock, for there is still enough darkness to hide the attacking party from infantry and machine

gun fire, and yet by the time the trench has been captured it will be light enough for the men to see what they are doing.

If you land in the German trenches at night it is impossible to see what either you or they are doing, and the fact that everything is strange doesn't make you feel any the more at home. To offset this, maps of the German trenches are often made from airplanes and from these maps similar trenches are dug by the Allies and the soldiers are made thoroughly acquainted with them. But inasmuch as these duplicate or *replica* trenches are also crude, while they serve their purpose in a measure, yet they are not all that could be wished for. As a consequence, it is far better to find yourself fighting in Fritz's trench at dawn than at dusk.

Finally the hour for the attack arrives, the signal is given, and the men go over the top of their trenches one after the other by means of short ladders. The barb wire in front of their own trenches they have cut the night before and so they find no trouble in getting started.

As they go over the top, the heavy artillery of the Allies drops a curtain of shell fire just in front of them and this protects them from any *counter attack* by the Germans. As they advance slowly over the very rough, and very likely muddy, ground this

FIGHTING OVER THERE

curtain of fire is advanced—see Fig. 71. Over ground such as this there is no such thing as a dashing charge and a snail's pace must be maintained so that the soldiers will not be exhausted when they reach the German trenches and need their strength most. The attacking party continues its slow advance and the curtain advances with it.

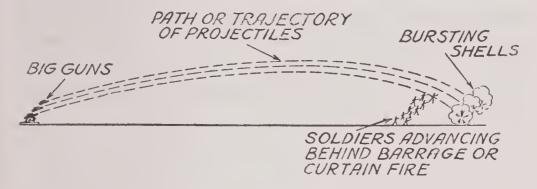


Fig. 71. Curtain Fire

Finally the curtain passes over the first line trench, and a couple of minutes later the attacking party strikes the trench. I say trench but as a matter of fact it is now only a mass of débris or rubbish and has long since been blown away. Theoretically the attacking party should strike the trench as a solid wave, every man at the same instant, and so be able to strike a heavy blow the full length of the trench. As a matter of fact, due to the unevenness of the ground, the attacking party strikes the trench a handful here and a handful there. They are met by Fritz, who has come out of his

dugout the instant the barrage passed over him, and it is then that they get an opportunity to do some bayonet work. Then woe be unto him who has not practiced faithfully during his training, for there is but one chance for you to run your bayonet into Fritz, and if you don't do it first he will.

When the first trench has been taken the attacking party moves on to the support trench and takes this under cover of barrage in a like manner. In the meantime the Allies' support, which follows the attacking party, arrives at Fritz's first line trench and proceeds to mop up as follows:

Each soldier is outfitted with a bag of bombs. Suppose you are one of them. You go to the nearest dugout entrance and, using your best German, call down and invite any Boches within to come out and surrender. If there are any in there they will usually come out peaceably; but if they should refuse, you throw down a handful of bombs, when they will come out anyway but not in such good shape as if they had followed your first invitation. Thus is the gentle art of mopping up carried on by the support.

When the attacking party has captured the last trench it was commanded to take, it immediately starts to dig in. Since the trench has practically been destroyed, it is necessary for them to work fast, for they can rest assured that despite the heavy

FIGHTING OVER THERE

watering, Fritz's reserves will soon be at them tooth and nail, and then they will need all of the protection they can get if they are to hold the trench. So great is the need of hurried digging that many officers have abandoned their swords for the more useful entrenching spade.

From the above account of a typical attack, I think you will be able to get a fair idea of how modern fighting is conducted, and just what it means when you read that another 600 yards of trenches were captured.

CHAPTER XIV

WAR INFORMATION AND ADVICE

APPENDIX A

First Aid to the Wounded—One of the worst things that I can think of is having to sit and watch a wounded comrade suffer, and not be able to help him because you don't know the first principles of first aid. Of course you can't hope to become as proficient as a surgeon, but you can learn a few of the simple things that have saved many a man's life.

The most useful thing that your first-aid packet contains is a roll of antiseptic bandage. This is done up air-tight and up to the time it is opened will be absolutely clean and free from germs. For this reason you should handle the bandage as little as possible and see to it that your hands are as clean as you can get them in a hurry.

