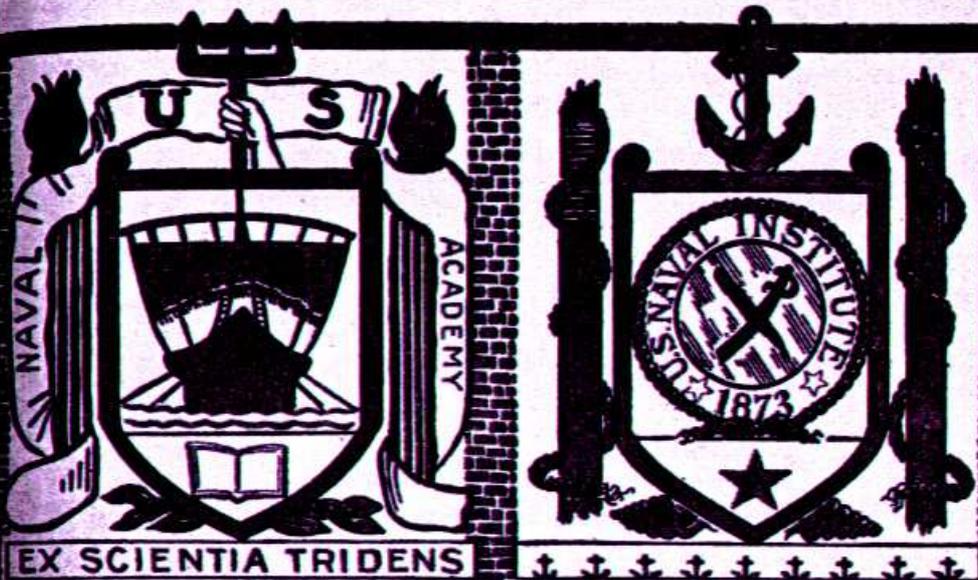


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SABRE AND BAYONET

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SABRE and BAYONET¹

By Civil Engineer A. C. Cunningham, U. S. Navy.

Until within a couple of years the sabre and bayonet had become be regarded in the United States Service as practically obsolete weapons. Probably their estimated value as weapons reached lowest ebb during the Boer War, for in that conflict the Boers were not only seldom within hand reach, but seldom even in plain sight.

A tendency to underestimate the sabre and bayonet in the United States is a natural one. For many years our only conflicts were with hostile Indians who were so successful in evading personal encounter that the sabre and bayonet came to seem encumbrances. Improvement in firearms has been the strongest against hand to hand weapons, for with increased rapidity and accuracy of fire it has become almost suicidal to venture into the open when near the enemy.

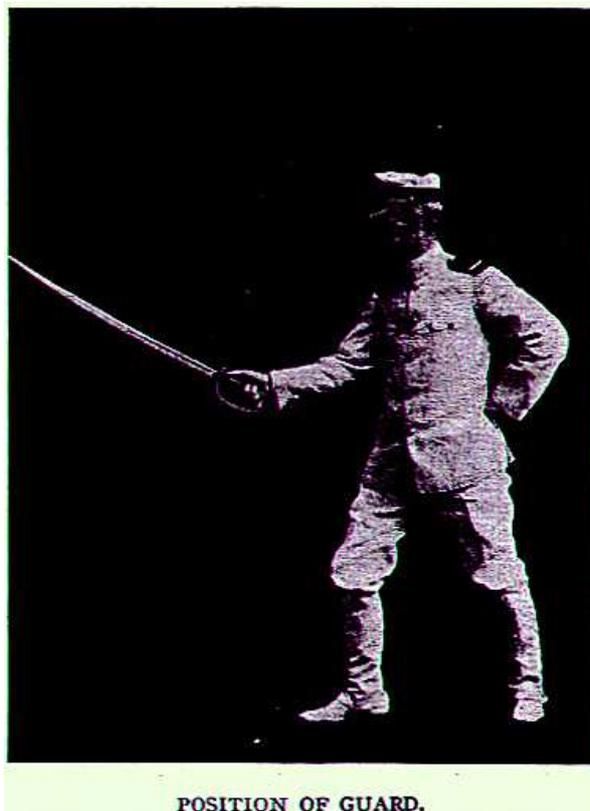
In the United States the sword has never been a part of every man's personal and necessary equipment as it was in more ancient times in Europe, and consequently there has been no individual sentiment and association connected with it. The bayonet is a

¹ The illustrations of this article were posed for by the author, the new army cavalry sabre and the new army rifle with 16-inch bayonet being used.
Harris & Ewing, photographers

comparatively modern weapon, having originated in Bayonne the latter part of 1600 and has no individual association to create sentiment in its favor.

Notwithstanding the increasing opinion that the sabre and bayonet were obsolete, the influence and counsel of a few wise minds had saved them from extinction. The fact that a bayonet could be used as an intrenching tool helped save that, and that other nations retained the sabre for, at least, what had been accomplished with it, may have had some influence in the case.

The results of the Russo-Japanese War have entirely changed the prevailing ideas regarding sabres and bayonets, for this conflict was between combatants who did not evade hand to hand encounters when opportunity offered. It was early discovered in

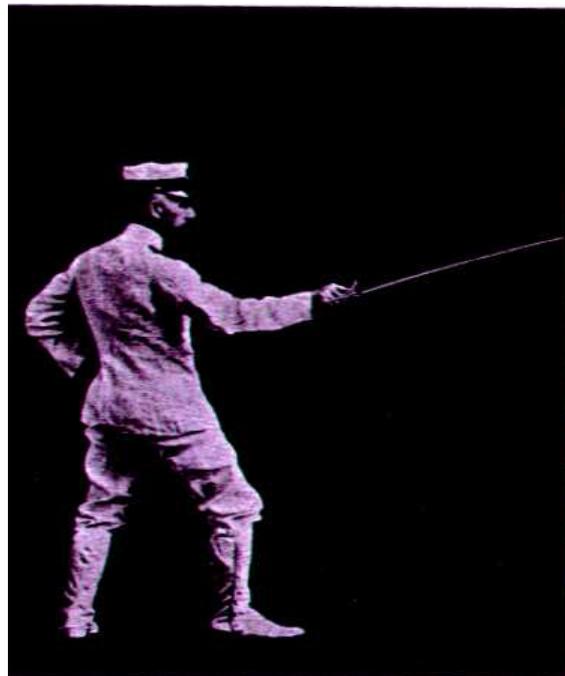


this war that the retarding effect of rapid and accurate gun-fire did not exist under cover of darkness, and that hand to hand conflicts could be precipitated at night. When such an affair occurs the side that is the best armed and trained for it will be victorious.

It is quite generally regarded that cavalry, as such, will be of little importance in modern wars but of considerable, regarded as mounted infantry. Perhaps I will be well not to pass final - judgment in this case also, as long as horses exist. In completing the rout of an enemy and effecting captures, cavalry certainly becomes of the first importance and much of this work can be done with the sabre while it continues to exist.

The bolo of the Philipino seems to the American an outlandish weapon and his method of using it without formulated system. The bolo, however, is to be classified with the sabre and the Philipino's method is what is known to swordsmen as "timing." Timing is common to all savages, and especially those who use shields; it is the fundamental principle of swordsmanship of taking advantage of an opening, and when highly cultivated, becomes extremely dangerous to a less trained adversary. The advanced swordsman not only "times" on opportunity but makes opportunity by parries and feints.

In spite of the lessons of the Russo-Japanese War the United



POSITION OF ENGAGE RIGHT.

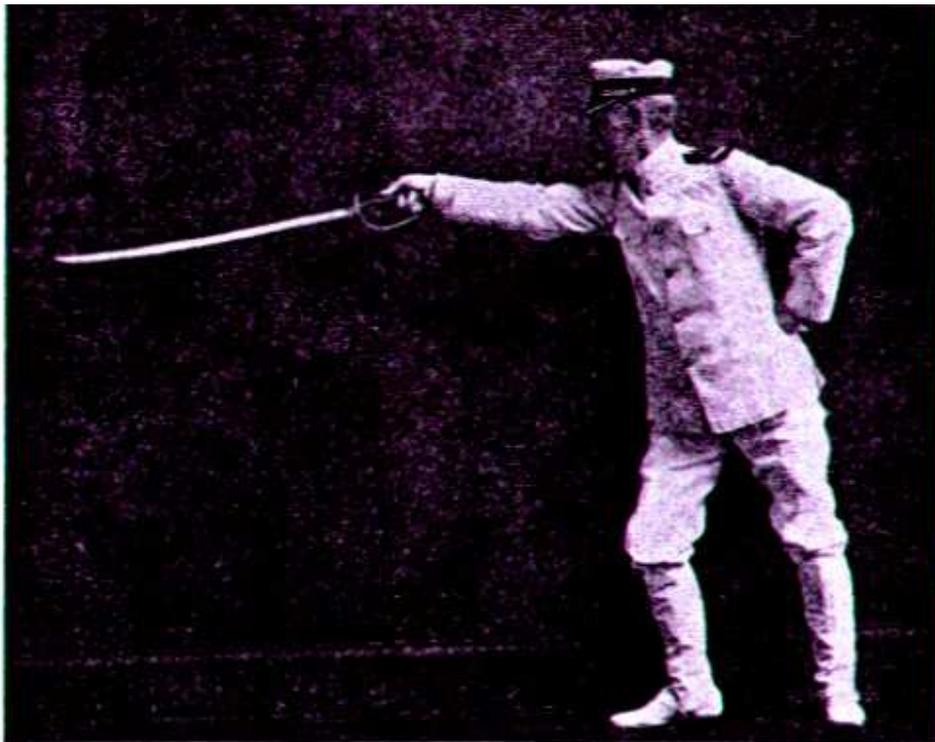
States army bayonet was about to degenerate into a simple prod called a rod bayonet when President Roosevelt, after personal investigation, called a halt and ordered the design of a bayonet of the first class. With great thoroughness he at the same time ordered the design of first class swords for both the army and navy. A joint board left the matter in the hands of the army where it remains at present.



