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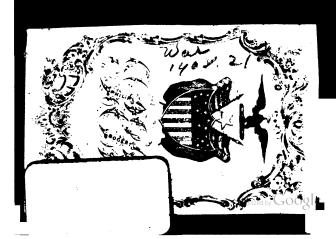
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THE

ARTILLERIST;

COMPRISING

THE DRILL WITHOUT ARMS,

AND EXERCISES AND MOVEMENTS

OF THE

LIGHT AND HORSE ARTILLERY.

TOGETHER WITH A

SWORD EXERCISE

FOR THE

LIGHT ARTILLERY.

ALSO,

RULES FOR THE FORMATION OF COMPANIES AND REGIMENTS.

BY PIERCE DARROW,

LIEUT. COLONEL OF INFANTRY, AUTHOR OF "MILITIA TACTICS," AND TEACHER OF SWORD EXERCISE.

SECOND EDITION—IMPROVED AND ENLARGED.

HARTFORD, OLIVER D. COOKE.

1821.



BE IT REMEMBERED; That on the twelfth day of SEAL. October, in the forty-sixth year of the Independence of the United States of America, PIERCE DARROW, of the said District, hath deposited in this Office, the title of a Book, the right whereof he claims as Author, in the words following to wit: "The Artillerist; comprising the drill without arms, and exercises and movements of the Light and Horse Artillery. Together with a sword exercise for the Light Artillery. Also rules for the formation of companies and regiments.—By Pierce Darrow, Lieut. Colonel of Infantry, Author of "Militia Tactics", and Teacher of Sword Exercise. Second Edition—Improved." In conformity to the act of the Congress of the United States, entitled, "An act for the encouragement of learning, by securing "the copies of Maps, Charts and Books, to the authors and "proprieters of such copies during the times therein mentioned."

CHAS. A. INGERSOLL,

Clerk of the District of Connecticut.

A true copy of Record, examined and sealed by me,

CHAS. A. INGERSOLL,

Clerk of the District of Connecticut.

RECOMMENDATIONS.

WE have examined the small volume, entitled "The Artillerist," at the request of the Author. The want of a system of exercise for the Artillery has been felt by every officer since the organization of the Artillery into Regiments. It was found that every company had a Drill of its own; and no small embarrassment was occasioned, both to officers and men, when they were called to exercise together. The Sword Exercise here laid down in the Artillerist, which is substantially taken from Taylor's Art of Defence on Foot, will remedy much of this difficulty. The system is a good one, and will not be found difficult in practice.

The other parts of the work are concise, explicit, and well arranged. It cannot be expected to contain the learning and extensive detail of TOUSARD, yet it will be much more useful in the hands of the militia than a more extensive work.

In our opinion the Artillerist is a useful compendium and will be of essential service to the corps for which it is designed; and we therefore give it our cheerful and cordial recommendation.

> DAVID DEMING, Brigadier General of Artillery. NATHAN JOHNSON, Brigadier General of Artillery.

INTRODUCTION.

IT will doubtless be thought useless for me to publish a system of exercise for the Artillery, since there are already so many extensive works on that subject; but the most of those publications however, are calculated for actual service, and are not altogether applicable to a regiment or company of militia: nor do I recollect of ever having seen a system containing a sword exercise of the artillery. The artillery have experienced for a number of years the want of a system of exercise, and have waited with anxious expectation that congress would establish a system for the artillery of the United States. Having waited until a system was adopted for the infantry, and none appearing for the artillery, I was induced by the advice and assistance of several officers of distinction to undertake the first edition of this work, which was published in 1818. My first object, was to introduce a system of sword exercise for the artillery, which I conceived would be of great utility. But it being thought advisable by several officers distinguished for military attainments, to have a system containing all parts of company duty, I enlarged the system much beyond my first intention.

In 1821 the Legislature finding it in vain to wait for a system of exercise from general government, appointed a committee to report a system for the artillery to the next legislature; and that committee have recommended the alterations and additions that are contained in this edition, which has considerably enlarged the work, and extended it to the discipline of a regiment, and is embraced in Four Parts.

In the First Part I have described, as minutely as

possible, the drill, and exercise of the sword.

The Second Part contains the method of forming company, posting officers, and different movements of a company without a piece, which are equally applicable to a company of Infantry as Artillery. For the better understanding of the movements, the position of officers, and the management of the pieces, I have added a number of Plates.

The Third Part relates to the duty of the men at the pieces, and their different movements, and the

formation of a regiment.

The Fourth Part comprises the duty of Horse Artillery, and concludes with a number of evolutions.

The following treatise I have endeavoured to make plain and useful; as to the language, it is far from being so correct as I could have wished. I have attended to those parts of the duty with which I conceive it necessary that the young artillerist should be acquainted; and have endeavoured to explain every part of the exercise minutely. Some, indeed, may think me to have erred in this respect; I have, however, inserted nothing but what would, when the duty was entirely new to me, have been very acceptable, and have saved me much time and application.

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RULES AND REGULATIONS

FOR THE

SWORD EXERCISE

FOR

ARTILLERY.

PART I.

CUTS.

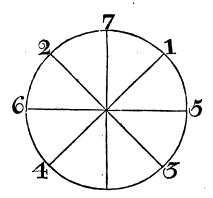
THERE are only seven ways of directing the edge of the blade; therefore the different parts of the body, which may be exposed by the unskilfulness of a recruit, are not to be considered as admitting so many distinct cuts. The action of the wrist and shoulder alone direct the blade; and they admit of but seven movements, from which every cut is derived, wherever may be its particular application to the body. Of the seven cuts, four are made in diagonal directions, two horizontally, and one perpendicular: the whole are equally applicable against infantry as artillery, but their application must depend on the opening given by

the adversary, and be regulated by judgment and experience in the use of the weapon.

To make a cut with effect, and at the same time without exposing the person, there are two points which principally demand attention. The first is, to acquire a facility in giving motion to the arm by means of the wrist and shoulder without bending the elbow; for, in bending the elbow, the sword arm is exposed. Of this exposure the opponent will ever be ready to take advantage, as a cut in that quarter may be made with the greater security; and if it be well directed, with the most fatal effects.

The next object is to attain a correctness in applying the edge in the direction of the blade; otherwise it will turn in the hand; and as in that case the flat part must receive the whole force of the blow, the blade will in all likelihood be broken.

That the recruit may more readily be brought to comprehend the intention and object of the different directions in which he will be required to carry his blade, and at the same time in order to enable the drill officer to judge how far the motions are accurately executed; the recruit may be placed facing a wall at the distance of six feet, but not so as to touch it with his sword when drawn. Upon the wall immediately in front of his position, describe a circle of two feet diameter, and full four feet from the ground; then draw two lines which will divide the circle into four parts, each line being drawn diagonally; then a third line forming an horizontal diameter; then a fourth perpendicular: on the different points of those lines place the figures 1, 2, 3, 4, 5, 6, 7. Thus,



This will serve to convey the idea of that space, which an antagonist would occupy in point of height, and the recruit is to direct all his movements to it, upon that supposition; the figures denoting the seven distinct cuts of the sword, which are to be applied in that given space.

The first six cuts for the artillery are applied in the same manner as the six cuts of the cavalry; but the guards and the movements of the sword differ. The seventh is a charge over the head, and made directly down.

SWORD KNOTS.

No sword should be made use of without having a sword knot attached to it. It enables a person instantly to recover his weapon if forced from his grasp; and in drills prevents accidents which are liable to occur by the sword escaping from the hand, when not restrained.

THE DRILL.

DRAWING OF SWORDS.

THE first word of command commonly used in the artillery to draw swords, is handle swords; and I think there is a propriety in adopting it as a rule for this reason: there being so much difference in the tightness of the scabbard, that unless men have an opportunity to start the sword from the scabbard before the word is given to draw, they can never do the motion together.

Handle Swords.

Words of Motions. 1. Upon the word swords being given, direct the eyes to the sword hilt, bringing the right hand with a brisk action across the body and seize the hilt, at the same time seize the scabbard with the left hand; draw the sword about four inches, and wait in that pesition for the next word of command.

Draw Swords, 1. Draw the sword from the scabbard with a full extended arm at the same Command. ∽

Words of Motions, time give it a turn to the front; then bring the hilt of the sword immediately under the chin, and the back of the hand outwards, the flat of the blade to the front.

- Bring the hilt down just above the hip, the elbow near the body, the blade perpendicular, and the wrist in a small degree rounded, which turns the edge inwards.
- Turn on the left heel so as to bring To the left half 1. . the left toe pointing along in a line to the face. left, at the same time step forward with the right foot, about six inches from the left, the right heel opposite the hollow of the left foot, with the right toe pointing to the front, and the weight of the body principally on the left foot.*
- Prepare to Guard 1. This is performed in one motion and done by bringing the extremity of the sword hilt up to the pit of the stomach, with the back of the hand outwards, the flat of the blade to the face;

This position I have preferred, because the body takes up less room : i. a much better position of defence, and much easier for exercise.

Command.

Words of Motions, and carried perpendicularly; at the same time bring the left hand on the left hip.

- Outside Guard. 1. From the prepare to guard, the hand is carried with a quick motion to the front, turning the back of the hand up the edge of the sword to the right, the nails of the fingers down, the hand a little below the level of the shoulder, the point of the sword to the front, and raised so as to bring the sword upon an angle of forty-five degrees, the flat of the blade up.
- 1. Turn the back of the hand under and Inside Guard. bring the nails up, and carry the hand about four inches to the left, with the same slope, the edge to the left, and arm straight.
- Prepare to Guard. 1. From the inside guard bring the sword and hand in the position of prepare to guard as before directed, keeping the left hand on the hip, without changing the position of the body.
- 1. Drop the hand to the hip as in the Carry Swords. first position of carry swords; at the same time drop the left hand by the side.

Words of Motions, 1. Relax the three last fingers and let Command.

Slope Swords.

the sword drop on the right shoulder, the edge square to the front, the hand carried a little to the front; at the same time turn on the left heel and bring the body square to the front, stepping back with the right foot and come in the 2-fir position with the heels parallel and touching each other, and the toes occupying about three fifths of a semicircle.

Carry Swords. 1. Clinch the hilt of the sword with the fingers, and come to the position of carry sword as before directed.

To the left half 1. As before. face.

Prepare to Guard. 1. As before.

Outside Guard. 1. As before.

Cut one in three 1. By a quick motion of wrist turn the point of the sword with a circle to the left, carry it over the head and turn the edge a little out to the right so as to lead in the cut.

2. Make your cut by dropping the point

Command.

Words of Motions. with a suick motion to the front, beginning at number 1, and concluding at number 4.

- Turn the back of the hand to the rear, bring the point with a circle close to the left elbow, and raise the sword perpendicular, at the same time bring the hand to the prepare to guard.*
- Inside Guard. 1. Carry the hand with a quick motion to the front with the arm straight, the back of the hand under and nails up, the point raised as before.
- Cut two in three 1. Relax the fingers and carry the point of the sword to the right, and down Molions. over the head to the left shoulder, with the back of the hand to the right, and the blade a little turned to the left.
 - Make your cut by throwing the point with a quick motion to the front, beginning at number 2, and finishing at number 3.
 - Turn the back of the hand under and drop the point close to the body on
- * It is to be understood that the cuts 1, 3, and 5, must be made from the outside guard; and 2, 4, and 6, from the inside guard, and 7 either from the inside or outside guard.

Words of Motions, the right side, and at the same time bring the hand to the prepare to guard.

It is to be remarked that the first motion in every cut consists in bringing the blade back to gather a sweep; at the same instant placing it in the direction in which it is to be applied, and the last motion brings it back to the prepare to guard.