Wounds in the sides, abdomen and chest you cannot aid except by washing them off with clean water and tying a pad of bandage over them to keep out dirt and prevent infection from setting in.

WAR INFORMATION AND ADVICE

Flesh wounds, such as tears and lacerations from shrapnel, should be washed clean and bandaged well.

If a wound bleeds profusely, the blood coming forth in little gushes, it is a sure sign that an artery has been cut, and that the injured man may die from loss of blood if the bleeding is not stopped

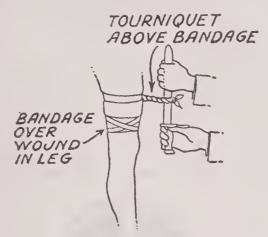


Fig. 72. How the Tourniquet is Used to Stop a Bleeding Artery

instantly. If such a wound is on the arm or leg you should wash it clean and tie a bandage over it. Then take a strip of clothing or other strong cloth and tie it loosely above the wound. Slip a stout stick, bayonet, or other instrument into this loop of cloth and twist it around and around until the strip has become tight enough to stop the bleeding. Such an arrangement is called a tourniquet, and it is shown in Fig. 72.

In the case of a bone broken or splintered by

shrapnel or rifle bullets you should wash the wound and bind a pad of bandage over it firmly. Then cut

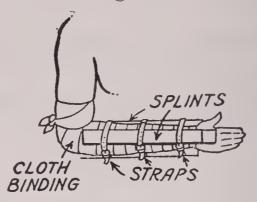


Fig. 73. How the Arm is Fixed in Splints When the Bone is Broken

and smooth four flat sticks about two feet long, two inches wide and one-half inch thick. Wrap



Fig. 74. How the Head is Bandaged

the broken spot tightly with clothing for a foot above and below the wound and then tie or strap the sticks firmly around the arm or leg, as the

WAR INFORMATION AND ADVICE

case may be. It should then be tied to the body or to the other leg. The sticks are called splints



Fig. 75. (A) Carrying a Wounded Man Who is Unconscious
(B) Carrying a Wounded Man Who is Still Conscious

and their purpose is to prevent the jagged ends of the broken bone from tearing the flesh around them. The operation is shown in Fig. 73.

Wounds in the head and face are bandaged as shown in Fig. 74, after first having been washed clean.

In all cases you should give the sufferer your prompt attention and should then see that he is treated by a surgeon as quickly as possible. If the wounded man is lying in a position where he is likely to be wounded again, you should carry him to a place of safety. There are two ways of doing this. If the patient is conscious, have him put his arms around your neck from behind, and his legs around your waist. You can then hold his legs in your arms as shown at Fig. 75 B and walk very easily. If the patient is unconscious, stoop down and put his left arm around your neck and hold it there with your right hand. Drag him to a sitting position, when you can put your left hand around his left leg and lift and carry him as shown at A.

APPENDIX B

About Your Health—As you may well imagine, a fellow has to be pretty well hardened to stand the hardships of fighting, but every American is a natural-born camper and finds army life a great deal easier than he had at first expected. There is one thing, however, that few of us ever think

WAR INFORMATION AND ADVICE

about, chiefly because we have so much of it, and that is our health. Camp life makes for health but there are some things that you must do for yourself, and these are: (1) Bathe as often as possible. Cleanliness in camp is hard to maintain but it is worth it. (2) Keep your clothes as clean as possible. Wash them often. (3) Wash your teeth twice a day-morning and night. If you don't you will have howling toothaches, and an army dentist is not a pleasant thing. (4) Keep your bowels open or you will surely get sick, and army doctors think that Epsom salts are the natural food for the sick soldier. (5) In summer have your head shaved. You will be troubled somewhat by flies but there are other insects that will otherwise get into your hair that are even worse. (6) When you get a cold, take plenty of quinine. And (7) when you feel sick report to the doctor and he will fix you up.

APPENDIX C

Hints on Roughing It—A great many fellows have the idea that to be a good fighter you must rough it. My idea is just the opposite, and I have found that the more you try to smooth things the better off you will be.

When making your bed remember that the soft springy tips of pine boughs make one of the most fragrant mattresses possible to sleep on. Before you turn in, see that your bed is comfortable, for if you find it the least bit uncomfortable then, in the early hours of the morning it will become unbearable. You should always sleep with as much cover under you as you have over you and you will never be cold.