POSITION OF ENGAGE LEFT.

The development of the bayonet is interesting. At first it was purely a prod inserted in the muzzle of a musket when action became too close to permit of further loading; a variation and improvement on this type was a dagger with a hollow handle that went over the muzzle of the musket. The next stage was the fixing of the prod to the muzzle with two side rings which permitted the musket to be fired with the bayonet fixed. This naturally developed into what we know as the triangular or Springfield bayonet in which the prod is carried farther from the muzzle by a shank.

As the prod or stabbing type of bayonet is not the best sort of a hand weapon, the last general development took the form of the knife and the sword bayonet. At first bayonets were fixed on the side of the musket barrels, but as accuracy of fire developed it was recognized that this tended to turn the barrel in aiming, and they are now fixed on the bottom. In developing the bayonet



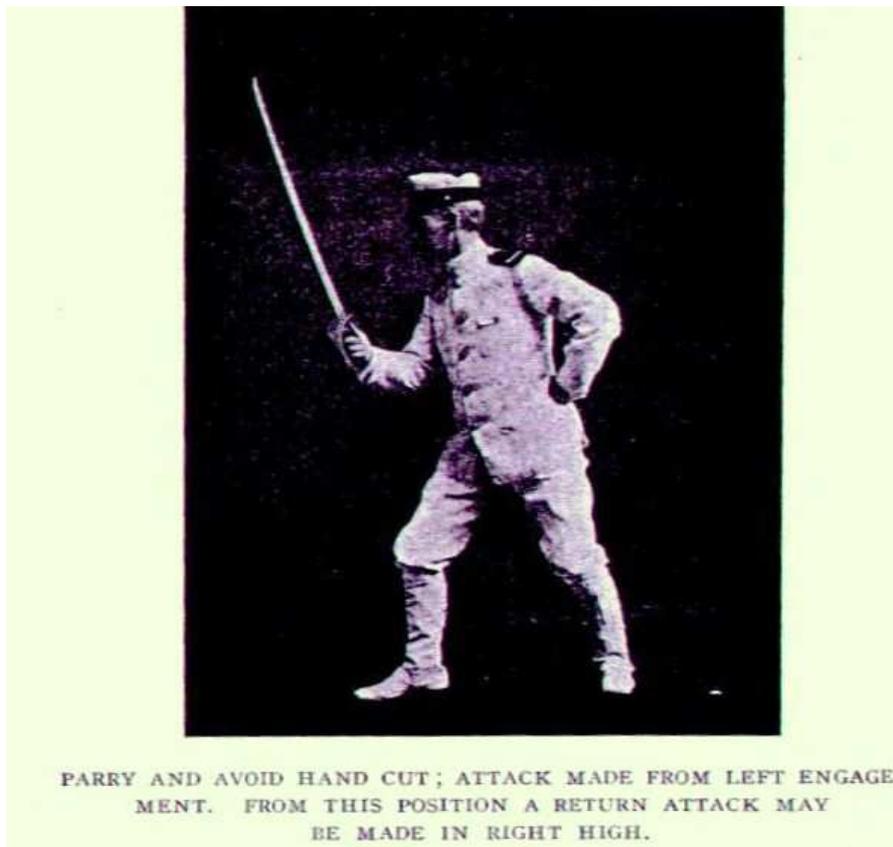
CUT AT THE HAND. EXTENSION WITHOUT LUNGE. EXECUTED FROM THE POSITIONS OF GUARD, ENGAGE RIGHT, OR ENGAGE LEFT.

into a hand weapon as well, undue dimensions and weight have at times been given to it, but in good proportions and design not only an efficient hand weapon is secured, but a better bayonet as well. During the development of the bayonet it has been sought to combine with it at times the properties of various tools, but these efforts have made no permanent impression.

There had been no development in American swords until President Roosevelt's order. The United States cavalry sabre was of uncertain origin and antedates the Civil

War; it had a long, heavy, dull blade, effective only in rough assault, and entirely unsuited to defensive purposes or true swordsmanship. The new army sabre has a much lighter and balanced blade which is sharp on the point and front edge, and part way down the back; it is well hilted, has the most effective grip yet designed for a sabre, and it is well suited for both attack and defense. There are three lengths of blades for various service.

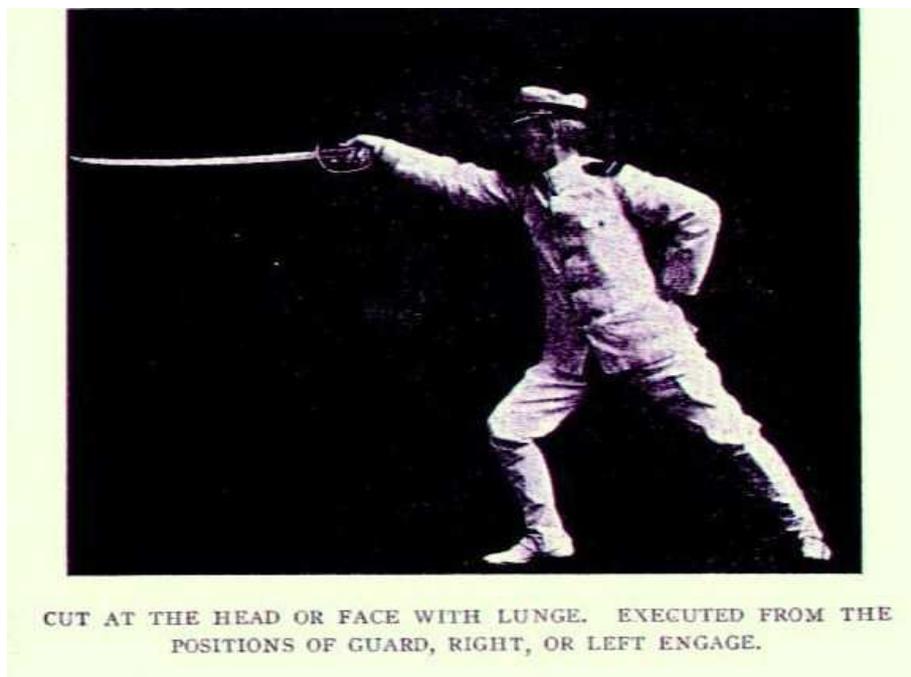
The United States navy cutlass dates from the Civil War. It



has a short heavy blade suited to rough assault and defense. The hilt is very poor it is over guarded on one side with a half basket and much exposed on the top and the other side; the grip is of such a shape and size that combined with the guard, the weapon can only be used effectively after the manner of a club. It should be replaced with the new army sabre having the shorter blade.

Officers' swords in both the army and navy and marine corps have degenerated into little more than ornamental badges of authority, and in the navy they have been abandoned for even this, except on occasion of ceremony, having been replaced by the revolver. In the army hereafter, officers will use the new saber as issued to the general service.

The fact developed by the Russo-Japanese War that sabers and bayonets may still be of some use and are of too much value to be abandoned, leads to the consideration of their most effective use.



The history of the sword shows that its skillful use has been mostly controlled by sword masters who have associated themselves into various schools. The art of fencing has been made complicated and tedious and its acquirement a slow and laborious process. Even yet there are some who may believe that there were secret and special attacks which gave their possessors great advantage. Fencing has gradually freed itself from its mysteries and complications, but is still a matter for sword masters and the fencing hall, and no strictly military system free from these matters has as yet been developed.

A military system of fencing should be simple, effective, and quickly and easily learned. Its transmission should be possible without a fencing master, and its principles so simple and correct that even one not greatly skilled can teach others to become skillful.

No disparagement of existing standard methods or schools is intended whatever. They are most excellent and admirable, but are truly for the expert specialist in his natural field, the fencing hall. The more highly specialized fencing becomes the greater are the number of rules limiting what may be done and the area of attack and defense. The more intricate the art the less does the tool used resemble a true weapon of warfare, and the more nearly alike must they be, until we reach the slender French foil, the use of which in its greatest perfection makes only point touches on less than half the torso.

In warfare there are no rules and limitations nor choice of adversaries, weapons or place, and it takes but little thought to see that fencing hall work does not alone fully fit one for the field.

Anyone who has carefully watched a fencing contest has noted that when hard pushed even the most accomplished fencers will resort to any movement that will defend themselves, and that an aggressive man with an unrecognized and apparently wild and irregular attack is harder to keep off than an expert. These irregular touches are easily healed in the fencing room with the balm that "they are atrociously bad form;" when made with a bolo by a savage they need a surgeon. With these ideas in view the following systems are submitted:

THE SABRE.

A MANUAL AND EXPLANATION OF ATTACK AND DEFENSE WITH THE SABRE FOR FOOTMEN.

This system is based on what may be called a natural or instinctive method, and the expansions which would most naturally follow from experience and observation. It is instinctive to strike with a club and a matter of cultivation to thrust with the end. It is instinctive to first dodge a blow and next to turn it aside.

In this system the attacks are made by cuts and thrusts, the cuts developing planes or warped surfaces, and the thrusts developing lines, straight or curved. In this respect all systems are similar.

The defense is made by the partial development of a variable cone, or cones, the base being away from the body. In other systems the defense is made by the development of planes or warped surfaces after more or less intricate and unnatural motions.

No originality is claimed for this cone of defense, simply due and just recognition. The experts of all systems will resort to the cone of defense when hard pressed and their own system fails to be effective.

When a line or surface of attack is developed and is brought to intersection with a cone of defense before landing, the defense is effective and may be repeated or the attack reversed. The cones of defense are developed away from the body.

The attack and defense are distinguished as right and left, high or low.

From this general description of the proposed system the following manual and explanations will be readily comprehended and mastered by even those who have given no great attention to swordsmanship.