It is of the utmost importance that the recruit be made to perform the cuts in the several motions, that they may understand the exact movements of the sword when the cuts are made in one motion. The commanding officer will therefore be careful that each one wait until they count for each number; or the motion be taken from the fluglemen.

Words of Motions. Command 🛶

Outside Guard, 1. As before.

Motions.

Cut three in three 1. Raise the point of the sword perpendicular, and drop it near the right shoulder down to the right side by turning the wrist in that direction, and relax the grasp of the three last fingers of the sword hand, keeping at the same time a firm hold with the four finger and thumb. This will bring the blade in a diagonal line, with the back of the blade towards the body, the point well to the rear.

Words of Motions. 2.

- 2. Conduct the point of the sword by bending the wrist towards the face, and pressing upon the three extended fingers which act as a brace, commencing the cut at figure 3, and stop at figure 2.
- Come to the original position of prepare to guard, by turning the back of the hand up and dropping the point, close to the body on the left side.
- Inside Guard. 1. With the action of the wrist raise the Gut Four in Three point of the sword as in the first motion Motions. of cut three, and drop it in front, and in a diagonal line across the body, within three inches of the left elbow, and with the edge of the sword outwards.
 - 2. Carry the point diagonally, by extending the hand in a direct line with the arm, beginning at No. 4, and concluding at No. 1.
 - 3. Turn the hand over and bring the sword to the prepare to guard.

Oulside Guard.* 1. Carry the sword to the left without
Cut five in three dropping the point until past the head,
Motions. when the blade is dropped within six

^{*} It is to be understood that the sword is to be brought to the inside or outside guard, (according to the cut that is to be made,) the same as has been before described.

Words of Motions. Command.

inches of the right shoulder, the back of the hand under and the nails up, flat of the blade up, and edge to the right.

- 2. Conduct the point horizontally across the circle, which is done by inclining the hand inwards in the direction of the cut, without changing the position of the hand.
 - 3. Turn the back of the hand up and continue the motion of the blade round to the left shoulder, then raise the point and bring the sword to the prepare to guard.
- Inside Guard. 1. By the action of the wrist carry the Cul six in three sword to the right and over the head to the left shoulder as before to the right, the back of the hand up.
 - Conduct the point from number 6, to number 5, with a quick motion, keeping the back of the hand upwards.
 - 3. Turn the hand and carry the point towards the right shoulder, and bring the sword to the prepare.
- Outside Guard. 1. Turn the back of the hand to the left Cut seven in three and drop the point close to the left Motions. elbow, then raise the point over the head with the edge up.

Words of Motions. 2. Make the cut at your antagonist's head, directly down.

- 3. Come to the prepare to guard, carrying the point around the left elbow, as in the first motion.
- Outside Guard. 1. Raise the point of the sword with the Slope Swords, in arm straight, and slope it to the rear or two Motions. at an angle of forty-five degrees, pointing over the right shoulder.
 - 2. Turn on the left heel as before described, and drop the sword on the right shoulder as before.*

The sword may be brought to the slope either from the inside or outside guard, or from the carry.

In the foregoing motions, it will be necessary to carry the right shoulder well forward, and keep the breast well turned to the left; as the body in this position will take up much less room, and of course you have not so much to defend. The recruit must often be cautioned against carrying the hand too much to the right and left in making the cuts. He may be allowed to do it in a small degree, but by no means to excess; and on no account should he be permitted to bend his arm, until the cut is completed.

[•] It will here be noticed that the sword is brought to the slope without first coming to the carry, of course the left hand must be dropped from the hip the same time that you turn on the left heel; but at all times when the sword is brought to the carry, the hand is to be dropped from the hip.

The manner of performing the seven cuts in the several motions, being attained; the next object is to make them in two motions. The first motion is to bring the sword in the first position of the cut, then wait until the drill officer counts, when the cut is made and the sword brought to the prepare to guard; the officer will be careful that the cut be regularly made, as much depends (as to use and appearance,) upon the accuracy of the seven cuts. When companies have sufficient opportunity, the cuts should first be taught in three motions: but when that is not the case they may be first taught in two. The cuts will next be made separately in two motions.

Words of Motions. Command.

Outside Guard. 1. As before described.

Cut one in two 1. The sword is brought to the position to make the cut the same as when performed in three motions.

2 When the officer counts two, then finish the cut and come to the prepare to guard without any other pause.

Inside Guard. 1. As before.

Cut two in two

Motions.

1. Remember the first motion is to carry the sword in the position to make the cut, there, wait for the order.

The officer will proceed in the same manner till the cuts are all completed in two motions, paying particular attention that the sword perform the same revolution as when cut in three motions.

The officer must be careful to come to the prepare to guard, as the cuts must be made from a disengage; of course the guard must shift each time when there is but one cut performed at once.

As the chief utility of the sword depends on a well regulated cut, I have directed that they be executed in different ways before they are combined.

The officer will next proceed to blend two of the cuts in succession.

Words of Motions. Command.

1. The cuts one and two, are made in one motion without coming to the pre-Outside Guard. pare, until the cuts are finished. Cut One and Two. one will be careful that the sword in cutting one and two, drop close to the body on each side, which must be done by relaxing the three last fingers and letting the sword play easy in the hand.

Outside Guard. Cut Three and Four.

Three and four are likewise cut in one motion, without coming to the prepare between them, and see that they are cut well up, as new recruits are very apt to cut them too much horizontally.

Words of Motions. Command

Remark, the sword is brought each time to the outside guard, when two cuts only are blended.

Outside Guard. 1. In making cut five and six, the sword Cut Five and Six. must be brought well to the left and over the head to gather a sweep, and make the cuts without any pause, and come to the prepare.

Inside Guard.

1. To cut seven from the inside guard, the sword must be dropped to the right close to the elbow, then make the cut down and come to the prepare, as before. This is a very handsome motion if well executed.

The cuts are next made in two divisions.

Outside Guard. 1. These three cuts are made without Cut One, Two and any pauses, and performed the same as Three. before, and come to the prepare as soon as the order is finished.

Inside Guard. 1. These cuts are likewise performed in Cut Four, Five, one motion as before described.

Six and Seven.

The changes upon each cut necessary to a combined movement having been acquired, the recruit should next be taught to execute all the cuts quickly, and as one movement; which in the course of future practice will be termed the assault.

In combining the cuts, take care that cut two is correctly made, it being a common fault with beginners not to carry the edge well in making that cut, in consequence of allowing the sword hilt to turn in the hand, and not retaining that firm grasp with the fore finger and thumb, which is indispensably necessary. Wherever this fault occurs, the recruit must be brought back to the drill motions, and made to practice the cuts singly till perfect.

It must be obvious that the mode of executing the cuts two and four, according to the preceding directions, lessens the number of motions and that each cut leads to the other, by which means, when the whole are quickly executed, the edge is carried with redoubled force acquired by the velocity of action in the blade, in consequence of not being impeded in its course.

The offensive movements of the sword in artillerists, consists principally in the seven cuts; but the point may many times be given with safety and success; but some have objected to its adoption as a motion of the exercise, on account of the difficulty of a company being taught to perform it properly. But I have found so much benefit resulting from a well regulated thrust, that I am not willing totally to neglect it; I shall therefore describe the manner in which it ought to be executed.

I would not recommend officers to practice it by companies, unless they have considerable opportunity for exer-

cise; it should be taught generally in the drill; and should never be allowed but by stepping forward with the right This circumstance creates the difficulty in some men, to perform it properly. It may be executed from almost any position of the sword, but the best and most effectual one, is after parrying a cut or thrust made at the lower part of the body on the right side, which is parried by the outside protect. But as that motion has not yet been laid down, I shall first describe the thrust from the outside guard as that is the position of the sword from whence the motion is to commence in the divisions.

Words of Motions.

Front Molions.

- 1. This is first done in two motions, by dropping the point of the sword nearly: as low as the hip, and bending the arm give point in two so at to bring the hand close to the head, with the hilt of the sword in the hollow of the hand, and back of the hand up; the sword on a slope of about. forty-five degrees.
 - 2. Step forward with the right foot as far as possible without constraint, keeping the right toe to the front and the left toe to the left, the left leg straight, and right leg from the foot to the knee perpendicular, and the thigh about horizontal; and at the same time make your thrust by straightening the arm with a quick motion, and dropping the hand;

Command.

Words of Motions. Ievel with the chin, and direct the point at your antagonists body just above the hip; then wait in this position for the next order; the body in this motion is to be kept erect, and not bent forward. as much depends on its proper position.

Prepare to Guard. 1. The former position is resumed by stepping back with the right foot, and turning the sword with a quick motion to the left and come to the prepare to guard.*

This thrust by many is called the longe, in contre distinction to the giving point. in the cavalry exercise, the difference is, in giving point, the body is not to be moved: but in longing, the body is moved forward to reach your antagonist; but I have preferred the word give point, because it is a word better understood, and more easily pronounced.

 After giving point the sword may be brought to almost any position in the whole exercise, to defend against any movement your antagonist may make; but in the foregoing motion of coming to prepare, it is supposed that you have succeeded in making your thrust. You have therefore no defensive movement to make, as your antagonist cannot retort; but if your thrust be parried, it will be necessary to come to the head protect, as that part will be most exposed; of which I shall treat hereafter. It is to be understood that whatever position the sword may be brought to from the thrust, the body is to be brought back to what is called the standing position, with the right foot in front.

We now arrive at the different modes of parrying, which are called the defensive movements.

Words of Motions.

Outside Guard.

1. As before directed.

Inside Protect.

1. Turn the back of the hand under and nails up, drop the point of the sword with a half circle to the left on a slope of forty-five degrees to the front, and drop the hand about four inches and carry the hand and sword about a foot to the left with the edge in that direction. This will parry cut 3, made at the lower part of the body, or a thrust in the same place.

Ordeide Protect.

1. Turn the back of the hand up, the mails under, and raise the edge of the sword and perform a circle with the blade, the edge of the sword to the right, and carry it in that position, one foot to the right. This will protect against cut four made at the lower part of the body, or a low thrust.

Prim.

 Bring the hand with a quick motion to the forehead above the helmet of the cap so as to see your antagonist under the arm, and carry the point to the left Command.

Worns of Motions, with the edge out, and a little in front of the body and sufficiently to the left to protect your shoulder and body from cut one or five, or to carry off a thrust made in that direction.

Hanging Guard.

3 .

This is done from the prim, by dropping the sword perpendicular, and carrying it to the right, with the arm bent and hand near the face. This is intended to parry a cut or thrust after your antagonist has made a feint on your left, with the intention of hitting you onthe right.

This parry by some may at first bethought dangerous, as it exposes the arm: to a cut, unless soon straightened.

But it is never adopted but when your antagonist has made a feint, and then he is supposed to be so nigh that should you straighten the arm to make a parry on the right, you would strike thefort* of your antagonist's sword withyour feeble, and of course there would not be strength in your sword to make the protect.

Left Prolect. 1. Give the point of the sword a turn to the right, and raise it perpendicular and

The fort of a sword is that half nearest the hilt; the feeble is. that half nearest the point.

Command. 🗸

Words of Motions. carry it with a straight arm sufficiently to the left, to protect yourself from cut five or one.

Right Protect. 1. From the left protect bend the elbow in a small degree, and carry the sword with a quick metion two feet to the left, the arm a little below level with the shoulder.

To preserve uniformity in the motion of left and right protect, which are both applied on the same principle, it was necessary to distinguish the distance the hand must move from left to right; but when opposed to an enemy, their application must depend on the direction of the cuts er thrusts which they are intended to parry.