I mention these facts above all others because, of all the hardships that mortal man can undergo, a poor night's sleep, with a hard day's work ahead, is the most discouraging.

APPENDIX D

On Keeping Your Temper—If you will just remember when things go wrong—as they are bound to do—that losing your temper won't better them, you will be doing yourself and everybody else a favor. Further, you must always treat your commissioned and non-commissioned officers with the courtesy and respect that their rank calls for. Losing your temper with them, no matter what the cause may be, is always a losing deal.

WAR INFORMATION AND ADVICE

APPENDIX E

Bravery and Truthfulness at All Times—If you think that a brave man is one who never gets afraid you are away off the track. A man who never fears anything is not so brave as he is foolish. A really brave man will be just as afraid as any one else but he will not let his fear get the best of him and make him unable to think, move, or speak. Just because your mind becomes afraid is no reason why you should let your body flunk the work at hand, be it ever so dangerous.

In regard to truthfulness, possibly you have found that you can lie in ordinary life and never get caught. Take my advice and never lie in the army unless you are looking forward to a life on some other earth than this, where army regulations and punishments are unknown. Your life and safety and the lives and safety of others depend on the absolute truth, and you should always tell it at all times, no matter how disagreeable it is.

APPENDIX F

More About Insignia—In addition to the braid on an officer's sleeve told about on page 28 each

officer wears a black and gold hatcord, with gold acorns on the tips.

The branch of service that *enlisted men* belong to can be told from their hat cords as the following table shows:

| Branch of service | Color of hat cord | Insignia | |
|--|--|---|--|
| Infantry Cavalry Artillery Ordnance corps Signal corps | Light blue Yellow Scarlet Black and scarlet Orange and white | Two rifles crossed Two swords crossed Two cannon crossed Two bombs and flame Two signal flags crossed, with torch | |
| Engineering corps Quartermasters corps | Red and white Buff | Castle with two turrets Wheel under an eagle with crossed key and sword | |
| Medical corps | Maroon | A wand surmounted by wings and with two serpents twined about it. | |

Do not make the common mistake of thinking that every soldier who wears leather putties is an officer. Privates in many of the branches, particularly the cavalry, also wear them.

APPENDIX G

War Words, Terms, and Phrases You Should Know the Meaning Of—

WAR INFORMATION AND ADVICE

Barbed Wire—Wire with barbs or sharp points sticking from it used for entanglements. Almost impossible to get through.

Barrage—A heavy fire from the big guns concentrated on a certain portion of the enemy's trenches.

Bay—An indentation of a trench built so that an attacking party will be unable to strike the full length of the trench a heavy blow at the same moment and to lessen the shocking force of bursting shells.

Canteen—(1) The container used by the soldier to carry water in; (2) a place where soldiers are sold refreshments—often spelled cantine.

Caterpillar—A powerful gasolene vehicle running on large flat belts instead of wheels, which will crawl up a tree if necessary. It is used to drag the big guns into position.

Curtain Fire—A heavy fire behind which troops are advanced to the attack.

Dugout—A cave twenty to thirty feet below the ground, opening into a trench. It usually has several entrances.

Field Pieces—Any cannon or piece of artillery mounted on wheels for field use.

Fire Trench—The first line trench from which rifle fire on the enemy's trenches is maintained.

Flare Pistol—A pistol shooting what is known as

a flare or bomb which bursts, throwing a bright light on the ground in front of the trenches. Used to discover raiding parties of the enemy.

Gas—A poisonous, heavy gas drifted into the enemy's trenches to suffocate them. The gas drifts before the wind and settles to the bottom of the trenches. Usually used just before an attack.

Gas Mask—A mask worn over the face to protect the soldier from gas attacks. It has mica eyeholes and is treated with chemicals which purify the air so it can be breathed safely.

Housewife—A collection of needles, thread and buttons with which the soldier mends his clothes.

Liquid Fire—A burning fuel, such as gasolene, sprayed by German soldiers upon Allied soldiers to burn them to death. The gasolene or fuel is carried in a tank on the back from which it is forced out of a hose by compressed air, when it catches on fire.