In the following manual no foreign or technical words are used. Opponents are designated (1) and (2) and the command for execution is the conventional word, Hep. The instructor will first name each motion, or combination of motions and then explain and illustrate the same. As a class progresses, explanations and illustrations will become less necessary, and the correction of errors and perfecting of motions will become the principal concern. The fewer the men in a class the greater the attention that can be given to each individual. With beginners it is preferable that individual instruction should first be given by more experienced men, if possible. The motions having been executed by (1) and (2) should be reversed and executed by (2) and (1). At the completion of each motion the position of guard should be resumed without further command. The fact should be recognized from the start that the work is of an individual nature and that the perfection of the individual is the object desired. Correct

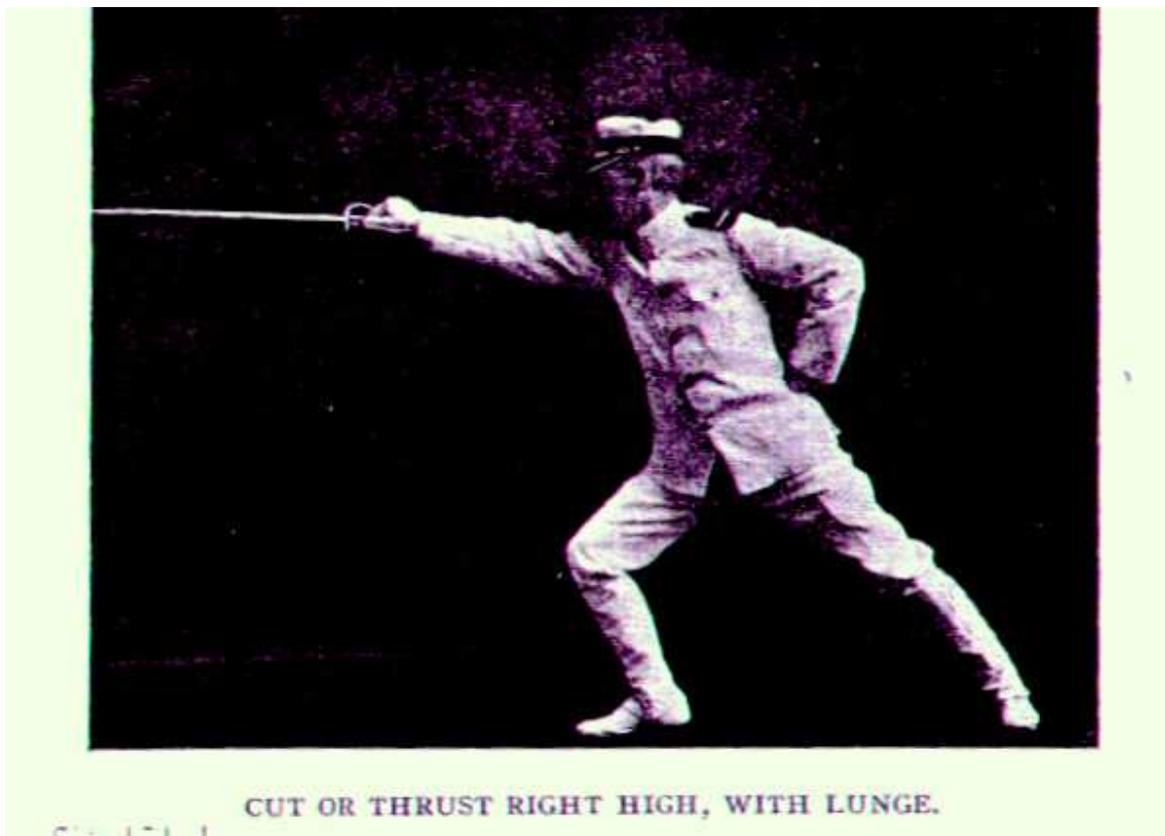
understanding and execution should be the aim rather than entire uniformity and the reduction of the matter to a mere form of drill. With the exercise of patience and encouragement the matter will soon become of interest to the pupils and rapid progress will result.

The men are first deployed, by infantry tactics, in two lines facing each other at a distance of about 10 feet, and with about 6 feet between the couples engaged, sabres at carry, order, or porte arms. With beginners the motions are executed deliberately at first until understood and perfected; speed is then increased as rapidly as possible.

Sabre Manual.

(1) and (2), guard (front or rear), Hep!

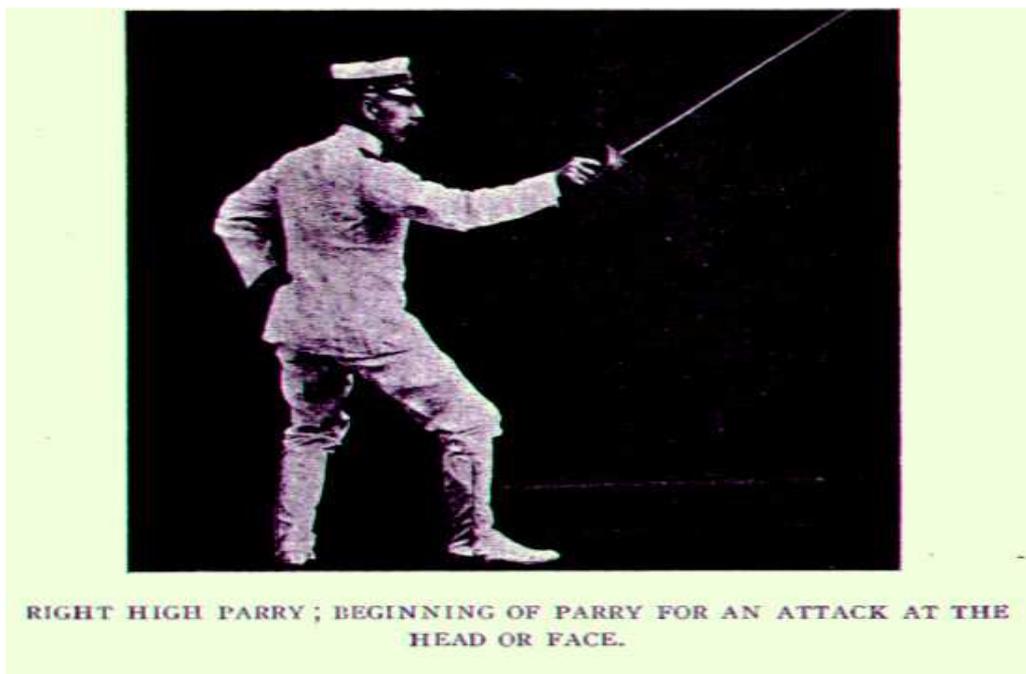
Half face to left; advance the right foot or retreat the left,



according as an open or close distance is desired, until the heels are about one foot apart and approximately on the line connecting opponents: feet at an angle of not greater than ninety degrees; sabre held firmly in right hand with thumb on back of grip; edge down; right hand about height of waist; elbow about six inches in front of hip; point at height of chin; left hand on hip and left elbow well back. An unknown opponent may take this or some other guard, but from this position you are always ready for action. Take account of the ground you are on and its peculiarities. From the time you are on guard and within reach watch carefully and constantly your opponent's sword and sword arm; do not watch his eye.

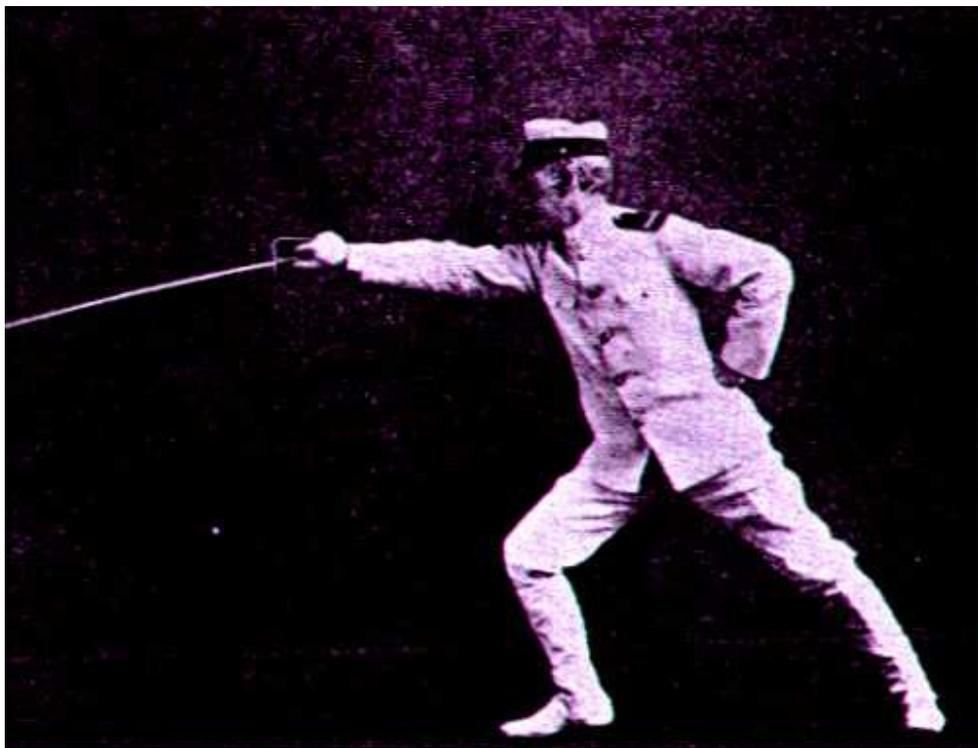
(1) and (2), engage right (or left), Hep!

From the position of guard the edges of the sabre are turned to the right (or left) and brought into contact, the blades crossing at about the outer third of their length. (1) takes the initiative, passing his blade over that of (2) if the latter's blade is low, or under if it is high. In right engage the hand is about in



line with the right side of the body and the blade inclines slightly to the left; in left engage the hand is about in line with the left side of the body and the blade inclines slightly to the right. Right engage is the standard initial position of the fencing hall: it closes one line of attack and the feeling of the blades gives some intimation of intended action. An unknown opponent cannot be forced into a continuous engagement, if unwilling. A continuous engagement will greatly dull the edge of a sharpened sword. Before making an attack it is essential to know on which side of your opponent's blade your own is located, and this is the main reason for an engagement. Opponents should accustom themselves to attack and defense, both from the positions of guard and engagement.