The utmost attention must be paid to opposing the edge to the enemy's cut, and keeping it firm in that position, the arm to be properly distended, for the purpose of resisting the force of the blow. The right protect will parry cut six or two.

Words of Motions. Command.

Head Protect.

1. This motion may be done either from the left or right protect, if from the right protect it is done by dropping the point to the front and sufficiently to the right to clear your antagonist, should he be within the reach of your sword, then turn the point to the left, dropping it under your antagonist's hand, sword Words of Motions. Command.

parallel with the front, and raise the sword sufficiently to parry cut seven: the edge up, at the same time carry the hand a little to the left.

In coming from the left protect to head protect, you will merely drop the sword horizontal to the left, and carry the hand a little to the right so as to see your antagonist close to the inside of your hand under the sword.

It is now supposed that your enemy is like to be too hard for you; it therefore becomes necessary to retreat, and defend yourself with the same motions as when standing to the front. In this however, I have not directed to march to the rear, but merely face to the left, and make use of such motions as would apply on the retreat.

Words of Motions.

To the Left Face.

1. On hearing this word, the sword being at the head protect, the recruit will turn on both heels to the left, so as to form a full half circle with the toes, which will bring the right toe pointing along in a line to the original left, and the left to the rear, feet six inches apart. At the same time carry the point of the sword to the rear, turn the back of the hand under, and drop the point of the sword under your antagonist's sword; then carry the poin around to

Command a

Words of Motions, the left, turn the edge of the sword up and hold it parallel with the line, and sufficiently above the head to protect cut seven. This movement will cover the body while facing, and is the same as the St. George.

It would be natural to suppose that after your antagonist has been defeated in the attempt to cut the head, he would make an attempt to cut three or five at the body, which may be parried by the inside protect.

Words of Motions.

Inside Protect.

1. This is done by dropping the point of the sword to your present right, and drop the hand a little below the level of the shoulder, with the back under, and edge to the right," and the sword held upon the same slope as in the same motion to the front. This will protect against all the cuts or thrusts in that direction.

Outside Protect. 1.

Turn the back of the hand up and carry the sword to the left, the edge in that direction without changing the slope of the sword or lowering the hand.

This will defend the cuts and thrusts in that direction.

 It must be kept in mind that these motions are made in rear of your present position : of course the right and left is reversed. Command.

Words of Motions. i. Turn the back of the hand under, and raise the point perpendicular, and carry the hand to the right with a quick motion, the edge in that direction.

Right Protect.

1. Carry the hand with a quick motion two Left Protect. feet to the left and oppose the edge to your antagonist; the hand the same height as when protecting to the front. The rear parries will protect the same cuts and thrusts as the same in front.

St. George.

1. Drop the sword horizontal, and carry the hand to the right, and hold the sword firm in the hand and see your antagonist under your guard.

The inside and outside guards are here omitted, as they are preparatory to an offensive movement, which is not here intended, but merely to defend the The next motion is a cut, and terminates the rear defence.

To the Rear Cut. 1. Raise the point of the sword over the head, at the same instant carry the blade to the rear, directing the edge from 6 to 5, till it arrives in a right line with the arm, which will be at its full extent. The point of the blade to be kept upon a level with the shoulder, the back of the hand upwards until the point has past your rear; then by a Command.

Words of Motions. motion of the wrist turn the back of the hand down and bring the point over the head, and at the same time bring the sword to the prepare to guard, and turn igain on both heels to the front without stepping the feet, and resume the standng position, with the left hand remaining on the hip.

DEFENCE AGAINST INFANTRY.

I shall next treat of the defence against infantry, as that constitutes an essential part of the artillery exercise. The artillery are liable in various ways to lose their pieces. It is of the utmost importance that they understand the use of the sword against a bayonet, because that will then be their only defence, and an excellent defence it is in close combat, if properly understood. They need not fear to attack three times their force if in close order. It has even been known in actual combat for life, for one man to defend himself against fifteen with charged bayonets.

In defending against infantry it is all important that the men keep in close order; the motions will therefore be described as in that position.

Words of Motions.

Infantry Guard.

1. This is done from the prepare to guard, by dropping the point of the sword to the rear close to the body, and carrying the hand to the front with quick motion, the arm straight and hand a little below a level of the shoulder, the sword perpendicular and well to the rear of your position, to leave an opening in front that your antagonist may not thrust on the right of your sword.

Command. (

To the left Parry.

Words of Motions. 2. With a strong motion carry the sword to the left two feet without altering the position of the hand, or bending the arm. When this is done in actual combat, you catch the fort of your sword into the crook of the bayonet of your antagonist (when he makes a thrust,) and at the same time step forward with the right foot and catch the bayonet with the left hand.

Cut Two.

1. Bring the sword with a sweep near the left shoulder, cut two as in the exercise, and come to the prepare.

In the exercise I have not directed to step forward and seize the bayonet with the hand, as it would be useless unless there was a line of infantry to oppose. This however, might be rendered useful in exercise could it be done with safety.

The above mode of receiving infantry I have found to be far preferable to any I have ever seen or practised .-The sword must be brought to the guard in time to receive your antagonist, and if possible oblige him to thrust in front, as that gives you an opportunity to catch his bayonet, which decides the contest at once, as you can make a cut at his head before it is possible for him to make any But should your antagonist thrust in rear of your sword, you must then adopt the hanging guard, or what I shall term the right parry, (the hand being lower than at the hanging guard,) and then step forward and cut one.

Parry.

To the right

Words of Command. This is done by extending the arm to the front, then drop the point of the sword and carry it with a strong motion to the right sufficiently to parry a thrust of the bayonet made on that side. When this parry is made, and your antagonist within reach, you strike your sword back of the neck of his bayonet, which gives you an opportunity to disengage it from the piece.

Cut One.

After parrying to the right, you make out one by bringing the point of the sword with a sweep around the left shoulder, and make the cut and come to the prepare to guard.

It may sometimes be useful to cut, four after parrying to the right, as that cut may be made quicker than cut one, but not with as much force.

In defence against infantry, the point can seldom be used to advantage; the edge is to be preferred because given with more force. The use of the point is when parrying your antagonist, and your point being within his guard, the thrust may be made without any circuitous motion, which makes it difficult to be parried; but in defending against a hayonet, you are not likely to meet with any resistance in making a cut, a musket being so unweildy.

Words of Command.

Outside Guard.

As before.

Multinet, or cut

One and Two.

This is to cut one and two alternately, by dropping the point of the sword close to the body on each side, and continue till the word is given to prepare to guard, or reverse swords.

This motion is very useful in supleing the wrist, as it requires it to turn very quick to the right and left; and is a motion useful for defence, and makes a handsome appearance.

Reverse Swords.*

After cutting two, bring the point of the sword over the right shoulder as in cutting one; then drop it directly to the front, and turn it under the right arm, with the edge up and point to the rear, a little sloped, the right hand the under side of the hilt, and little finger in front.

Carry Swords.

1. This is done by relaxing the elbow which holds the sword, and let it drop

^{*} The sword may be brought to the prepare to guard, if the efficer chooses.

5*

Words of Motions, to the front, and turn the sword in the Command. hand, and bring it to the carry.*

Reverse Swords.

1. This can be done either from the mullines or carry sword; if from the carry, it is performed by dropping the point to the front, then turn it under the right arm.

Carry Swords.

As before:

Present Swords.

Bring the sword in front of the body with the right hand, and receive the edge of the blade with the thumb and fore finger of the left hand, six inches from the hilt; and extend the arm to the front with a quick motion, edge to the rear, and the hilt the height of the breast.

This is a short and simple motion, and will in nowise embarrass the least experienced officer. As this is not intended for a motion of show, the most simple, therefore, I think to be the best-

^{*}It must be remembered that the hand must be dropped from the hip at all times when the sword is brought to the carry, and replaced when it is brought to the prepare to guard.

Words of Motions. Command. 🔷

Two Motions.

- 1. Bring the fingers of the left hand on the blade in the hellow of the right Advance Swords, shoulder, and shift the fingers of the right hand from the hilt round the guard; the first finger in front of the hilt, and the remainder in rear; the thumb above the guard.
 - 2. Extend the right arm tull length, and carry the sword at ease, lying against the right shoulder, and the left hand dropped to the left side.

This is the usual manner of carrying the sword, either in or out of the ranks: but it must be brought to the carry or port, previous to a salute. The greatest objection to this position of carrying the sword is, that the officer will beinclined to swing his sword-arm on the march, having nothing to confine it. which must however be carefully avoided, as likewise that of the left.

Carry Swords, Two Molions.

- 1. Raise the sword to the position of the carry with the right hand, and seize the blade with the left; then shift the fingers of the right hand round the bilt.
 - 2. Drop the left hand.

Words of Motions.

When the motions of advance and carry are performed on the march without the word, it may be done in one motion, with the right hand, without bringing up the left. But when performed by word of command it should always be done with two motions.

Slope Swords.

The same as before directed, and let it not be forgotten to turn on the left heel and come square to the front at all times when the sword is brought to the the slope, and not before unless the word be given.

Salule in four Motions.

- 1. From the carry bring the sword to the poise, the hilt the height of the chin, sword perpendicular, flat of the hlade to the face, the edge to the left, and the hilt in the hollow of the hand.
- 2. Second motion drop the sword forty-five degrees to the right of a front line, the arm straight, the hand as low as the hip, the point of the sword a little below a line with the arm, the eyes fixed on the officer saluted, and the fingers relaxed, holding the sword with the thumb.
- 3. Turn the back of the hand up, at the same time bring the point of the

Words of Motions, Command.

sword in front, give it a turn to the left, and with a graceful motion bring the hilt to the chin as in the first motion.

4. Drop the sword to the carry.

There are various methods of saluting with the sword—this being short and easy, I have adopted it for a salute for the artillery; as it is necessary that every man armed with a sword should understand some salute, I have recommended that it be practised by companies as part of their exercise; and is invariably to be practised while standing to the front, and generally to conclude the exercise.

Enter Swords.* Seize the scabbard with the left hand and drop the point of the sword and enter it until the hand is a little below the left breast, there wait for the next word of command.

Return Swords 1. Thrust the sword home and pause two Motions. with the hand on the hilt.

2. Drop both hands to their proper places.

*This word of command I have substituted in the room of point swords on account of the similarity of sound between point and poise swords, one frequently being taken for the other.

MANUAL EXERCISE

I shall now proceed as proposed to arrange the motions in the order exercise.

As the exercise is lengthy, I have thought proper to divide it into six separate divisions, that the sword may be brought to the slope and rest.

The sword exercise consists of the motions already described, arranged in six distinct classes of offensive and defensive movements, with reference to the application in those situations which are most likely to occur in actual service.

The company being paraded in one rank, and the tallest on the flanks, and sergeants four paces in front, the commanding officer will order.

Number yourselves into right, center and left hand files; commencing on the right.

When the men will number themselves into three ranks, by the first files numbering, right, the second centre, the third left, the fourth right, and so on to the left of the company. The order is then given.

Form ranks of three-March.

At this word the right hand files will step one oblique step to the left and cover the centre file, and the left hand file will step one oblique step to the right and rear and cover the right and centre files, in close order. When the ranks are to be opened for exercise the order is given—

Front and rear ranks take distance for sword exercise— March.

At the word march, the first rank, consisting of the right hand files, will step two full steps to the front and dress, and the rear rank the same distance to the rear and dress.

A shorter way to extend for exercise might be to order the right and left hand files to the *front* and *rear*, before they are formed in ranks. But by this movement the files would not cover each other, of which I have found great advantage in the exercise; as a file having an object directly in front, will assist him in regulating his motions.