Machine Gun—A light rifle having a large magazine from which a volley of shots can be fired rapidly without reloading. It is cooled with water. Very effective for stopping infantry and cavalry. The Lewis Automatic Rifle, which is air cooled, invented by an American of that name, is largely used in France. It shoots 47 shots without reloading, the cartridges being held in a horizontal, circular, revolving magazine or pan.

WAR INFORMATION AND ADVICE

Mills Bomb—A bomb about the size of a baseball thrown by hand into the German trenches. Very deadly.

Mine—A tunnel dug secretly under the earth until it just reaches the enemy's trench. A large quantity of high-explosive is then placed in it and fired, causing great damage.

Mortar—A short cannon of extra large bore shooting a bomb filled with high-explosive. Very effective at short range.

Outpost—A guard placed at some distance from an encamped army to prevent surprise attacks.

Periscope—A device by which you can look over the top of a trench without being shot at. Practically the same as that on a submarine.

Sentinel—A soldier placed on guard to prevent attack by giving warning when such impends.

Slacker—A fellow of military age without gumption and courage enough to serve his country in the army. Don't be one.

Sniper—An expert rifleman who is detailed to pick off enemy soldiers, one by one, from a sheltered position.

Strafe—The German word for punish. Largely used by the English.

Star Bomb—A bomb shot from a cannon for illumination at night. Similar to a flare.

Swank-English slang for pep.

Tank—A huge caterpillar, enclosed and armored heavily, carrying light guns. It stops at nothing, and nothing can stop it. It is an English invention.

| About face, 40 Action, bolt, 86 Aim, how to, 131 Armories, 13 Arm signals, 103-112 ARMY: A mistaken idea of, 22 | Barrage, 201 Battalion, commanded by major, 25 Bay, 202 BAYONET: Description of, 86 Fighting, first principles |
|---|---|
| As it really is, 23 Enlisted men in, 30 Field, 25 French, 5 German, 6 | of, 135 Parts of body where thrusts are effective, 137 Practice, 138 |
| How war changes needs of, 6 National, 15 Obedience in, 31 Regular, 15 Regulation piece of, 85 | Blankets, on washing, 172 Bolt action, 86 Bordentown Military Academy, 11 Bowie, Jim, 1 Boys in Confederate Army, |
| Spirit of, 30 Army corps, about, 28 Assemble march, 60, 84 Assemble to the right, 60 (or left) march, 60 As skirmishers guide right (or left or center) | Brains of army, 23 Brigade, commanded by brigadier-general, 25 Brigades, divisional, 25 Brigadier-general, 25 Butt, heel and toe of, 88 |
| march, 81, 82 As skirmishers march, 61 At ease, 43 Attention, how to stand at, 37 Aviation Section of Signal | By the right (or left) flank march, 42 Cadet corps, 12 CAMPAIGN: Military, 139 |
| Corps, 161 Backward march, 42 Barbed wire, 200 | Trapping, 139 Canteen, 201 Captain, company commander, 25 |

| Caterpillar, 202 | COMPANY: |
|----------------------------|-----------------------------|
| Change step march, 43 | Sergeant, n o n - commis |
| Close ranks march, 59 | sioned officer, 25 |
| CODE: | Squads in, 26 |
| Dots and dashes of Gen- | COMPULSORY MILI |
| eral Service, 122 | TARY TRAINING |
| General Service, 118 | How it helps you, 7 |
| International Morse (see | Slater Law, 14 |
| General Service) | Confederate Army, boys in |
| Two-arm Semaphore, 114, | 7 |
| 115 | Contour maps, 142, 143, 155 |
| Colleges, State, 11 | Corporal, non-commis |
| Colonel, commander of reg- | sioned officer, 26 |
| iment, 25 | CORPS: |
| Column right (or left) | About army, 28 |
| march, 74 | Cadet, 12 |
| COMMANDS: | Engineer, 28 |
| About giving, 38 | Hospital, 29 |
| Of execution, 38 | How to get commission |
| Preparatory, 38 | in, 29 |
| COMMISSIÓN: | Medical, 29 |
| How you can get a, 29, | Signal, 29 |
| 159 | Some other, 29 |
| West Point, 163 | Count off, 51 |
| Y. M. C. A. courses as an | COUNTŔŸ: |
| aid to getting a, 163 | How it protects you, 3 |
| Commissioned officers, 30 | How to serve best, 8 |
| COMPANY: | Why you must fight for |
| Commanded by captain, | 4 |
| . 25 | Covering, 51 |
| Corporal, non-commis- | Crack shot, why you should |
| sioned officer, 25 | become one, 124 |
| Divisions, 25 | Crockett, 2 |
| Duties of officers, 64 | Curtain fire, 202 |
| How formed, 66 | |
| Lieutenant, officer in, 25 | |
| Movements, 69 | Deploy, 49 |
| Officers, 25, 64 | Direction, how to know, |
| Platoon, division of, 26 | 149, 150 |
| Right (or left) march, 69 | Distance, estimating, 134, |
| School of, 63 | 135 |