All of the following motions and combinations may be executed from the positions of guard or engagement. In the manual an engagement is indicated to insure the correct relative position of blades.



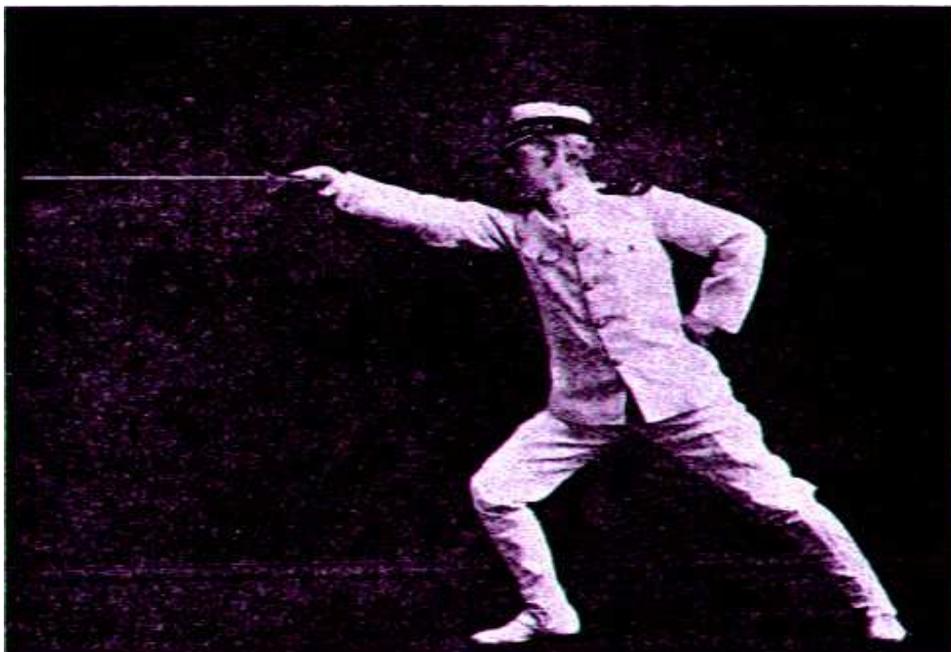
CUT OR THRUST RIGHT LOW, WITH LUNGE.

(1), cut at the hand (down, right, or left);

(2), parry or evade, Hep!

Executed from the positions of guard or engagement. (1) makes a quick snapping cut at the hand of opponent without raising the point. (2) raises his point to receive the cut on cross plate at the same time turning the knuckle guard to the side from which cut comes. When well executed this cut comes so quickly and with so little indication that it will generally have to be avoided by quickly drawing the hand back out of reach.

This hand cut is frequently prohibited and never encouraged in the fencing hall, as it tends to neutralize the more complicated and interesting sword play. The guards on practice sabres are also very much larger and more extensive than the service conditions of a military sabre will permit, and in consequence of these conditions very few amateur fencers give any consideration to attacking or defending the hand. To a military fencer disabling his opponent takes precedence over a showy display of swordsmanship, and the sooner and easier he can be put out of action the better. This hand cut should be frequently practiced



CUT OR THRUST LEFT HIGH, WITH LUNGE.

until the fencer has it so well fixed in mind that he is always prepared to deliver or receive it.

From the guard on an unknown opponent's sword, some idea of his method may be inferred. If his sword has little or no guard he will not be likely to offer opposition, will dodge in preference to parrying, will keep a good distance and make rush attacks when an opening is presented. If his sword has a fair or good guard he is more likely to offer opposition, parry instead of dodging, and make direct attacks. In this manual both methods have consideration.

(1) and (2), engage right, Hep!

(1), cut (or thrust) left high with lunge;

(2), parry left high, Hep!

From the right engagement (1) passes his blade over the point of opponent's blade, turning the edge to the left, extending the arm and leaning forward with the body. Any part of the opponent's left side from the head to the waist is attacked. The point attacked remaining open, the right foot is quickly advanced to increase the reach, the left leg being extended at the same time. The advance of the right foot, or lunge, should be moderate and not in excess of a point from which the position of guard can be quickly recovered. By keeping the right foot back of the knee a stronger spring can be made in recovering. The left foot preferably remains flat and in place. The passing of the blade and the extension is one continuous motion instantly followed by the advance, or lunge, if it appears that the attack will be successful. Whether the attack is a cut or a thrust will be a matter of choice and judgment. The point attacked remaining open as the lunge is made, a cut may be converted into a thrust by moving the point in. Thrusts, as a rule, are more effective and deadly than cuts, but require more accuracy and skill, and do not demand as strong a parry.

As (1) passes and extends his blade (2) will turn his edge to the left moving his hand to the left line of the body at the same time; the attack being continued (2) will

make a conical motion with his blade engaging the blade of opponent and throwing it off and downward. During the contact of a successful parry the attacking blade is no longer under the complete control of its owner.

Whether an attack is successful or not the one delivering it will resume the position of guard as rapidly as possible.

Cuts in general are preferably delivered with a quick snapping wrist motion, and with a sharp blade are very effective. Full arm and swinging cuts may be of advantage at times when a sure opening has been secured, but as a rule they are strongly indicated to the opponent and give time for evasion or the possibility of placing a quick stop attack before the swinging cut has landed. As the motions become familiar and understood the commands for execution may be abbreviated, the foregoing, for instance, becoming:

Engage right; (1) attack left high, (2) parry, Hep!

(1) and (2), engage right, Hep!

(1), cut or thrust left low with lunge;

(2), parry left low, Hep!

Executed in a similar manner to left high, except that the attack is directed to a point from the waist downwards. It will seldom be advisable to attack below the knee. In the parry the hand should be carried lower than in left high, and the attacking blade may be carried well down by extending the arm and depressing the body, thus causing a large opening on the opponent for a quick return attack. When this parry is well made on a



LEFT LOW PARRY ; FINISHED EXTREMELY LOW FOR A STRONG RETURN ATTACK OR DECEPTION IN RIGHT HIGH.

strong attack, the attacking blade is quite helpless for an appreciable time. The strongest parries are made with the portion of the blade nearest the guard, and should be so made as far a possible.

(1) and (2), engage left, Hep!

(1), cut or thrust right high with lunge;

(2), parry right high, Hep!

(1) and (2), engage left, Hep!

(1), cut or thrust right low with lunge;

(2), parry right low, Hep!

These motions are executed in a similar manner to those previously described for the left side. If an opponent holds an unusually high guard the attacks in the low lines,

both right and left may be made by passing the point under instead of over the opponent's blade.

(1) and (2), guard, Hep!

(1), cut at the head or face with lunge;

(2), parry right (or left) high. Hep!

(1) extends and makes a short quick downward cut from the wrist at the head or face of opponent. (2) parries high right or left according to which side of the attacking blade his own may be on. This attack is used immediately upon coming on guard when the distance is moderate or short and may frequently be successful from the element of surprise in it where the opponent may be of a more deliberate nature. When the distance becomes short and there is no engagement existing this attack is also indicated.

(1) and (2), engage right, Hep!

(1), cut or thrust right low with lunge;

(2), parry right low, Hep!

From the right engagement (1) lowers his point directly on the right side for an attack anywhere below the guard of (2). This attack is particularly indicated when the opponent holds a high guard. In parrying (2) will move his hand to left, if necessary, to insure being on the inside of the attacking blade.

(1) and (2), engage left, Hep!

(1), cut or thrust left low with lunge;

(2), parry left low, Hep!

The movements are executed in a similar manner to those just described for the right side.

The motions so far described are single attacks and parries, and must be well understood before more complicated work can be made successful. An unskilled opponent may frequently be disabled by a single attack, and the ability of an unknown opponent may also be judged by one or two cautiously executed single attacks. With a skilled opponent a single attack will seldom be successful and also invites an immediate return attack. In consequence a skilled swordsman generally begins an attack with a deception, as follows:

(1) and (2), engage right, Hep!

(1), deceive left high and cut or thrust right high with lunge;

(2), parry left high and right high, Hep!

(1) starts a left attack with vigor and all the indications of completion, but without lunging. As (2) takes the left parry (1) changes his attack to the right and delivers it with a lunge. The success of this attack lies in securing a strong full parry from the opponent. As soon as it is seen that the parry will be made the attack is immediately changed before a contact is secured, the attacking blade being shifted under that of the opponent. When the attack is changed to the right (2) parries right if possible. A skilled swordsman will seldom be deceived into a full parry on a false attack. The sense of time and distance becomes so strongly developed that the parry is executed at the last instant necessary for protection. This deception is executed in a similar manner from the left engagement.

(1) and (2), engage right, Hep!

(1), deceive left high and cut or thrust right low with lunge;

(2), parry left high and right low, Hep!

Executed in a similar manner to the foregoing except that the real attack is directed to the low line instead of high. The parry is even more difficult for the final attack than in the preceding.

This deception is executed in a similar manner from the left engagement.

Deceptions in General

Unless an opponent responds well to a deception there is little use of continuing the attack. It being found that the opponent is fairly well versed in one deception, two may be attempted in different lines before the real attack. More than two deceptions are of little practical value. The object is, of course, to utilize the time that an opponent takes to parry one line to attack him in another.

When an opponent uses strong single attacks a skillful adversary will continue the necessary parry into a return attack which may be landed without lunging, as follows:

(1) and (2), engage right. Hep!

(1), cut or thrust left high with lunge;

(2), parry left high and return right high (or low);

(1), parry right high (or low), Hep!

(1) executes a full left attack, (2) executes a left parry carrying opponent's blade well down and without any pause in the motion executes a right cut at the most exposed part of adversary. The thrust is not used for this return as it involves a loss of time, and the opponent is also within easy cutting distance. (2) executes a right parry, if possible, before or while resuming guard. The motions are executed in a similar manner from the left engagement. The abbreviation for above command would be: Engage right; (1) attack left high, (2) parry and return, Hep!