The swords are then drawn, and the distance taken in the following manner—

Handle Swords. As before directed.

Draw Swords. As before.

To the front prove distance of files.

The centre and rear ranks will extend their swords the full length of the arm to the front, holding them horizontal with the back of the hand up, and see that they clear the files in front at least one foot, as the files after facing and coming to the prepare will occupy more ground to the rear than when facing to the front. The front rank must not move, but stand with their swords at the carry and if the ranks are not sufficiently extended the others will at this time step to the rear until they have obtained their proper distance; there wait for the next order.

Carry Swords.

When the point is raised and the sword brought to the carry.

It may frequently be necessary and proper to draw swords before opening the ranks, then give the word, centre and rear ranks take distance; when the two ranks will take distance and the front remain on the line. This saves one word of command and the distance is taken at the time the ranks are opened; but it would require more time, and be less likely to be performed correctly. But as before observed, it may frequently be necessary, and of this necessity the officer must be the judge.

When the company are thus prepared they will be put through the six divisions in the following manner.

DIVISIONS.

WORDS OF COMMAND.

FIRST DIVISION OF MOVEMENTS.

To the left half face-

8. Cut four.

Prepare to guard-

9. Outside guard.

1. Outside guard.

10. Cut five.

2. Cut one.

Inside guard.

3. Inside guard.

12. Cut six.

4. Cut two.

13. Outside guard.

5. Outside guard.

14. Cut seven.

6. Cut three.

15. Outside guard.

7. Inside guard.

Slope swords.

As so much depends on the use and uniformity of the seven cuts, I have confined the First Division to performing them seperately.

SECOND DIVISION OF MOVEMENTS.

To the left half face - 5. Outside guard.

Prepare to guard-

6. Cut 5 and 6.

1. Outside guard. 2. Cut 1 and 2.

7. Qutside guard.

3. Outside guard.

8 Cut seven.

L Cut 3 and 4.

9. Outside guard.

10. Cut 1, 2 and 3.

- 11. Inside guard.
- 12. Cut 4. and 5.
- 13. Inside guard.
- 14. Cut 6 and 7.
- 15. Outside guard.
 - Slope swords.

THIRD DIVISION OF MOVEMENTS.

- To the left half face—
- Prepare to guard-
- 1. Outside guard.
- 2. Assault.

- 7. Inside protect.
 - 8. Outside protect.
- 9. Prim.
- 10. Hanging guard.
- 3. Outside guard. 11. Cut one. 4. To the front give point. 12. Outside guard.
- 5. Prepare to guard.
- 6. Outside guard.
- Slope swords.

FOURTH DIVISION OF MOVEMENTS.

.To the left half face-Prepare to guard-

- 1. Outside guard.
- 2. Assault.
- 3. Left protect.
- 4. Right protect.
- 5. Head protect.
- 6. To the left face.

- 7. Inside protect.
- 8. Outside protect.
- 9. Right protect.
- 10. Left protect.
- 11. St. George.
- 12. To the rear cut. 13. Outside guard.
- Slope swords.

FIFTH DIVISION OF MOVEMENTS.

To the left half face—

Prepare to guard--

- 1. Infantry guard.
- 2. To the left parry.
- 3. Cut two.

- 4. To the right parry.
- 5. Cut one.
- 6. Outside guard. Slope swords.

SIXTH DIVISION OF MOVEMENTS.

To the left half face— Prepare to guard9. Reverse swords.

1. Outside guard.

10. Carry awords.11. Advance swords.

1. Outside guard

Carry swords.

2. Assault.

3. Outside guard.

4. Mullinet.

5. Reverse swords.

6. To the front face.

7. Carry swords.

8. Salute.

Rest.*

Attention.†

Enter swords.

Return swords:

Stand at ease.‡

† Resume the former position, with the sword at the carry.

† That is to stand in any position they may choose.

[•] This is done by stepping back with the right foot, and bending the left knee, and dropping the back of the sword on the left arm, and take hold of the right hand with the left.

REMARKS.

THE first and second division comprise the seven cuts, and are offensive movements, and are equally applicable against infantry as artillery.

Third division comprehends the offensive and defensive movements, the cuts applied indiscriminately.

Fourth division is calculated to defend against artillery, and commences with the assault, which after your enemy have parried, they return cut 5 and 6, which you parry by the right and left protect; it is then supposed that your enemy have the advantage, and your safety consists in retreat: you come first to the head protect to cover the body while facing, and then protect that part of the body supposed to be most open to a cut or thrust. The rear cut is made when it is supposed the retreat is finished, when the body turns to the front or to the original position.

The fifth division is solely against infantry, and the motions are but few, as the contest will always be short, for as soon as you can succeed in making one parry you are sure of your mark.

Sixth division concludes the exercise, and is calculated more to attain the use of the sword, and for show of parade, than for defence.

The six last words of command are not to be considered as belonging to the sixth division, but they should be well understood, and be practised when the officers think proper, and if he chooses to return swords at the conclusion of the sixth division, he may then make use of them.

The words of command in each division which characterises the movement, is distinguished by numbers; the preparatory motions of each being the same, and concluding with the slope swords.

The six divisions should first be practised in open order to prevent all accidents; but when well versed in the exercise, they should be brought in closer order; sometimes at arms length, and sometimes at half arms length, which movement will be described hereafter. The fifth division which is against infantry, should often be practised with files closed, to prevent the enemy from breaking your ranks; for should he succeed in attaining your rear, it may end in a defeat.

The third and fourth divisions may be practised in close order by omitting the assault. Even men who are well acquainted with the use of the sword, may perform all the movements in close order without endangering each other, which would evidently ensure victory could it be attained.

When a company are small, they may be extended in one line for exercise; and at all times be in one line when in close order.

After the exercise is finished, and it is wished to form in one rank, the officer will give the word,

Close ranks-March.

If the first rank have moved to the front, they will now step back to their original position, and the centre rank

will remain; but if the other have taken distance to the rear, then the front rank will remain, and the other ranks close up to them, when they will receive the following word of command.

Form rank enlire -- March.

At which word the front rank will oblique one step to the right and rear, and the rear rank oblique one step to the left, and each resume their places in line.

PART II.

THE DRILL OR DISCIPLINE OF THE SOLDIER WITHOUT ARMS.

REMARKS.

THE drill without arms is the same for all companies on foot, and should first be taught to men in one line, and when practicable, to five or six at a time, they being placed at a short distance from each other, to prevent their interfering with each other in the facings.

THE FIRST POSITION OF THE SOLDIER.

The heels on the same line as near each other as the conformation of the man will admit; the toes turned out so as to occupy a little more than three fifths of a semicircle, which could be described by turning the feet on the heels to the right and left. The knees strait, but not stiff; the body perpendicular, and the weight resting more hardly on the balls of the feet than the heels; the arms hanging down naturally and fully extended, and close to the body; the palm of the hands turned a little to the front, the elbows not separated from the body; the little fingers touching the seam of the pantaloons; the head well up, without being constrained; the chin a little drawn in, the breast pro-

jecting to the front; and the eyes fixed on the ground at the distance of fifteen paces to the front.

Nore.—The first word of command, in all cases, after the soldier appears on the line is—

Attention.

When he will instantly assume the position above described.

The instructor will then teach the motions of the headby giving the words of command which follow.

Eyes right.

On hearing the last word, the soldier turns his head with an easy and equal motion to the right, without moving the body; so that a line dropped from the left side of the nose would pass down the centre of the body; his eyes being fixed in the line of the rank he stands in.

Eyes left.

The motion of eyes left, will be executed by inverse means.

Front.

On hearing this word of command the soldier resumes the first position.

Rest.

On hearing this word the soldier will step back with the right foot about six inches to the rear, resting the weight of

the body principally on the right leg, and bending the left knee; he will join the hands before the body, keeping the eyes to the front. To make him resume his position the word is given—

Attention.

At this word the soldier resumes the prescribed position and steadiness.

Note —Turning the head to the right and left will be found necessary in all wheelings and dressings. It is to be observed as a general rule, that the first position is the one to be resumed after an order is completed.

Right-Face. One motion.

On hearing the last word he turns on his left heel, and at the same instant brings back his right foot and places it parallel with the left, describing one quarter of a circle to the left.

Left-Face. One motion.

Raise the right foot and left toe, resting the weight of the body on the left heel, and describe a quarter circle to the left bringing forward the right foot, placing it on a line with the left.

Right about—Face. *Two motions.

1. At the word about, the soldier makes a half face to the right, by stepping back the right foot in rear of the left heel, the centre of the foot touching the heel, and turning on the left heel so that the toe point directly to the front, and the right pointing along the line to the right; if under arms, lay hold on the cartridge-box with the right hand.

2 At the word face, he raises the toes, and turns on both heels half round to the rear; he then raises the right foot and carries it back even with the left.

REMARKS.

In the War Regulations, it is directed that the facings to the right and left about be done in two motions: but it is there ordered that the right foot be placed three inches in rear of the left heel, then turn on both heels, as here described. But I have found much difficulty in performing it in this way. The weight of the body being borne equally on both feet, and being obliged to swing back the right foot at the time of facing; it is found to be extremely difficult to balance the body on the left heel while the feet are at such a distance. And furthermore, it is not necessary that the right foot should be at any distance from the left, as it is to be carried to the rear at the time of facing; of course it cannot be in the way of the left.

Left about-Face. Two motions.

1. Observe the same rules as when facing to the right about, stepping forward the right foot instead of stepping to the rear; the feet in the first motion at right angles, the left toe pointing to the left, and the right to the front; the right heel in the hollow of the left foot.

The soldier is next to be taught the various steps, viz.

1. The common step.

5. Lock step.

2. Back step.

6. Time step.

3. Oblique step.

7. Balance step.

4. Side step.

These several steps are all useful in the movements hereafter to be practised; and they are severally regulated by the different kinds of *time*, except the balance step. These steps are to be taught in the following manner:

COMMON STEP, OR MARCH TO THE FRONT.

Forward-March.

At the word march, the soldier steps off with his left foot 28 inches, placing it flat on the ground, and be sure not to touch the ground with the foot that is raised, until it reaches the place where it is to be planted down. The right foot is then raised and moved in the same manner, at the rate of 75 in a minute, and continued alternately and regularly, until the officer commands—

Halt.

At this word, the step which the soldier may have begun is completed; the other foot brought up by its side; and the first position resumed.

BACK STEP.

Backward-March.

At the word march, the soldier carries back the left foot directly to the rear, and plants it 14 inches from the other. The body (as in all in other steps) kept square to the front, and erect. On hearing the word hall, the soldier places the foot (which is then raised) at the proper distance, and brings the other back by the side of it.

All the steps in the drill are to be performed in common time.

OBLIQUE STEP.

While on the march the officer orders-

To the right oblique—March.

At the word murch (which should be given as the left foot strikes the ground) the soldier will place his right foot so far to the right as to gain to the right, about three fourths of a full pace. The left foot is placed directly in front of the right, about three fourths of a full pace to the front.—The word then ought to be given—Right—Left; with so much of a pause between as to give the soldier time to get fixed in his position. When the ground to the right flank is gained, according to the design of the officer, he commands—

Forward-March.

At the word march (which should be given when the right foot is down) he resumes the march direct.

To the left oblique—March.

This is performed on the same principles.

SIDE STEP

This step may be begun with the right foot, which is not the case with any of the other steps. When the squad is in the line the word is given—

By the side step to the right-March.

When the right foot is raised and carried directly to the right, about 8 inches, or the distance between the files, preserving the line on which they are placed; the left foot is then brought up to it with as much of a pause as would equal the time of taking a full pace to the front in common time; the head turned to the right. At the word halt resume the first position.