Division, commanded by major-general, 25
Divisional brigade, 25
Do, what you can, 158
Double time march, 41
DRILLS:
How to practice, 45
Value of, 48
Dugout, 183, 184, 201

Educated, why an officer
must be, 6
Engineer corps, 28
England, Mistress of the
Seas, 5
Enlisted men, 30
Enlistment period, State
Guard, 13
Equipment of an officer, 174
Examination, physical, how
to pass, 15
Eyes right (or left), 44

Fall in, 66 FIELD ARMY: Commanded by lieutenant-general, 25 Its officers, 25 Field pieces, 201 Fight, why you must, 4 File, what it is, 48 Fire curtain, 189 Fire, how to, 132 Fire trench, 201 First aid to wounded, 192 Fix bayonet, 100 Flags, how to signal with, Flank, right and left, 51 Flare pistol, 201 Flinching, 134

Forming a squad, 50 Forward march, 40 France, army of, 5 Front, 53

Gas, 202
Gas mask, 202
General Staff, 23
Germany, army of, 5
Germans, how a trained army stopped the, 5
Grade, how to tell an officer's, 27
GUARD:
Advance, 181
Home, 12
National, 12
State, 13

Half step march, 42
Halt, 43
Hand salute, 45
High school education, why
you must have, 156
Head, how bandaged, 194
Headquarters, 25
Health, about your, 196
Hero of olden days, the, 2
Home Guard, 12
Housewife, 202

Independence, War of, I Insignia of non-commissioned officers, 66 Inspection arms, 99

Junior Plattsburg Camp, 11

Kidd, William, 1 Kit, mess, 171 Kneeling firing position, 125

Military Academy, New Left face, 39 Left shoulder arms, 97 York, 11 Lieutenant, officer of a com-Military Academy, St. John's, 11 pany, 25 Lieutenant-general, com-Military Institute, Virginia, mander of field army, Military schools, about, 10 MILITARY TRAINING: Liquid fire, 202 Local organizations, 12 High Schools, 14 Proper, 6 Regular Army, 15 Slater Law, 14 Machine gun, 202 Major, commander of bat-State Colleges, 11 State Guard, 13 talion, 25 West Point, 15 Major-general, commander of division, 25 Mills bomb, 202 Mine, 203 Make-up of a squad, 48 MAP MAKING: Mistress of the Seas, Eng-Culture symbols, 152 land, 5 Vegetational symbols, 155 Mortar, 204 MOVEMENTS: Water symbols, 153 MAPS: Company, 69 Company similar to Contour, 142 Hatchure, 141, 150 How to tell direction, Squad, 63 How to practice, 45 149-150 How to tell scale, 149 National Army, 15 Kinds in military use, 141 National Guard, 12 National organizations, 15 Learning to read, 142 Profile, 144 Navy, England's, 5 Symbols used in making, Need of officers, 6 New York Military Acad-151-154 Value to an army, 139, emy, 11 Non-commissioned officers, 148 Where to buy, 155 26, 30, 66 Marching, about, 177-181 Marion, 2