These simple attacks may be executed with a view to securing a return attack from the opponent and then hitting him with a counter return, as follows:

- (1) and (2), engage right, Hep!**
- (1), left cut or thrust high with lunge,**
- (2), left parry high and return right high,**
- (1), right parry high and return left high,**
- (2), left parry high, Hep!**

(1) executes a full left attack but only with sufficient strength so that a return is invited; (2) executes a parry and right return which is delivered with strength; (1) remains in lunge, parties right and continues is to a strong left return; (2) parries left, if possible. The motions are executed in a similar manner from left engage.

The combinations of attacks, parties, deceptions, returns and counter returns that are possible are exceedingly numerous, but the principles of all are covered in the preceding descriptions, The practice of these motions between opponents will soon indicate the importance of a proper distance, and the manner of controlling it may be taught at any time as follows:

- (1) and (2), guard (front or rear), Hep!**
- (1), advance with right foot;**
- (2), retreat with left foot, Hep!**

(1) advances the right foot with caution about its own length and quickly follows with the left to position of guard. (2) carries back the left foot about its own length smartly and quickly follows with the right to the position of guard. The advance and retreat are indicated simultaneously here for practice only. The advance is used for securing an easier hitting distance. An attack should always be watched for as the advance is made. An advance may be covered by threatening attack at the same time. A

retreat is used for opening a dangerously close distance or for avoiding an attack when there may be uncertainty of parrying it. As it is taking the user out of reach it is made quickly and freely. Retreating to avoid attack should not become a habit in preference to parrying.

(1) and (2), guard (front or rear), Hep!

(1), advance with left foot;

(2), retreat with right foot, Hep!

(1) brings the left foot against the right and advances the right to position of guard. (2) carries the right foot back against the left and then the left back to the position of guard. This advance and retreat are for a different purpose than the preceding. The advance is a more cautious one and less likely to be observed. It may be reversed at any time before the right foot is moved. It may be converted into a lunge as soon as the left foot is placed, thus greatly increasing the previous reach, and may be the only way of reaching an opponent who insists upon a long distance. The retreat also more quickly carries the right leg out of hitting distance. It need not be completed, but the right foot may again be advanced to position of guard.

(1) and (2), guard (front or rear), Hep!

(1), advance passing left foot front,

(2), retreat passing right foot rear, Hep!

(1) passes the left foot to the front and left of right and quickly brings the right to position of guard, or attacks with lunge. (2) passes the right foot to the rear and right of left and quickly brings the left to position of guard. This advance and retreat cover still more ground than the preceding. The retreat is particularly valuable for avoiding a reckless attack.

(1) and (2), guard (front or rear), Hep!

(1) and (2), spring to the rear, Hep!

This is executed as a quick jump as far as may be without losing the balance or destroying the position of guard. It is used in emergencies or when surprised beyond control of the situation.

The mastery and understanding of the motions and movements described should readily fit the swordsman for undertaking or receiving more complicated attacks. The ordinary systems of swordsmanship do not encourage originality or independence and in this respect are at fault.

Special Cuts, Parries and Evasion.

As a saber is sharpened down the back some six or eight inches, some valuable attacks may be made with this edge, and such attacks should also be watched for and guarded against. If an opponent offers a feeble opposition in engagement his blade may be pressed aside and the attacking blade advanced inside his guard, making a cut with the back edge on the face or neck.

From the right engagement, especially if the opponent holds a high guard, the blade may possibly be passed under his guard and a hooking cut made on his wrist or forearm with the back edge.

Attacks on the left from the right engagement may at times be made with the back edge and point without turning the hand from the position of guard. Attacks on the right from the left engagement with the back edge should be sparingly used as they leave the arm much exposed to counter attack.

A high left attack may sometimes be parried with the back of the sabre without turning the hand, and permits of a very quick return attack in right high.

As a general rule all attacks should be parried. A high horizontal cut, however, may sometimes be evaded by quickly lowering the body on both legs, or by carrying the left leg backwards to the position of lunge, a low return attack being delivered at the

same time. The proceeding is attended with some risk and should be used sparingly and with caution.

Practice Assault.

Practice assaults should be made from the very beginning of the instruction under the supervision of the instructor. They should be limited to the motions learned and understood, including all that has been previously acquired. In no other manner can a competent swordsman be developed. The instruction by manual gives a previous knowledge of the attack that is to be met; in the assault the attack can only be judged and inferred as it is made and developed.. A competent defense becomes instinctive and without formulated thought for which there is no time, and as it is far more difficult to acquire than the attack, it should be carefully cultivated. The practice assault should sometimes be made with the service weapon, blunted and dulled, to accustom the adversaries to its weight, balance and feel; ordinarily, wooden sabres or more flexible practice sabres may be used; masks, gloves and padding are essential, not only for safety, but for the full development of the swordsman who will not work correctly when exposed to uncomfortable hits.

General Remarks.

Distance.-The distance between opponents is very important. If it is too short parries are very difficult. If too long, hits are easily avoided. Cautious swordsmen generally keep within long hitting distance and, if necessary, close when attacking. Generally, keep out of easy hitting distance, especially if the opponent has a longer weapon. If you have the shorter weapon, the opponent's attack should be induced and a hit made with a return attack while the opponent's body is advanced, if possible. If the opponent keeps a long distance watch him for a rush attack; if he seeks to constantly dose the distance, it may be possible to keep him off by threatened or false attacks.

Attacks.-The attack has the advantage against a poor opponent, and is at a disadvantage against a good one. One or two cautious attacks should be made to judge

an opponent's skill. Return and counter return attacks are more likely to secure a hit on an opponent of some skill than direct attacks. A good swordsman is seldom hit on direct attack; deceptions are used to induce a parry and the attack is then changed to an unprotected line. When the opponent parries with his point well down or up, or attacks with swinging or circular cuts, watch for an opportunity to cut his sword arm or hand. When an opponent's guard is held high, attack or deceive, in the low line, and when held low, the reverse. An opponent's blade may be pressed to one side to induce an attack on the other side.

Defense.-Whatever system or style your opponent uses, his object is necessarily, to avoid your attack and make a hit with his point or edge. If he uses a shield of any kind a direct attack on him should not be made. With a stronger opponent or one with an unknown method be cautious about engaging blades. Use parries as much as possible, but be always ready to retreat or dodge an attack. Attacks on the left side may be received on the back of an emptied revolver held in the left hand and a return attack made with the sabre at the same time. Do not make a full, strong parry until certain that a positive attack is delivered. No complicated attack can be made without your cooperation in parrying.

The Sabre Against a Fixed Bayonet.- A short sabre is of more advantage against a fixed bayonet than a long one, as the opponent cannot be reached on simple attack in any event, but only after getting inside his guard. A short sabre is a "quick" weapon and the best adapted to parries. Avoid engagement against a fixed bayonet, as the opponent has great leverage for throwing the sabre out of line. Keep only within long hitting distance of the bayonet. When the opponent hinges with the bayonet it is more easily thrown out of line with a parry and an opportunity may be made to close in and make a hit. It is possible to turn a bayonet out of line by strongly engaging with the sabre near the hilt; by then closing in and grasping the gun barrel near the muzzle with the left hand the opponent may be at once disabled. The opponent's left hand on the gun barrel is his most exposed and unprotected part and should be attacked whenever possible.

Actual Combat.- In single combat the principles of swordsmanship may be fully applied, but the recklessness and rush sometimes used in the practice assault may result in defeat. Superior parrying ability may decide a single combat as there will be seldom more than one hit necessary. When a good hit is made there will be no return from the opponent, such as are frequently made in practice assaults. In a melee, judgment alone must direct the proceedings of the swordsman, but a good knowledge of the principles of swordsmanship will be greatly to his advantage.

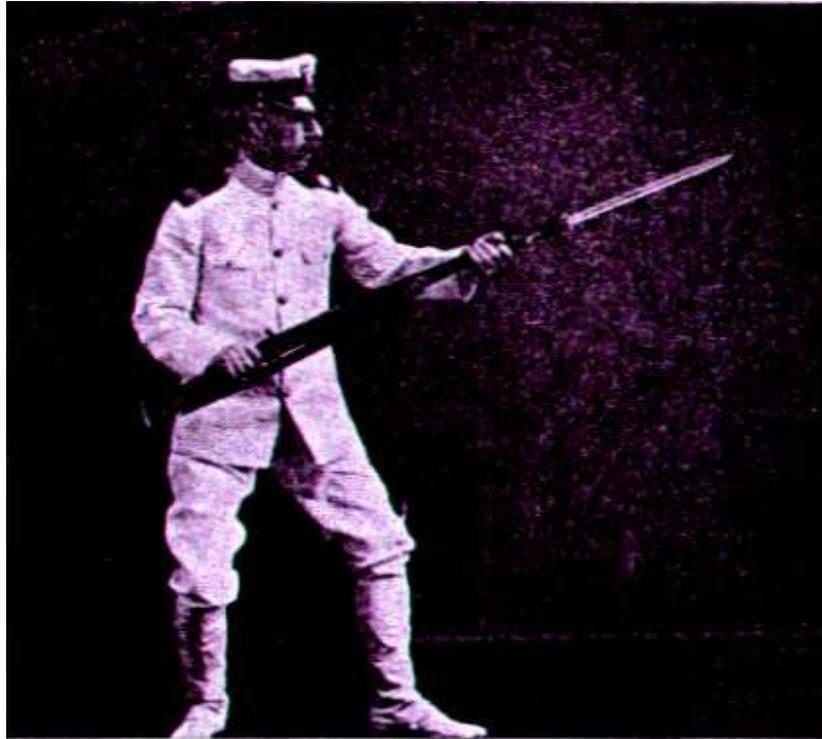
THE BAYONET.

Considered as a fencing weapon, a rifle with a fixed knife bayonet is a sort of crude combination and compromise between a quarter-staff, a spear, and a two-handed sword. It has all of the defects and a few of the advantages of these weapons, and if it were primarily or solely a fencing weapon there would be no excuse for its existence. The combination, however, is an incidental one, and in extension of the principal use of the rifle, and as such becomes of great importance.