REMARKS.

This step is very important and necessary. It is of use in opening or closing the files, or in moving an entire line a short distance to the right or left.

RULE.

When the line is to be moved to the right or left without opening the files, the first file on the leading flank must step no further than the distance between the files; otherwise the files will open, which is not the object. Each file will occupy at each step all the distance between the files, so

that when ordered to halt, will occupy no more ground than formerly.

When files are to be opened by the side step, the leading file may step the distance of two feet or more; and each file in succession will be enabled to step the same distance until the line is properly extended, when each file will halt in succession without the word as they get their true distance.

When the divisions or sub-divisions are to be opened from each other, the number of steps may be named, and the private counts for himself, and halts when the steps are finished.

LOCK STEP.

This is particularly useful in displaying a column, and in all file marching. It is not used in the drill until a number of files are formed in a rank; when being faced to the right or left, the word is given—

Forward-March.

When each file will raise his left foot and plant the heel opposite the hollow of the right foot of the file directly before him; then his right foot opposite his file-leaders left, in the same manner; continuing thus whether the step be long or short, until he hears the word hall, by which means every soldier will retain his true relative situation, and when brought into line, will occupy no more ground than will be necessary for the formation of close files, if the march has been correctly performed by the lock step.

This step is differently understood from what is here described. Gen. Scott, in the War Regulations, has described it thus: "That at each step the man in rear of another shall plant his foot on the spot left by the man in front of him."—Gen. Maltby describes it thus: "Every man locking, or placing his advanced foot on the ground before (upon) the spot from whence the preceding man had taken his."*

But the author is convinced that neither of these modes are practicable. It must be obvious to every one skilled in file-marching, that to step in the tracks of the file in front, he must wait until they be left by his file leader, which will cause the line to extend exactly twice its usual length, which is contrary to all military principles whatever.

TIME STEP.

This step is designed to preserve or mark the time, while on the march. It may be necessary to keep the same ground, and preserve time without gaining or losing ground; as when a front division may have to wait for one of the rear to advance, or when a front division meets with some impediment, the whole must wait for the front to advance; or when it is wished to change the direction of the march, by wheeling about on the centre. Then the officer will command—

Mark time-March.

The word march is given when one foot strikes the ground, the other is then flung out to the front so far as to

* This, says Maltby, was taken from James' Dictionary.

straighten the leg, and without constraint, when it is brought back and placed by the other foot, within the time of making one step, whether in common or quick time. This is alternately continued until the officer gives a second order.

BALANCE STEP.

This step is not practised except in the drill. It is executed in the following manner. At the words Balance slep-March, the left leg is extended and carried forward with a straight knee sufficiently to the front to make a step of 28 inches, the foot level, and suspended from the ground, with the whole weight of the body on the right foot, the attitude of the body the same as in the first position. At the word one, from the officer, the foot is swung to the rear as far as practicable, without any mo-Then wait until the officer gives the tion of the body. word two: when the foot is carried to the front and planted 28 inches from the other; when that is raised and carried to the front and suspended in the same manner, the weight of the body on the left leg. This is continued alternately, swinging the foot to the front and rear, until the word is given rest; when the foot that is raised is planted by the side of the other, and the soldier stands at ease.

REMARKS.

The principle object in this step is to habituate the soldier to march erect, without wavering or jostling, or unnecessary motions of the body or limbs, and that the step at all times should appear easy, and without great bodily exertion; particularly to have habitually at command the exact balance of the body in all the various steps, and the easy motion or swing of the leg. The soldier is extremely apt to bend the knee too much when marching, which arises in no small degree from the want of practice in this step. Too much care cannot be taken to prevent the soldier from bending the knee when marching. The weight of the body should never be allowed to come upon the foot until the knee is perfectly straight.

In all marchings, the body should move directly to the front as much as possible, without jostling to the right or left, more than to balance the body from one foot to the other.

The first position of the soldier, the various facings and steps, as already pointed out, having been taught, and become familiar, he is prepared to receive his arms, to take the same position, and to perform the same movements with arms.

TO FORM A COMPANY AND POST THE OFFICERS.

REMARKS.

It will first be the duty of the commanding officer to ascertain if there be a complement of non-commissioned officers present, if not he will launch others to fill the vacancies for the day. He then orders one of the sergeants to parado the company in one rank, with the tallest on the right and left, and divide them into sub-divisions and sections, and assign the officers their posts.

This duty commonly belongs to the first sergeant, but the captain should make them take turns, that they may all understand the duty.

The sergeant will then order the music to beat the long roll on parade, when the men will form on the left of the music, with the tallest on the right, in succession to the left. The non-commissioned officers in front to assist when called on. The sergeant then gives the order,

Attention.

Number yourselves into first and second divisions—beginning on the right.

When the first file will say first, the second second, the third first, the fourth second, continuing first, second, through the whole to the left flank. The officer then commands,

Divisions-to the right and left-Face.

The first division will face to the right, and second division to the left; that is, those who number first, will face to the right, and number second, to the left. The order is then given,

One side slep to the left - March.

At the word march, each file will step one step to the left and halt, which will open the division sufficiently for them to pass each other in line. It will then be ordered,

Company—to the right and left size—March.

The sergeant will have previously posted an officer on the left of the second division to lead them into line, and as soon as the word march is given, the first division will close up to the first file on the right, who does not move from his ground; the second division turn by files to the right-about, and form a line with the first division and halt without the word as soon as each one has closed up; but the officer must be careful that the files do not close so close that they cannot face without crowding each other out of place. The officer that leads the division will step to the front as soon as the line is formed. The officer then orders.

Hall-to the front-Face.

The tallest will then be on the flank, and the shortest in the centre.

If at any time it is desired to form two ranks with the tallest men in the rear, count off the whole in four divisions. The officer then orders,

First and fourth divisions-form rear rank-March.

At the word rank, the divisions named will face inwards; and at the word march, they move to the centre, in rear of the second and third divisions and halt without the word; they are then fronted by order. The tallest will then compose the rear; and the shortest the front rank.

But as artillery companies uniformly parade for exercise and movement in one rank, I shall in the succeeding part of the work consider them in that order.

When the company are paraded as above, the sergeant will proceed to divide them into four equal sub-divisions,

and eight sections. But should there be odd files, the sub-divisions or sections on the right and left must be the largest until the odd files are taken up.

For instance, you have fifty files, and divide them into sub-divisions of twelve, you have two files left; you will of course leave thirteen on the first and fourth, then dividing the sub-divisions into sections you will leave seven in the first and eighth.

I have sometimes in dividing the company into sections, made them number themselves, then designate each file which is to be the left and right of each section and subdivision; but as I have experienced much difficulty from their not retaining their numbers, I have chose to count them and make a small separation between the sections, that there be no mistake when wheeling, as the officers are not to be posted till the company are wheeling into column.

When the company are properly divided into sub-divisions and sections, the officer commands,

By sections—on your left—backward wheel—March.

The officers are then posted according to Plate 1. Fig. 2. The officers then orders,

Sections—to the left—wheel into line—March.

When the company will incline a little to the left to make room for the officers who will now remain in line till the captain takes the command, unless the sergeant who paraded the company wishes to exercise them, in which case the others will take post in front. It has formerly been the practice for the sergeant to take the music and wait on the officers to parade; but it has of late grown out of fashion, and I think very justly; for I consider the time lost, and worse than lost; it had much better be spent in the duties of the day. Therefore the captain will give the sergeant no more than sufficient time to parade the company before he appears on parade; and it would be well if he would be present with the other officers through the whole formation, and correct all mistakes that may happen.

When the captain takes command, the first sergeaut will take post on the right of the company, and the other non-commissioned officers in line. (See Plate I. Fig. 1.)

The captain will then wheel the company by sections on the left backwards; then order the most experienced privates in the section to take post on the right to do duty as officers through the day; then wheel the company into line, and order one of the sergeants to call the roll and read the law; when the other sergeants will step four paces in front and face to the company, and the three commissioned officers in a line with them on the right. After the roll is called and the law read, the next business is to inspect, after which the company proceed to exercise.

When the company are to exercise with swords or muskets, the sergeants, (if they understand the exercise as they ought,) should be posted six paces in front to regulate the motions.

When the company have concluded their march, and halt, the sergeants will keep post in line till the officer orders to stand at ease, when they will step four paces in

rear and dress in a line; which will give room for the men to incline and rest.

It will be noticed that I have posted the non-commissioned officers at all times on the commanding flank of their sections and sub-divisions, which all authors will agree to be the left of the column when the right is in front, and the right when the left is in front.

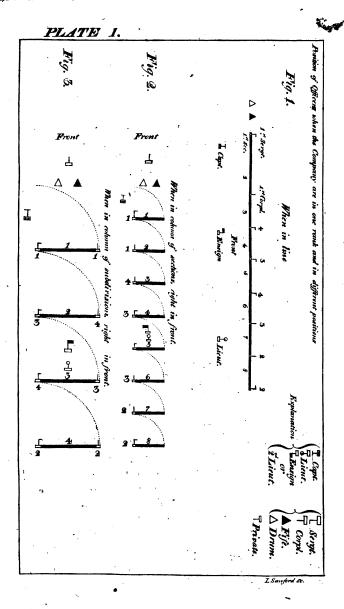
Some general directions for officers and privates respecting wheeling.

THE officer should give the words of command plain and distinct, and with energy; as much depends on the manner of giving them. He should always make considerable pause between the word wheel and march, that each one may have an opportunity to think which way he has to wheel.

I have often seen the best disciplined companies thrown into confusion, in consequence of blending the caution with the command.

It is an invariable rule, (when the ground and circumstances admit of it,) to break a line by wheeling backward on the left, to march with right in front, and on the right to march left in front; but there are various modes of breaking into column, and should all be understood, as they may sometimes be necessary.

The reason for wheeling in this way is, to retain the dress of that flank which is to govern on the march; whereas, if wheeled the reverse, and there be odd files in



the sections, the line must be irregular, and as soon as they march they must oblique to the right and left till they get the flank in line.

It is at all times to be remembered as the only possible way to wheel correctly, for each man to look to the wheeling flank, excepting the man on that flank, who looks to the pivot flank.

Therefore as soon as the word is given *wheel*, each man will turn his head in that direction, and there wait for the word *march*; and unless this be strictly attended to, it will be impossible to wheel well; for it is readily seen that the man on the wheeling flank has further to go; therefore it will be necessary to look to that flank to see that you do not leave the man next to you on that flank.

These instructions it will be necessary for the officer often to repeat to his company, as they are important and hard to be remembered.

Directions respecting dressing.

When the company stand in a line, they must dress by the right; but as soon as they are wheeled into column with the right in front, they will dress to the left; and when the left is in front, dress to the right; that is, look and feel at all times towards the officer commanding the section or sub-division to which you belong, except in wheeling,) who is always to remain on the commanding flank.

This mode of dressing you will perceive is different from what has formerly been practised in the militia; and in my first edition of this work I have laboured at considerable length to prove the necessity, and propriety of this mode of dressing; but I need not say more at this time than that this is now established by a law of Congress, and sanctioned by this State.

MANŒUVRES.

EXPLANATION.

This figure——as the place from where a sub-division is moved.

The small dots, or points, shew the path in which the sub-divisions move.

The small arrows by their points, shew the direction of the march.

MANŒUVRE No. I.