Obedience in army, 31 OFFICERS: Commissioned, 30 Equipment, 174 Field army, 26

Mark time march, 42

town, II

Military Academy, Borden-

Mess kit, 171

| OFFICERS: How to care for equipment, 174 How to tell grade, 27 Must be educated, 6 Our need of, 6 On right (or left) into line march, 77 Open ranks march, 59 Order arms, 90, 93 | PIECE: Magazine, 87 Magazine-spring, 87 Mainspring, 87 Rear sight, 128 Regulation army, 85 Sear, 87 Trigger of, 87 Pistol shooting, 133 Platoons column right (or |
|--|---|
| ORGANIZATIONS: | left) march, 77 |
| Local, 12 | Platoons right (or left) |
| National, 15 | march, 72 |
| State, 12 | Platoon of squads, 26 |
| Outpost, 203 Over the top, 187 | Port arms, 92 Present arms, 90 |
| over the top, 10, | Princess Pat's Regiment, |
| Pack, care of, 172 | 176 |
| Parade rest, 43, 93 | Profile map, how to draw, |
| Peep sight, how to adjust, | 146 · |
| Periscope, 203 | Prone firing position, 125 |
| Perry, 2 | Quick time march, 41 |
| Physical examination, how | Ranks, front and rear, 48 |
| to pass, 15-19 | Regiment, commanded by |
| PIECE: | colonel, 25 |
| Barrel, 88 Bolt, 87 | Regular Army, physical ex- |
| Bolt and cocking-piece, 88 | amination, 15-19 Rest, 43 |
| Bullet, jacket for, 88 | Revolver shooting, 133 |
| Butt, 88 | RIFLE: |
| Cartridge, 88 | Cleaning, 168-171 |
| Cocking-piece, 87 Ejector, 87 | Firing positions, 125 How to load and fire, 86 |
| Firing-pin, 87 | Metal fouling, 170 |
| Forearm, 88 | Parts of (see Piece) |
| How to hold for bayonet | Powder fouling, 169 |
| fighting, 136 | Salute, 99 |
| How loaded and fired, 86- | U. S. Magazine Model |
| 88 Important parts of, 88 | Right (or left) dress, 52 |
| important parts or, co | reight (or left) dress, 32 |

| Right face, 38 Right (or left) front into line march, 79 Right (or left) half face, 39 Right (or left) oblique march, 53 Right shoulder arms, 94 Right (or left) step march, 42 Right (or left) turn march, 58, 74 Roughing it, hints on, 198 Scale of maps, how to tell, 149 Schoolboys, compulsory military training for, 7, 8 Schools, military, 10 Semaphore, Two-arm Code, 113 Sentinel, 203 Sergeant, non-commissioned officer, 25 Shooting, pistol and revolver, 133 Shrapnel, 183 SIGHT: Battle, 130 Bead, 131 Closed, 130 How to, 131 Peep, 130 Rear, 128 SIGNAL CORPS: Aviation Section, 29 Described, 29 How to get a commission | Special training, value of, 157 Splints, 194 SQUAD: Drilling a, 50 Forming a, 50 Left march, 57 Make-up of, 48 Right march, 55 Right (or left) about march, 58' School of, 48 What it is, 48 SQUADS: Right (or left), column right (or left), march, 77 Right (or left) march, 72 Squeeze, Trigger, 132 St. John's Military Acad- |
|--|---|
| Aviation Section, 29 | Squeeze, Trigger, 132 |
| Described, 29 How to get a commission | St. John's Military Academy, 11 |
| in, 158 | Staff, General, 23 |
| Radio, 29 Telegraph, 29 | Standing firing position, 125 Star bomb, 204 |
| | • |

STATE: TRENCH: Colleges, 11 Cross-section of, 184 Guards, 13 Described, 181-183 Organizations, 12 Trenches, how opposing are Stock, small of, 88 laid out, 185 Strafe, 203 Swank, 203 UNIFORM: SYMBOLS: About your, 164, 166 Culture, 152 How to clean and care Used for map making, for, 165 151-154 How to get into, 35 Vegetational, 154 Washing leggings, 165 Uniformed, about being Water Feature, 153 neatly, 34 Take distance march, 60 Unfix bayonet, 100 Take interval to the right (or left) march, 59 Tank, 203 Virginia Military Institute, Temper, on keeping your, Terms you should know the meaning of, 200 War, how it changes army To the rear march, 43 needs, 6 Tourniquet, 193 Washington, 2 Trail arms, 98 Water-moccasin, 1 Trained army, how it Weight, how to pass physistopped the Germans, cal examination, 19 West Point, 15 Why you should be a Trained soldier, why you should be a, 2 TRAINING, MILITARY: trained soldier, 2 Williams, Capt. John Hod-Compulsory, 7 der, 177 Windage, how to correct for, 129 Proper, 6 Value of special, 157 Will help you, 8 Wounded man, how to Trigger squeeze, 132 carry, 195