The invention and adoption of the bayonet changed the military tactics and equipment of armies. In the face of muzzle loading, inaccurate, and slow firing muskets, bayonet charges have decided the result of engagements. Troops without high courage and strong motives cannot stand before a bayonet charge if it comes - within effective reach, and the latest facts are that it can be brought within effective reach under cover of darkness and silence, at least.

It has been previously pointed out how the practical military use of the sabre has been retarded by the monopolizing of the art of fencing by various schools of swordsmanship. Any one who in studying fencing has made a hit on his fencing master by some unexpected attack "not in the system," will recall the state of moral terror to which he was reduced for such proceeding, and the punishment he probably received "according to the system" for what was actually a success and to be encouraged.

As an actual fact the practical use of the bayonet has suffered



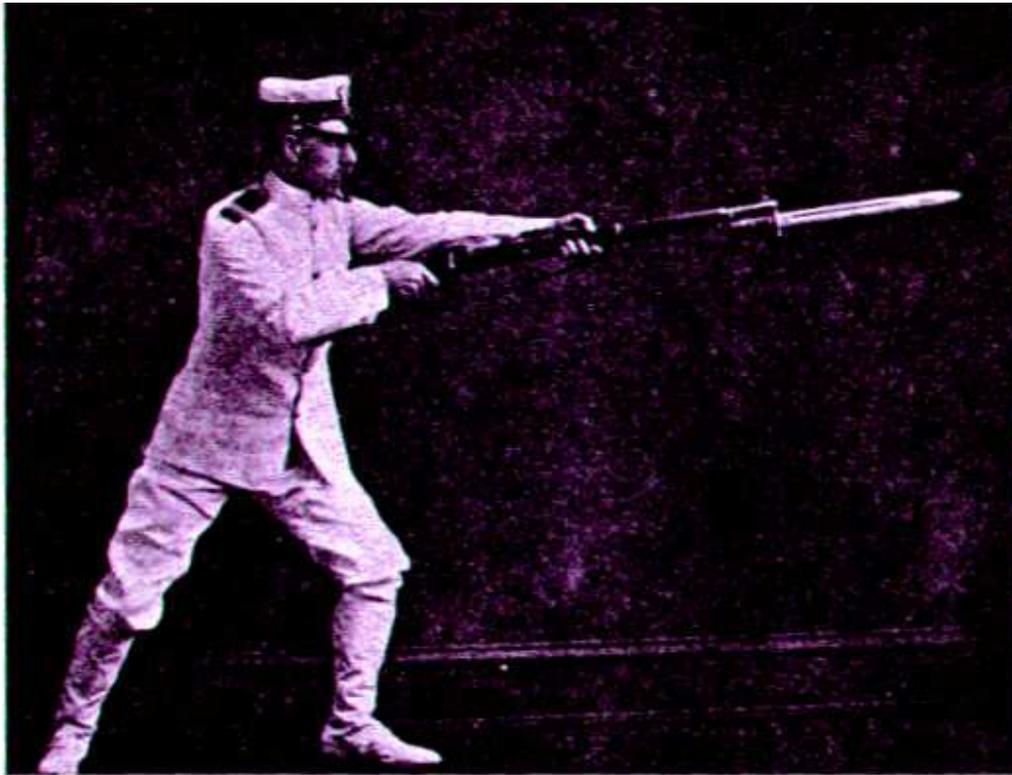
POSITION OF GUARD, SHORT.

more from the hands of military men than the sabre ever did from fencing masters; not the military men of to-day, but of the days when an attempt to move a body of troops while at order arms would have been considered an appalling display of inefficiency.

The manner in which the use of the bayonet has suffered has been in the attempts to reduce it to a purely military drill. A little thought will at once show that appearances have taken precedence over efficiency, and practical use. In addition to this, some experts of evidently unusual acrobatic power have at times introduced motions as ridiculous as they were impossible for the average soldier to perform.

Although the knife and sword bayonet have been in existence for many years, no generally used manual has ever yet recognized and provided for the use of the edge of the bayonet in cutting.

As long as we have the bayonet the most efficient work of which it is capable should be cultivated with it. The present popularity of the bayonet may be only a "flare up" before extinction, as so



CUT AT THE HEAD OR FACE, WITH LUNGE. EXECUTED FROM THE POSITIONS OF GUARD, RIGHT OR LEFT ENGAGEMENT.

many have predicted for such a long time. Even if the bayonet goes, however, we will still have the rifle left, and a rifle without a bayonet, when handled according to good bayonet manual, is a very formidable weapon.

In submitting the following bayonet manual full recognition is given to the point and edge, and especially the effectiveness of the latter. A strong similarity to the preceding sabre manual will be noted and the matters that are in common to both will be repeated as little as possible.

A MANUAL AND EXPLANATION OF ATTACK AND DEFENSE WITH THE FIXED KNIFE BAYONET.

Opponents are designated **(1)** and **(2)**, and the command for execution is the conventional word "Hep!" The motions having been executed between **(1)** and **(2)** should be reversed between **(2)** and **(1)**.

At drill or practice opponents are deployed in two lines facing each other, according to infantry tactics. The distance between opponents should be about four paces and between each pair of opponents sideways not less than three paces. The exercise may begin from order arms or porte arms with bayonets fixed. With beginners the motions are executed slowly at first until understood and perfected, after which speed is increased. The exercise is severe and fatiguing and caution should be used not to overdo it.

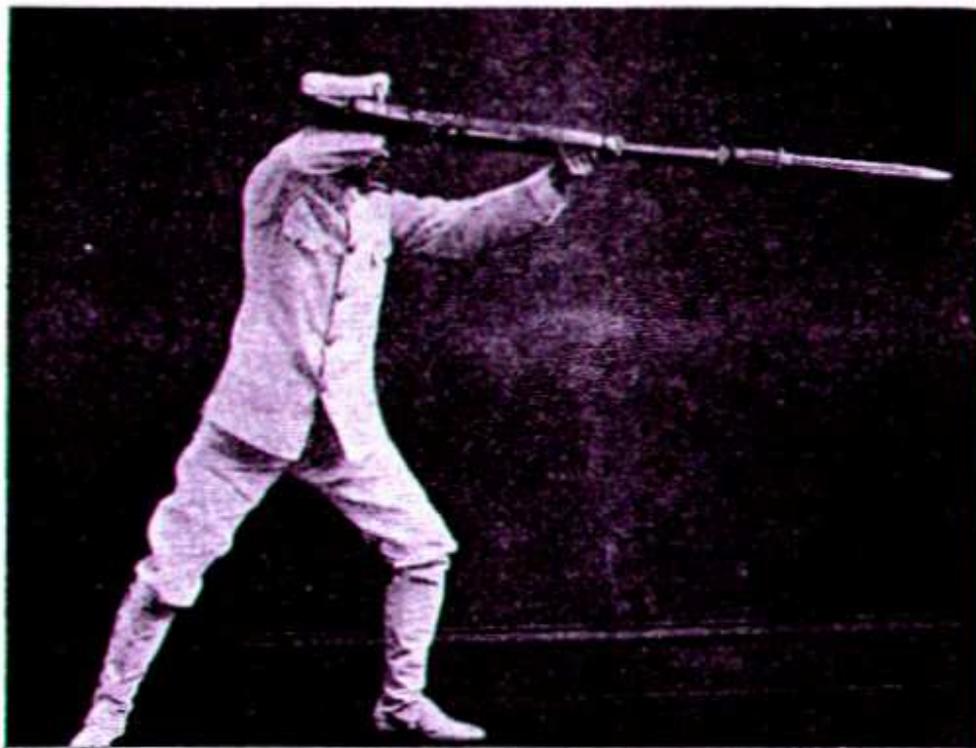
Bayonet Manual.

(1) and (2), guard full (or short), Hep!

Half face to right; carry the right foot back about once its length on the line joining opponents feet forming not greater than a right angle. Right hand and thumb closed around small of stock, butt to the right and entirely clear of forearm in order that a free and unhampered motion may be had. For full guard the left hand grasps the piece a short distance in front of the center of gravity; for short guard the left hand grasps the piece a few inches from the muzzle; the right hand grasp is firm and full; the left hand grasp is firm but always ready to shift from one guard to the other. With the short guard the piece may be slipped back and forth in the left hand in attacking and parrying. Barrel of piece to left and front edge of bayonet to right; right hand opposite and at height of hip; point of bayonet at height of chin and piece pointing slightly to left.

Attacks or parries may be made from either the full or short guard. The short guard is the less fatiguing and the stronger for parrying; a longer attack can be made from the full guard; changing guards quickly should be practiced. In both guards the left hand and arm is more or less exposed to attack which should be constantly watched for. When the left hand is attacked slip it back quickly, if at short guard, moving the piece back with both hands to avoid the attack and resuming guard as quickly as possible. Watch constantly for a chance to attack your opponent's left hand.

Your opponent's position of guard will not greatly differ from the foregoing in any event. If his bayonet is pointed only and without an edge you will have a great advantage. Observe as far as possible the nature of the ground you are on and its obstructions. Practice should be had on various kinds of ground



CUT OR THRUST LEFT HIGH, WITH LUNGE. EXECUTED FROM POSITIONS OF GUARD OR RIGHT ENGAGEMENT.

for experience. From the time your opponent is on guard within reach watch constantly his bayonet and piece.

(1) and (2), guard right (or left). Hep!

Swing on the ball of left foot to the line attacked following quickly with right foot to position of guard. Retain piece at position of guard making a strong sweep with the change of line.

(1) and (2), guard rear Hep!

Face to rear swinging to the right on ball of left foot, and bringing right foot to position of guard. If clear of friends make a strong sweep with piece in turning. If near friends or in close ranks bring piece vertical before turning and resume guard when laced to rear. When attacked in single rank, front and rear, odd numbers face front and even numbers face rear.

(1) and (2), move right (or left), Hep!