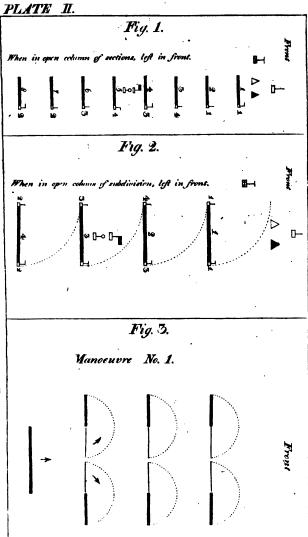
To change front of a column of sub-division when on the march.

Mark Time.

Column will countermarch and change front—By sections from the centre outwards wheel—March.

EXPLANATORY REMARKS.

Previous to the words being given to mark time, the officer should have some concerted signal for the music to beat time, that the words of command may be heard; the signal being given, the fifes will play and the drums beat time when the left foot strikes the ground. This answers many excellent purposes: it rests the music, and if any one has lost the step, gives him an opportunity to recover it. An officer should never attempt any movement without it, as it is difficult for the voice to be heard above the music. In this movement the music will again play as soon as they As soon as the word is given to mark move to the front. time, the men stop short, and mark time, without gaining ground, and see that they are dressed; and as soon as they hear the word march, the sub-divisions wheel outwards from the centre, by the two centre files forming a half circle to the right and left, and the sub-divisions will be facing to the rear; (see Plate II.) excepting the rear sub-division, which will not wheel, but move forward as soon as the word is given for the column to wheel and march.



As the rear sub-division is many times the largest, it will be necessary for the officers on the right and left, to incline a little to the right and left, to give the rear room to march through in the intervals without crowding.

Each officer commanding a sub-division, will give the word inward wheel, as soon as the sub-division in rear get in a line with their sections. The officers of each sub-division will change flanks as soon as they have past the column thus opened, by the commanding officer passing in front of his command, and the other in rear; when the column will then dress by the right as before observed.—

The music in this movement will not wheel nor face, but mark time until the sergeant or private, (who is posted in front regulate the movements, having faced to the company at the word march, and discovered that the sub-divisions have gained their distance,) faces again to the front and moves forward, when the music will follow.

MANŒUVRE No. 2.

To change the direction of march by wheeling of subdivisions on the centre file to the right about.

Mark Time.

By sub divisions—On your centre file—To the right about wheel—March.

EXPLANATORY REMARKS.

In this as well as the preceding movement, each one must be careful to mark time until the proper time to wheel or move to the front.

As soon as the word is given—wheel, the officers on the right and left, face to the right and left about, or outwards from the sub-division; and as soon as the word is given—march, the remainder of the sub-division wheel round on the centre file, by the right stepping back and left forward, until they again come in a line with the officers, who do not wheel, but keep their posts on the right and left.

The music wheel at the same time, and march in rear of the column.

By this mode of wheeling, the officer commanding each sub-division is kept on the commanding flank, which s agreeable to the system here laid down.

This may be countermarched as the first movement by each sub-division wheeling outwards, and the music passing through in front.

Both of these movements may be practised in column of sections or sub-divisions, or larger or smaller bodies, as best suits the officers.

MANŒUVRE No. 3.

To countermarch a line, and change front.

Company will countermarch by files on the centre, and change front.

Divisions inward face.

One side step to the right—March.

By files—Forward—March.

Halt—Front face.

EXPLANATORY REMARKS.

It must be previously noted where the centre of a company is, and the word is given, Divisions inward face, all face to the centre; then at the order, all step to the right, which will open the files sufficient for each division to pass, and turn into line and form on the original ground. The two centre files will turn to the left about, and form on the old line, facing each other; and the other files march and turn into line in succession.

Officers must be careful that the files do not close in such close order, but they may face without crowding.

MANŒUVRE No. 4.

Change of front by countermarch of sections on the cenfre.

Second division—Right about face.
Sections inward wheel—March.
Column march.
Hall—Front face.

EXPLANATORY REMARKS.

Companies are divided into first and second divisions, sub-divisions and sections. That half on the right of the centre is the first division, and that on the left the second.

So that when the word is given—to the right about face, the division named faces to the rear; and when the word is given—march, both divisions wheel to their present left, and halt. The first division will then be in column in front of the line, with the left in front. At the word—march, both columns march at the same time, and as soon as the two centre sections have past each other on the line, they wheel to the left into line and dress: the remaining sections, as soon as they have passed the line already formed, wheel into line by order of the officer commanding the section.

The officer must be careful that the men mark time until the word is given—hall, (if the music be playing.). The line is then fronted by order of the officer commanding.

PEATE III. Manoeuvre No. 2. Manoeuvre No. 3. Front Manceuvre No. 4. Front

MANŒUVRE No. 5.

To march in direct echelon of sections, to form a line to the front.

Company will advance in direct echelon of sections.

Mark time-March.

By sections from the right in succession—At half wheeling distance—March.

Echelon-form a line.

Halt.

EXPLANATORY REMARKS.

This is the echelon direct, to form in front, parallel, on a point distant, which the officer will have previously ascertained. It will be first necessary to mark time, that each one may get the step before moving to the front.

When the word is given for the first section to march, they will step off the full length of a step, and march direct to the front.

The officer commanding each remaining section, gives the word—forward, as soon as they see that the section in front have gained the distance required.

As soon as the leading section have reached the point of formation, the officer commanding the company gives the order—echelon form a line; when the first section will mark time and the remainder come up in succession, and dress by them.

It is to be kept in mind, that when those formations are on the right, the officers commanding the sections are to

be on the right; and that is then to be the governing flank. When formed to the left by this kind of movement, the left flank governs It will be necessary that a position square to the front should be maintained, and no inclination to the right or left, unless it be required in order to keep the proportion of the left flank of the preceding section, in line with the right, so that he will neither take up too much nor too little ground, nor in any way derange the other sections.

Nork. The direct echelon may be commenced from either section or sub-division in the company; taking care at all times, to feel and dress towards the section in front.

MANŒUVRE No. 6.

Echelon change of position to a point distant, and not within the company.

Company will murch in echelon to form a line to the right.

By sections—To the right half wheel—March.
Echelon forward—March.
Mark time.
To the left—Wheel into line—March.
Halt.

EXPLANATORY REMARKS.

This march in echelon is difficult, and requires particular attention. The front of each division must be retain-

PLATE IV. Manoeuvre No. 5. Front Manoeuvre No. 6.

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ed, and the same relative situation preserved. When the left flank of each section have arrived on the new line, the commanding officer orders—mark time. And each commandant of sections will immediately see that they have not changed position.

At the word—wheel into line, the left hand man of each section, will half face to the left, and the remainder of the section wheel up and dress by the right.

The march in echelon to the left flank, is executed in the same manner. It may be also done to the rear, and to either flank, by facing about, and by wheeling up in echelon to the flank required.

Note. It may be remarked, that any wheel short of a full wheel from line to column, would produce an echelon.

MANŒUV

The right of the company and formed on the left, so as t

Company will wheel into echec secti

By sections—To the left sec

EXPLANATORY

In this movement it has been to the left, so that each section new line. But I have found it in this way; as the sections not the right to prevent the eight the ground of the sixth.

By making a quarter wheel, angle with the line of march, w to march direct to the front, un on the new alinement. When the word—wheel into line; and see till the officer commanding give

There are various other move lon; such as wheeling on the ce left, and forming on the right; and forming on the left; and the forming on the right, and varibut these examples are deemed commandant of a company, to et be required of him by the echelon

Wart

ME!

ICEUVRE No. 8.

re filed into open column to the front

rom the left of sections, into open column to the front.

ace. ont—March.

PLANATORY REMARKS.

is given—left face, all face to the left left, who will remain facing to the front, ection when the word is given—march: ust look to the right, and see that they ach other; the remaining files will turn tey arrive on the ground where the leade whole move together at the word—te to advance in close order, till the gives the word—halt.

officers will see that the files are closed to wheel into line, or march in open required. If the march has been corve retained the exact wheeling distance, will have prevented opening the files. ow stand right in front, having faced to rd—front.

MANŒUVRE No. 7.

The right of the company brought forward by echelon, and formed on the left, so as to make a half wheel.

Company will wheel into echelon, to form line on the left section.

By sections—To the left quarter wheel—March. Form line on the left section—March—Halt.

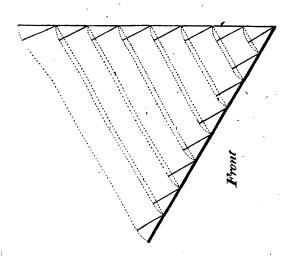
EXPLANATORY REMARKS

In this movement it has been practised to half wheel to the left, so that each section may stand parallel with the new line. But I have found it very difficult to perform it in this way; as the sections must continually oblique to the right to prevent the eighth section coming on to the ground of the sixth.

By making a quarter wheel, each section forms a right angle with the line of march, which enables each section to march direct to the front, until the left hand file comes on the new alinement. When the section officer gives the word—nheel into line; and see that each man mark time, till the officer commanding give the word—halt.

There are various other movements practised by echelon; such as wheeling on the centre, bringing forward the left, and forming on the right; throwing back the right and forming on the left; and throwing back the left and forming on the right, and various others equally useful; but these examples are deemed sufficient to enable the commandant of a company, to effect any change that may be required of him by the echelon movement.

Manceuvre No. 7.



Manoeuvre No. 8.



Front of Line.

MANŒUVRE No. 8.

The company are filed into open column to the front with right in front.

Company will file from the left of sections, into open column to the front.

To the left face.
File to the front—March.
Hall.
Front face.

EXPLANATORY REMARKS.

When the word is given—left face, all face to the left but the man on the left, who will remain facing to the front, ready to lead the section when the word is given—march: Each leading file must look to the right, and see that they are in a line with each other; the remaining files will turn to the right when they arrive on the ground where the leading file stood. The whole move together at the word—march, and continue to advance in close order, till the commanding officer gives the word—halt.

When halted, the officers will see that the files are closed to the pivot, ready to wheel into line, or march in open column, as may be required. If the march has been correct, they will have retained the exact wheeling distance, and the lock step will have prevented opening the files. The column will now stand right in front, having faced to the right at the word—front.

MANŒUVRE No. 9.

Successive formation of line, from open co the march, to the right flank.

Column will form a line on the front

Front section—to the right wheel.

Halt.

EXPLANATORY REMARKS.

When the intention is announced by the efficer of forming to the right flank by whee succession on a line previously designated, the section becomes the governing flank, to while and men are to conform.

When the word is given for the first seet they will wheel to the right, and step one pagive the remaining sections room to pass in roup as soon as they are uncovered, and mark have the word—hall.

PLATE	7.7.					· ·
Manceuvre No. Q						
-				-		
		Fig	. 1.			
Manoeuvre No. 10.						
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Fig. 1.						
•		Fi	g. 2.			Frant
		Fig.	3 .	: •		

MANŒUVRE No. 10.

To form the wedge from open column of sections.

Company form the wedge-Marck.

EXPLANATORY REMARKS,

Plate of movements, No. 10. Fig. 1. represents a company in open column of sections, right in front, containing fifty five distinct files. Fig. 2. represents the files broken off in each section, which are separated by small lines; and the files or parts of sections which form together, are connected by other small lines running across the lines which separates the sections. Fig. 3. represents the wedge formed in close order.

Forming the wedge, consists simply in decreasing the front, and increasing the rear, so as to increase each line one file from front to rear; should there be odd files, there may be an equal number in two or three of the last ranks.

Where a company consists of fifty-five files, as in this plate, the third file from the right in the first section forms the point; the two right hand files the second line; the three files on the left of the file that forms the front, forms the third line; the first file on the left of the first section, and the three files on the right of the second section form the fourth line; the four remaining files in the second section, and the first file on the right of the third section, torm

the fifth line; the remainder of the section form the sixth line; the fourth section form the seventh line; the fifth section and the first file on the right of the sixth section, form the eighth line; the six remaining files of the sixth section, and the three right hand files of the seventh section, form the ninth line: and the four remaining files and the rear section, form the tenth and rear line.

This may be formed from any number of files on the principle before mentioned, and may be very useful to break through a line of infantry, or resist an attack; but must always be formed in close order, and each file cover the intervals of the file in front.

The sections may be formed by breaking off of files, and forming as before, and mark time till each section have gained their proper distance in the column.

Observations respecting the change of front, and forming sub-divisions from sections.

It has been already remarked that when the company change the direction of march by wheeling to the right about on the centre, the officers do not wheel, but face to the right and left about, which reverses their order; and the commandant of the section or sub-division, still retains the commanding flank. This position of officers answers in the room of markers, which most officers post on the right and left flank of sub-divisions, to retain the exact position of the column, which is very necessary.

When the company are in column of sections, right in

front, and it be ordered to form sub-divisions, the first section will oblique to the right sufficient to give room for the second section to oblique half their length to the left, and form on their left in a line with the first section. The other sections will do the same, taking care that the front section of each sub-division oblique to the right, and rear to the left. The first sergeant and lieutenant must leave their sections, and oblique to the left; the other sergeants keep their places; the corporals fall in rear and take post on the right of the sub-divisions.

PART III.

THE MANAGEMENT OF FIELD PIECES, AND THE DUTY OF ARTILLERISTS.

Every artillerist in learning his exercise, must give the greatest attention to the words of command, the beats of the drum, and the different positions in which the body should be placed.

In the first place it is necessary that the young artillerist should be acquainted with the names of the apparatus which is necessary to equip a piece of artillery in the field, viz. 1st, a lint stock; 2d, a portfire stock; 3d, a powder horn and hammer, pincers, priming wires and gimblets; these are fixed in the gunner's belt; 4th, a tube box and thumb case; this is made of leather, which the bombardier puts on his left thumb, to prevent the heat of the piece in quick firing, from burning him; 5th, a haversack; 6th, a sponge and rammer; 7th, a ladle; 8th, a worm; sometimes the ladle and worm are fixed on one staff; 9th, a set of drag ropes; 10th, a trail spike to guide the piece with, or tiller, which is a more suitable term for it, as the gunner steers the piece with it. Also limbers, gears, horses, &c.

OF RECEIVING AND MANNING THE PIECES AT THE PARK.

The position of the men, to receive the piece unlimbered.

The pieces being placed on a line, at such distance from each other, that the wings of each division will not interfere when the pieces are manned, march the men in front of the pieces in open column of sub-divisions right in front, so as to have the pieces on their right. When the rear sub-divisions of each grand division, have arrived within wheeling distance of the left flank of their respective pieces, they will mark time by order of the officer commanding the sub-divisions. And when the front sub-divisions have gained the ground opposite the right flank of the pieces, they all mark time by order of the officer commanding the company.

, Mark time-Right face-March.

Great care must be taken to keep the files closed; and when the rear files have gained the line of the axletrees, the word is given.

Hall-Left face.

The left hand man of each sub-division should dress, so as to form a line corresponding with the axletress, by which the whole should be governed. If they are too open, they should close to the left by the side step.

To the left—Wheel into line—March.

They wheel to the left, and dress on a line with the axletrees.

OF MANNING THE PIECES.

COMMAND.

Man-Pieces.

In manning the pieces, great care should be taken, that each man understand and perform his duty with regularity and alertness in the following order; the sergeants will step back a little in the rear, and take care that every thing is in order for action or exercise, agreeable to the direction of the officer commanding the piece. One gunner at each. piece handles the trail spike or tiller; one the linstock, and the other handles the sponge and rammar. The bombardiers are placed one at the vent, one to serve the piece with cartridges, and the other, (with two or three other men to each piece, taken from about the centre of each sub-division. whose duty should be previously assigned them,) to take off the side boxes, and place them in the rear of the pieces opening from the piece. The man in each sub-division next the piece, should be expert in booking and unhooking the drag ropes. All the matrosses who are not otherwise employed, will attend at the drag ropes; the corporals on

the wings. The whole will dress in a line with the axletrees.

One matross at each piece, should be appointed to carry the haversack with cartridges. He should be a trusty man, as his duty is important. His place is on the left of the piece. Some officers post him in front of the drag ropes, others in the rear. If I were to exercise my own judgment in the case, I should place him in the rear of the drag ropes, in such a position as to hand the cartridges with his right hand to the bombardier, who will receive it with his left hand. When he has handed the cartridge, he may incline a little to the left; and must be very cautious when the piece is fired, that the fire be not communicated to the cartridges in his haversack. I would not be so nice about his attending to particular motions, as to doing his duty with fidelity and alertness. He should face to the front. holding his haversack under his left arm, the better to secure it from fire. The only material objection to posting this man in the rear of the drag ropes is, that he will be in the way of the men when shifting the drag ropes: but if he steps close to the wheel when the drag ropes are shifting, he will not be much in the way; for the man who hooks may pass by him with ease; but if he be in front, he will be in the way of advancing, and it will be attended with in conveniences, as it is sometimes necessary to load the pieces while advancing. Besides, if he is in the rear of the drag rope, he will, if necessary, more readily supply his haversack with cartridges from the side boxes.

OF MARCHING THE PIECES FROM THE PARK, WITH LIMBERS AND HORSES.

CAUTION.

Take care to limber pieces.

At this caution the sergeant will attend, that the drivers fetch the limbers.

Unhook drag ropes-Limber pieces.

The men at the drag ropes unhook and fix them to the breast transom-hooks of the carriage, and do them up; the side boxes are brought and put on the carriage. The pieces are to be limbered in the direction in which they are to march.

Company—Two paces—Forward—March.

That will give room to turn the pieces and limber them.

By sub divisions-To the right wheel March.

The non-commissioned officers and matrosses must be very attentive in knowing their places, and their right and left hand men, as activity is necessary in performing this duty.

When the pieces are limbered and ready to fall in, the word is given,

Forward-March.

The officers will pay particular attention to their respective sub-divisions, and see that suitable opening be made between the sub-divisions to receive the pieces. The first sub-division advances, and the first piece will follow, inclining obliquely to the left, until it gains its proper ground in rear of the centre of the first subdivision. The second sub-division follow on in rear of the piece, then the tumbrel.

The third and fourth sub-division will form the second division, in the same manner as the first. The first and third sub-division should march at least four paces in front of the horses heads; the like distance from the pieces should be observed by the sub-division which follow the pieces; or a greater distance must be observed, if necessary to give the horses more room; for it is difficult to make horses, (especially such as are unaccustomed to this kind of service,) march uniform with the men.

OF MARCHING BY FILES, ON THE FLANKS OF THE PIECES.

Previously to unlimbering, it is necessary that the subdivision march by files, on the flanks of their respective pieces. It is there requisite, that the men be often exercised in this wa of marching, that they may be expert, and perform it with accuracy and alertness; but the difficulty is, so to perform it, as to prevent shifting the sub-division from right to left, or being in a reversed position. I would propose the following method, which, I humbly conceive, will not be attended with either of the difficulties before mentioned.

CAUTION.

Company will march by files from the right and left of sub-divisions.

At this caution, the officers commanding subdivisions will see that their men are dressed; that the sub-divisions are at suitable distance from the pieces; that they give good attention to the commanding officer, and are ready to attend to the following word of command.

Sub-divisions-Advance by files-March.

At this word of command, the first and third, or front sub-division of each division, will face to the left, all but the sergeant or left hand man, who will proceed directly in front; the others, as they arrive on his ground, turn to the right, and follow him in succession. When they have uncovered the ground on which the piece is to march, they will march very slowly, by shortening the step, until they cover the pieces in flank: The second and fourth, or rear sub-divisions will face to the right, except the corporal, who will march directly forward on the right flank of the piece; the other men follow, as before directed, only they will

lengthen their step, and come up briskly, until they cover the pieces and the other sub-divisions. The file leaders should not be further advanced than the trail transoms. The files should be closed.

OF UNLIMBERING AND MANNING THE PIECES.

Being arrived on the ground on which you are to exercise—Command,

Halt—Inwards—Face.

When each sub-division will face to their pieces.

Unlimber-Pieces.

The men appointed to that duty will unlimber the pieces, and take their places as before. While this is doing, the word is given,

Wings-Outward wheel-and form a line-March.

Each file that are in a line with the axletree, keep their places, and merely face to the right and left at the word—march. The files in rear of the axletree, wheel backwards; those in front wheel forward.

Man-Pieces.

The corporals take the drag-ropes from the breast transom hooks, and hook one end to the washer hooks,

and by the other extend them in a line with the axletres, by which the men dress.

If the exercise is not to begin immediately, they may be laid on the ground in front of the line, and the men per mitted to rest. The foregoing method of marching by files on the flanks of the pieces and manning them, is undoubtedly the most correct; but is differently performed by some when on the march in column, with the sub-divisions in front and rear of the pieces. Col. Stevens directs that it be done in the following manner:

The company being on the march in column, with the right in front, and pieces limbered, and having arrived on the ground on which they are to exercise; the officer commands,

Platoons—From the centre—to the right and left turn—
Counter March.

(See Plate VII. Fig. 1.)

The men in each platoon face; those of the right wing of the platoon face to the right, excepting the right hand man, he marches directly forward; the others in succession as they arrive on his ground turn to the left, and march forward to the right flank of the piece; and those on the left flank of the platoon face to the left, excepting the left hand man, who marches directly forward on the left flank of the piece; the others, as they arrive on his ground, turn to the right, and march forward.

By this movement it is seen that the second and fourth sections, or the left sections of the first and second sub-di-

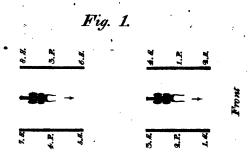
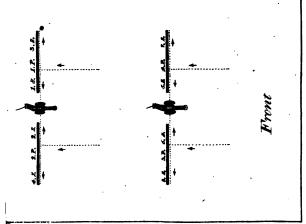


Fig. 2.



visions form the first platoon, on the left flank of the first piece; the first and third sections, or the right sections of the first and second sub divisions form the second platoon, on the right flank of the first piece; and the other sub-divisions form in the same manner, by the left sections forming on the left flank, and the right section forming on the right flank of the piece. The rear files advanced in a line with the muzzle of the piece.

Platoons—To the right and left turn to the confre—Unlimber pieces.

The platoons on the right flank of the piece turn to the lett, and those on the left of the piece turn to the right, and march to the piece which they unlimber, and man it out either for exercise or action. (See Plate VII. Fig 2.)

There may be objections to this mode of Col. Stevens' unlimbering and manning pieces; as it totally disconcerts the order of the sections and sub-divisions, which I think of great importance to be observed.

I would not be so nice as to point out every particular situation of each file in the company, in this movement; the duty of artillery being more independent of each other; it is not necessary that they should act as one body, like that of infantry.

But I think it of the utmost importance, there should be a uniform system for manning pieces. The artillery are frequently called to act together, and should they be governed by different systems, it might disconcert the movements of a whole regiment. The most of the officers now in command, undoubtedly have a mode of manning pieces, which they are attached to from habit; and many have an equal claim to preference; but to reduce them all to one system, some must relinquish theirs, however they may be attached to it from custom.