To move right advance the right foot a short distance to the right and follow with the left to the position of guard. To move left carry the left foot a short distance to the left and follow with the right to the position of guard. The movements are used



CUT OR THRUST RIGHT LOW, WITH LUNGE. EXECUTED FROM POSITIONS OF GUARD, RIGHT, OR LEFT ENGAGEMENT.

to secure a more favorable line for attack or to avoid the opponent's attack.

(1), circle right (or left) around (2);

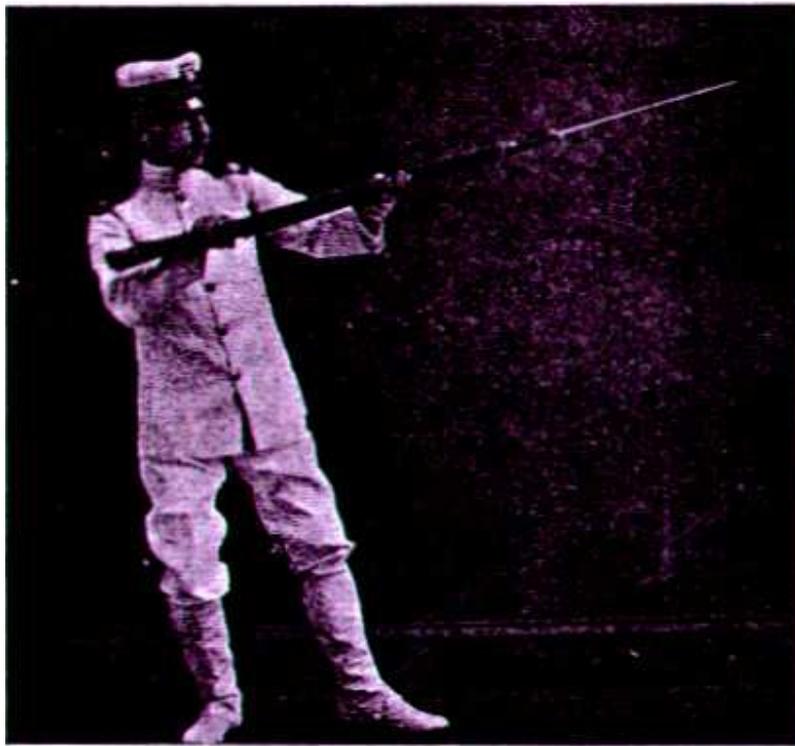
(2), circle left (or right) in position. Hep! - Halt!

The opponent may be encircled by a series of right or left moves so made as to maintain the distance. Better ground may be obtained in this way or a more favorable light. The opponent's left parries are the weakest and an encircling to the right may enable a strong attack on his left. If encircled by opponent turn left or right on ball of left foot to keep him in line, following with right foot to position of guard.

(1) and (2), butt front, Hep!

Bring the piece vertical in front of right shoulder, barrel to the rear. Strike forward and upward with the right hand. The blow may be delivered low or high according to distance of opponent. This blow may be delivered after opponent has grasped your piece near muzzle.

(1) and (2), butt left, Hep!



PARRY RIGHT HIGH ATTACK.

Bring the piece vertical in front of body, barrel to right. Strike left and upward with right hand.

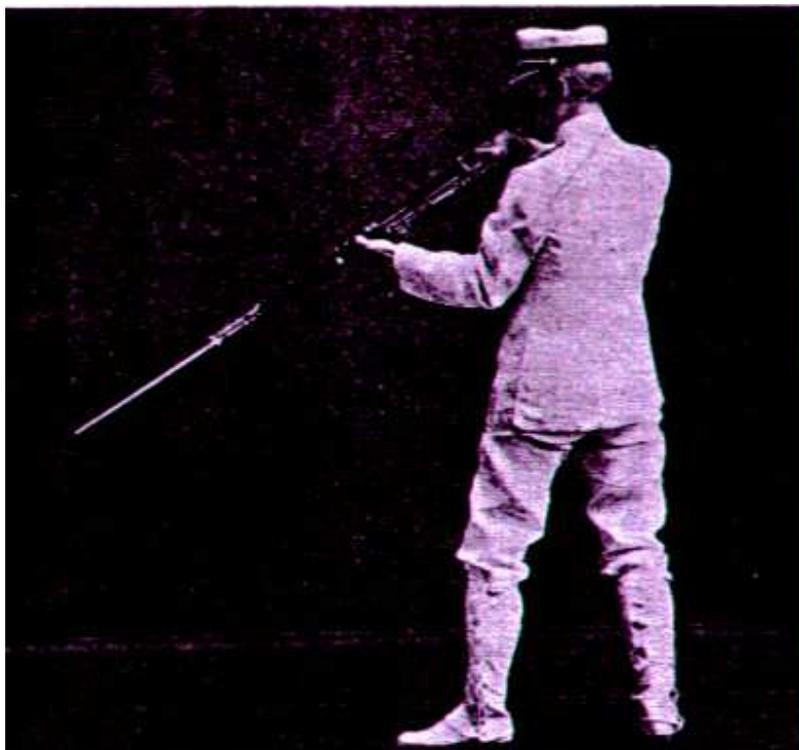
(1) and (2), butt right. Hep!

Bring the piece horizontally in front of the body, barrel down, butt to right. Strike to the right with both hands. Butt right may also be executed directly from the position of guard by striking out with the right hand.

(1) and (2), butt rear, Hep!

Face to rear turning to the right on balls of both feet. Piece horizontal, barrel down, and butt to rear. Strike to rear with both hands. The blow may be delivered high or low. A strong butt to the rear may also be delivered without turning to the rear on the feet.

The butt is used for sudden and close attacks when the bayonet cannot be brought into line. The grasp of the right hand is not changed; the left hand may be at long or short guard. When distance becomes too short to even use the butt, powerful blows may be struck with the piece held upright in both hands.



PARRY LEFT LOW ATTACK.

(1) and (2), engage right. Hep!

From the position of guard, full or short, opponents engage right by bringing the right or front edges of bayonets together (1) taking the initiative. This is the standard engagement with a fixed bayonet. It is not necessary that the bayonets should touch, but it is of extreme importance to know on which side of your guard the opponents bayonet may be and the contact gives assurance of the position. If the engagement is made below the bayonets it indicates a dangerously close distance, and there is a chance of fouling the bayonet guards. In the position of guard and the engagements the point of bayonet should be kept about on the center line.

(1) and (2), engage left, Hep!

From the right engagement either opponent may pass to the left engagement. The safest and quickest change is by passing the point underneath the opponent's and making a new contact with the left edge or back, the general position of guard remaining the same. If the opponent's point is low the bayonet may be



BUTT LEFT. USED FOR A SUDDEN AND CLOSE ATTACK FROM LEFT.

passed over his point by drawing the piece backward somewhat to prevent raising your own point too much out of line. If the opponent refuses any engagement whatever, be sure on which side of your guard his point is at all times.

(1) and (2), engage right, Hep!

(1), left cut or thrust high with lunge;

(2), left parry high, Hep!

(1) passes his point over or under the guard of (2) and extends his bayonet to reach him at some point on the left side from the head to the waist. The grasp of the hands is not changed and the barrel of piece is kept to the left. If a cut is intended the pass is made outside the opponent's body and an inward stroke made with the back edge of bayonet. If a thrust is intended the pass is made as closely as possible to opponent's piece without fouling the bayonet guard. As the extension is made the body is leaned forward to assist the reach and the left



**BUTT REAR. USED FOR A SUDDEN AND CLOSE
ATTACK FROM THE REAR.**

foot advanced to a short lunge at the same time. The lunge should not be so long as to prevent a quick resumption of guard. After the attack is delivered resume guard as quickly as possible whether a hit has been made or not.

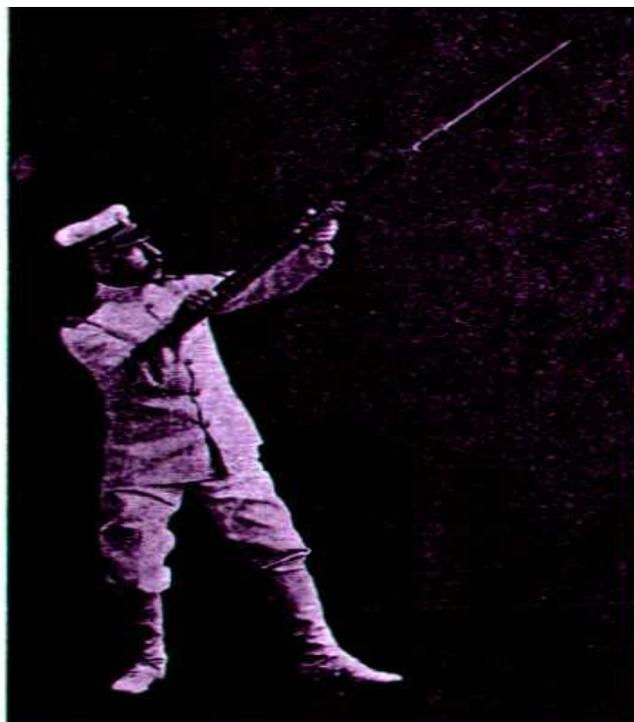
As the attack is delivered (2) moves his point quickly to the left a sufficient amount to keep the point or edge of (1) off his body; the motion is principally effected with the left hand.

(1) and (2) engage right, Hep!

(1), left cut or thrust low with lunge;

(2), left parry low, Hep!

Executed in a similar manner to left high, except that the point is passed under the guard of (2) and the attack is directed front the waist downward. As the attack is delivered (2) lowers his point sufficiently to meet the piece of (1) with the bayonet or



RIGHT HIGH PARRY FOR ATTACK FROM HORSEMAN.

upper part of barrel and with a left movement keeps the attack off the body. In lowering the point to make parry a slight circular motion to the right will insure the piece of (1) being on the left. When an attack is delivered at about the waist-line there is the choice of high or low parry. In all parries the piece should be kept well clear of the body, and moved up, down, or sideways by a motion of both hands.

(1) and (2), engage left, Hep!

(1), right cut or thrust high with lunge;

(2), right parry high. Hep!

Executed in a similar manner to the left high attack. Attacks on the right bring the full front edge of bayonet into play. Attacks on the right are stronger than on the left as are also the parries. As the attack is delivered it is by (2) with a motion of the piece to the right. Less motion with the point is required than in the high left and the entire piece may be moved slightly to the right.

(1) and (2). engage left, Hep!

(1), right cut or thrust low with lunge;

(2), right parry low, Hep!

(1) lowers his point below opponents piece and attacks in low right in a similar manner to the attack in low left, (2) parries right low in a similar manner to left low, except that less motion of the point is required and the whole piece may be moved slightly to the right.

(1) and (2), engage right, Hep!

(1), right cut or thrust with lunge;

(2), parry right low. Hep!

(1), lowers point and attacks directly in low right,

(2), parries low right.

(1) and (2), engage left, Hep!

(1), left cut or thrust low with lunge;

(2), parry left low, Hep!

(1) lowers point and attacks directly in low left;

(2), parries low left.

(1) and (2), engage right (or left). Hep!

(1), cut at the head or face (with or without lunge);

(2), right (or left) parry high, Hep!

If the opponent's point is held low or far out of line, a cut at the head or face may be possible. The barrel of piece is turned upward bringing the front edge of bayonet down and a short quick cut made at the head or, face. The attack may be accompanied with a lunge, (2) parries the cut with right or left high according to which side of the guard it is delivered on.

(1) and (2), engage right, Hep!

(1), deceive left high and cut or thrust left low with lunge;

(2), left high and left low parry. Hep!

(1) starts a left high attack at opponent, a cut being preferably indicated as it requires a stronger parry. As soon as (2) starts a left high parry. (1) drops the attack to left low and preferably delivers as a thrust which is quicker, closer, and harder to parry. (2) starts a left high parry; when the attack is changed to the low line the defense is converted into a left low parry; in lowering the piece a slight curve to the right will insure being on the inside of the attack.

(1) and (2), engage left, Hep!

(1), deceive right high and cut or thrust right low with lunge;

(2), right high and right low parry, Hep!

The attacks and parties are executed in a similar manner to those on the left.

(1) and (2), engage right, Hep!

(1), deceive left low and cut or thrust left high with lunge;

(2), left low and left high parry, Hep!

(1) and (2), engage left, Hep!

(1), deceive right low and cut or thrust right high with lunge;

(2), right low and right high parry, Hep!

(1) and (2), engage right, Hep!

(1), deceive right low and cut or thrust left high with lunge;

(2), parry right low and left high, Hep!

(1) and (2), engage left, Hep!

(1), deceive left low and cut or thrust right high with lunge;

(2), parry left low and right high, Hep!

These attacks and parries will be readily understood from the preceding explanations. An experienced man is seldom hit on direct attack, especially in the high line. False attacks, or deceptions are therefore used to create a wider opening and detract attention from the point finally attacked. No great force is put into the deception in order that the attack may be quickly changed. Parries should be given no more motion or strength than necessary in order that deceptions may be quickly met.

(1) and (2), engage right, Hep!

(1), left cut or thrust high with lunge;

(2), left parry high and return right high; (1), right parry high, Hep!

Having received and parried a left high attack, a return attack is at once made in high right while inside opponent's guard. The return should be made as soon as a safe parry has been secured and while the opponent is still advanced. When a return is contemplated the more the attack is thrown out of line the surer the return. The counter attack is parried in right high by first passing the point wider opponent's piece to the left side. The parry may be taken while still advanced by drawing the piece back, or may be taken as guard is resumed.

(1) and (2), engage left, Hep!

(1), right cut or thrust high with lunge;

(2), right parry high and return left high;

(1), left parry high, Hep!

(1) and (2), engage right, Hep!

(1), left cut or thrust low with lunge;

(2), left parry low and return right low;

(1), right parry low, Hep!

(1) and (2), engage left, Hep!

(1), right cut or thrust low with lunge;

(2), right parry low and return left low;

(1), left parry low, Hep!

These attacks and parties will be readily understood from the preceding explanations. Return attacks should be carefully cultivated, as they are difficult to parry

and the opponent is within easy reach and much exposed. The return attack can be made a continuation of the parry and there is no previous warning of its delivery. Return attacks, threatened or actual, prevent the opponent from making attacks in some other line. The combinations of attacks and parries so far explained are about the limit of practical application for the fixed bayonet.

The following foot motions may be taught at any time during the instruction in the manual.

- (1) and (2), guard, Hep!**
- (1), advance with left foot;**
- (2), retreat with right foot, Hep!**

If out of hitting distance the space may be closed by advancing the left foot about once its length and quickly following with the right to position of guard. This should be done with caution, as it may be met with an attack. An advance may be covered by threatening an attack.

The distance may be dangerously close and need opening. Carry the right foot back and quickly follow with the left to position. The retreat may be made and a parry executed at the same time. If the retreat is made for safety it should be long. A short retreat may be made to induce an opponent within easier hitting distance.

- (1) and (2), guard, Hep!**
- (1), advance with right foot;**
- (2), retreat with left foot, Hep!**

If the opponent is out of hitting distance the right foot may be brought up to the left just before the lunge is made, thereby greatly increasing the reach. The advance

with the right foot is a cautious one, as it may be reversed before completion in case of a sudden attack. If used simply for closing distance, move the left foot forward to position as soon as the right is advanced.

In the retreat the left foot is closed against the right and the right quickly moved back to position. This retreat most quickly carries the leg and lower part of the body out of hitting distance. The closure of the left foot, only, may be made to avoid a low attack and the foot again advanced to position.

(1) and (2), guard, Hep!

(1), advance passing right foot front;

(2), retreat passing left foot rear, Hep!

In the advance the right foot is passed to the front and right of the left, care being taken not to assume a cramped position. In the retreat the left foot is carried to the rear and left of right in the same manner. Follow with the other foot to position of guard. The movements are used to quickly open or close distance.

(1) and (2), guard, Hep!

(1), leap to front;

(2), leap to rear, Hep!

Spring forward or back on both feet being careful to retain guard and balance. The movements are used as an element of surprise or to avoid reckless and unfamiliar attacks.

General Remarks.

Distance. - The distance between opponents is very important. If too close, parries are difficult and if very open, attacks are ineffective. The matter of distance is complicated by the exposure of the left hand in the position of guard and in attack. The

safest working distance is with the bayonets engaged, and with a constant readiness to advance or retreat.

Attacks.- Hits will seldom be made on an experienced opponent by direct attack, and are more likely to be secured by a deception or counter-attack. The weight and balance of a rifle with fixed bayonet are such that complicated and intricate movements cannot be successfully attempted. The point of bayonet should be kept in the line of attack as much and as nearly as possible. Cuts with the knife bayonet can be made very strong and dangerous and their use in deceptions and counter-attacks will necessitate parrying on the part of opponent. It is sometimes possible to press an opponent's piece to one side and make a direct attack inside his line of guard. If the opponent uses a system of defense in which the hand grips are not secure, or in which the piece is held in insecure positions in attacks and parties, or the point moved much out of line, it is not difficult to hit him on a deception or counter-attack, or even knock his piece from his hands.

Defense.-Be always prepared for deceptions and counterattacks. Do not over parry or parry too soon. Parry as much as possible when attacked, but be always ready to retreat in necessity. Against an opponent of unusual strength use the short guard and avoid engagement. Against a footman with a sabre be careful that the muzzle of your piece is not grasped, and hold your point rather lower than usual. The swordsman's object is to get inside your guard. Against a swordsman on a horse keep your point about the height of his belt and use the high right and left parties for his cuts and thrusts. Attack his horse at every opportunity. The horseman's strongest attack is on his right side; if you can secure any other position you have a great advantage.

Practice Assault-Expertness in attack and defense with the fixed bayonet can only be obtained by the practice assault. Light wooden pieces with very flexible practice bayonets, covered with leather and having ball points are the only thing that can be used with safety or comfort. Suitable masks, padding and gloves should be provided. The practice assault develops originality and opponents should be allowed freedom of position and motion within safe and reasonable limits.

Actual Combat-Against a single opponent the principles of attack and defense may be fully applied. In the charge or melee, circumstances and judgment can alone indicate the best proceeding, but a knowledge of the manual will be of great advantage.

CONCLUSION.

It is a noteworthy fact that the officers of our army and navy as a class are not swordsmen. It is still more noteworthy that the cadets of the military and naval academies take no interest in fencing, and were not a certain amount of instruction compulsory, would never learn anything of it voluntarily. The few exceptions to this rule make it the more marked, as those who do study it aspire to win temporary distinction for themselves and their schools. The majority of those cadets who specialize in fencing at their academies do not follow up the afterwards.

It seems strange at first thought that this should be a condition amongst a class of men, part of whose personal equipment is a sword.

Upon analysis it becomes dear. The sword instruction at the national academies begins with the French foil. The ambitions of the young men who begin this work are great, but they quickly realize that only a very limited number will ever excel at this sport, and then only after long and tedious application. Next follows an instinctive if not a definite mental analysis that the foil is not a weapon of warfare, and its method of use not applicable to any practical weapon. About the time the student has become thoroughly indifferent to fencing there follows some instruction with the sabre. Carrying on his analysis the student notes that the sabre he is instructed with has no resemblance to the one he will later wear, and that the sword of the enlisted man resembles neither of them. However little he may have learned of fencing, he has learned enough to realize that his own sword and the sword of the cavalry man or the cutlass of the blue jacket are not practical fencing tools.

Thus are spoiled a lot of fencers in the making and instead of turning out fair swordsmen en masse, a very small percentage of temporary specialists are developed.

These conditions will never be bettered until both the officer and the enlisted man are given a practical weapon and taught to use it in a practical way that will be of permanent value to them, as an exercise in peace, and means of aggression and defense in war. In the army such a movement has a fair start. In the navy it is still inert.

Is it not possible that these conditions largely account for the American officer's tendency to regard the sabre as an obsolete weapon?