Various modes of manning pieces are to be taught, as the situation of the troops are varied; such as manning them at the park, and from marching by files on the flanks of the pieces, and from the march in column; and also from the regimental line, the pieces being limbered. In all these cases a different movement of the men is necessary: but in each, there should be a uniform system observed by all. The two first of those positions I have considered, and described the manner in which the pieces are to be manned. I have likewise pointed out the mode in which Col. Stevens directs that the pieces should be manned from marching in column, and which has been formerly practised by some officers. My object, however, in describing this method was more to show the absurdity of the mode, than to lay it down as a system to be adopted.

The company being on the march, right in front, and pieces limbered, the officer orders,

Hall-Unlimber pieces - Man pieces.

When the word is given to unlimber pieces, each man attends to the duty assigned him; and at the word—man pieces, the corporals from each sub-division, step to the pieces and take the drag ropes from the breast transomhooks, and hook to the washer-hooks, and extend them in a line with the axletrees, and lay them on the ground to

dress by. All the men that are not taken up in the mauagement of the piece, will form into line in the following manner:

The first sub-division being in front of the piece, will face to the left and march out half the length of the sub-division; then turn by files to the left and march till they arrive at the drag-ropes; then turn again to the left, and march till they arrive at the piece, then halt and face to the right without the word, and dress by the drag-ropes or or the axletrees. The sub-division in rear of the piece faces to the right, and marches out half-wheeling distance as the other; then turn by files to the left, and pass to the rear of the drag-ropes; then turn again to the left and follow the drag ropes to the piece; then halt and front to the muzzle of the piece as the first sub-division. The third and fourth sub-divisions belonging to the second piece, will do the same. The horses and limbers are turned out to the left flank of the pieces, and clear of the wings.

The pieces are then in column ready to march, with the left in front, or to form battery to any given point. (See Plate VIII. Fig. 1.)

TO MAN PIECES FROM COLUMN, AND CONTINUE THE MARCH TO THE FRONT.

The company being on the march in column with the right in front receive the word—

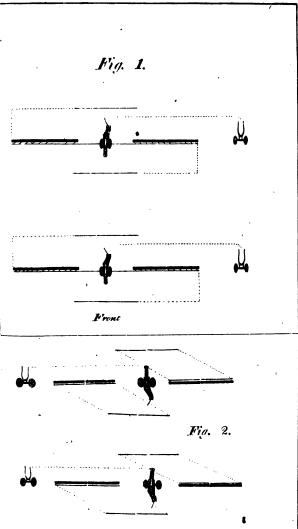
Hall-Unlimber pieces-Man pieces.

At the word to unlimber pieces, those detached for that

purpose will immediately leave the sub-divisions to which they belong, and unlimber the pieces and wheel them about, and prepare them for action or exercise; the limbers will turn out to the left flank of the pieces. While this is performing the sub-division in front of the pieces will face to the right about and march obliquely to the left until in line with the axletree on the right flank of the pieces; then halt and face again to the front. The sub-divisions in rear of the pieces will likewise oblique to the left without facin; and march obliquely to the left and dress by the axletree on the left flank of the pieces. The word is then given,—man pieces, when each one will attend to the particular duty assigned him. (See Plate VIII. Fig. 2.)

To unlimber pieces and man them from line is simply for the gunners and bombardiers to take their several stations, and the remainder to close to their pieces.

1. Sungerd Se.



Wards of command for the manual exercise of field pieces.

The pieces are considered to be unlimbered and formed in battery.

Attention. Secure side boxes. Man pieces. To the right dress. Advance spunge. Tend vent. Spunge pieces. Handle cartridge. Charge pieces. Ram down cartridge. Prime-Take aim. Fire. Change drag-ropes. Unhook drag-ropes. Mount side boxes. Limber pieces-Shoulder rammer. Carry lint stock.

THE DUTY OF THE MEN WHO MANAGE THE PIECES.

The duty of the gunner who directs the piece.

A gunner ought to be a man of good judgment acquainted with heights and distance, so that in the different situations of the ground on which he may be posted, he may be able to form a judgment what elevation or depression will be requisite to hit the object aimed at. He ought also to be well acquainted with the strength and quality of powder, so as to know what quantity is sufficient When the company have orders to load for a charge. and fire, you are to step your right foot in the trail of the carriage. In this position you are able to take your line of direction to the object, by placing your two thumb nails together on the centre line or horizontal surface, which is produced by letting fall a perpendicular line both at breech and muzzle; at that line mark on the breech and muzzle. and look through between your thumb nails and range the centre line with the object, which gives the centre line of direction. Then take your observation on the side lines. These side lines are a right line besecting the perpendicular in the centre of the cylinder's diameter at right angles, which enables you to know whether your piece wants elevation or depression, according to the distance and situation of the object aimed at.

Then retire to your post on the left of the tiller. Observe when the word is given to *fire*, step obliquely to the left so as to be clear of the carriage when it recoils; and stand straight, with your body square to the front.

The gunner's duly who fires the piece.

He should be very cautious not to fire until he hears the word distinctly given. You stand on the left side of the piece, your left foot about right angles with the vent, (or touch hole) of the piece, and so as to be clear of the wheel when the piece recoils; when you hear the word—fire, you make a half face to the right, step with your right foot a short step to the right. When fired, step back at position first.

The duty of the man who tends the vent.

You ought to be very careful in tending the vent, as it is a very essential part of the exercise in action.

When the piece is fired, you step up to the piece and put your thumb on the vent, (or touch hole,) placed so as to prevent any air coming out; your thumb is to be kept in this position till the piece is spunged, and the charge rammed home.

The gunner's duty who spunges and rams down the charge.

You are posted on the right side of the piece, between the wheel and the muzzle of the gun, with your body square to the front, and so far back as to be clear of the muzzle of the piece, when fired. Your left foot a moderate pace in front, the toes turned outwards. Place your spunge opposite your right breast, and right hand extended downward. Seize the staff just above the rammer head, with the back of the hand to the front, and fingers extended downwards; and with your left hand seize the staff opposite your left breast, holding the spunge perpendicular. The next motion you step forward with your right foot, and turn to the left about.

At the same time you face, bring down the spunge on the right side of the piece, slip the left hand to the head of the spunge, enter it into the cylinder of the piece, till it touches the head of the cylinder, turn it once or twice round; draw it out, and turn it over and enter the other end into the cylinder, and ram down the cartridge, keeping your body clear of the muzzle; then spring the rammar out of the piece, and come to the first position.

Duly of the maiross who carries the haversack.

He ought to be a man of considerable strength, as the fatigue of carrying the ammunition in the field is considerable. Your post is on the left side of the piece, in rear of the drag rope, as before observed, with your haversack slung on your left side, facing to the front. You must be very attentive to the words of command, and be ready to hand the cartridge to the gunner as soon as wanted.

Duly of the matrosses who man the drag-ropes.

The men are posted in rear of the drag-ropes, facing to the front, and when firing, each wing dress towards the piece. When you have the word to advance, the wings wheel inward; but not so far as to have the ropes rub the wheels; and when a hall is ordered, fall back and dress as before.

In wheeling to the right, those men on the right dragrope fall back; while those on the left wheel forward and dress by each other, so as to form at right angles with the original line.

The wheel to the left is on the same principle as to the right; the men on the left fall back, and the men on the right wheel forward, and dress as before.

The duty of the men who carry the side boxes.

They take post three paces in rear of the gunner at the tiller, and face to the front, and set down these boxes with the front of them to the rear, so as not to be exposed when opening the lids. The man in the centre takes a handle of each box, and carries them at the same distance from the piece, either in advancing or retreating.

OF FIRING IN GENERAL.

The commanding officer gives the signal for the drum to beat the preparation.

Charge -pieces.

The gunners and bombardiers will proceed to charge the pieces briskly, yet with great caution: in doing which the following things must be attended to, viz. 1st, that the first and second lieutenants superintend the loading of each

piece, and see that every motion is done correctly, and guard against every possible accident that might occur. A piece should never be suffered to remain in action without a commissioned officer to regulate it.

2d, That the piece be well spunged. 3d, That the vent be carefully tended.

OF FIRING WHILE ADVANCING.

It may sometimes be necessary for the artillery to fire advancing. When advancing in a line with two or more pieces, though the men at the drag ropes cannot keep dressed in a line, (being forward of the pieces,) yet the officers commanding pieces, should see that they adadvance uniformily, so that the pieces move in the line of march. And in all marches, with pieces unlimbered, it should be observed, that the drag ropes do not interfere with the wheels. The gunner at the trail spike, must keep his piece in proper direction, according to the direction of the officer commanding the pieces: which being observed, the gunners and bombardiers may proceed to load the pieces advancing. When the pieces are ready to be fired, command—

Halt.

Let the gunner direct the piece instantly-

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Fire.

Advance.

Then proceed to charge as before.

OF FIRING WHILE RETREATING.

This requires great caution and steadiness.

Change-Drag ropes.

The men who manage the drag-ropes, will slacken them, so that they may be unhooked with ease. The men on the right drag-rope face to the left about, at the same time, spring the rope over their heads with the right hand; hook the ropes to the trail transom-hooks. The men who carries the haversack will change sides of the drag ropes, and march in rear. As soon as the piece is loaded, command—

Hall.
Fire.
March.
Charge—Pieces.

The pieces are charged on the retreat, as well as on the advance. When the retreat is completed, before the piece is fired the last time, the men will change drag-ropes, and dress in a line; always taking care that the men face tow-

ards the piece when they change, and throw the rope over their heads with the hand opposite the piece.

OF FORMING THE LINE FOR ACTION, OR EXERCISE, TO ANY GIVEN POINT.

The company is supposed to be in column, with the right in front, the pieces unlimbered, and the enemy present themselves on the left flank.

Halt.

Company will form battery, facing the left.

Pieces—To the left wheel—and form battery—March.

This is done by the pieces turning on the left wheel as a pivot, and forming a line; the right wing of each piece wheel forwards, and the left backwards. The man at the trail must manage the piece so as to have it turn on that wheel next the flank to which the piece is ordered to wheel.

If the enemy present themselves on the right flank of the column; the officer commanding gives the caution.—

Company will form battery, facing the right.

Form Baltery-March.

At this word, the first piece or half battery, wheel to the right, and dress in a line.—The second piece will march in rear of the first; the right wing of the second piece will oblique as far to the left as possible, without the drag-ropes interfering with the wheel, and oblique with the piece, if it be necessary, to give room to pass in rear of the first piece; and when they have gained their wheeling distance from the first piece, they wheel to the right and form a line.

When the enemy present themselves in front of the column, the officer gives the caution—

Company will form battery on the first piece in front.

Second piece—To the left wheel—and form battery—March.

The right wing of the second piece will half wheel to to the left, and march obliquely on to line on the left of the first piece, and dress to the right. But if it be discovered that the enemy are disposed to attack the column in rear, the caution is given—

Company will form ballery on the rear piece, facing the rear.

Pieces—To the left about wheel—and form battery— March.

The second piece, which is in the rear, will wheel to the left about on the left wheel, and halt. The first piece will wheel to the left and march, till they have gained sufficient ground to the left; then wheel again to the left, and form a line.

Here it may be remarked, that when the caution is given, by pieces, it implies that each piece, or half battery, is to act independent of the other, in the execution of the order which follows the caution—as for instance: By pieces—to the right wheel—March—each piece wheels independent of the other, and forms a battery, or column; but act as one as soon as the order is completed.

And when the caution is given—by company, it is understood that the company are to act as one body, as, when the caution is given—by company—to the right wheel, it implies that the company are to wheel as one body as much as possible; and when the order is given—march, the company wheel on that piece next the flank to which they wheel.

Here I would also remark, as it is a matter of great importance in all military movements, that a caution precede the word of command; and they are of two kinds; the first directs what is to be done; and the second how it is to be done; and the command when it is to be done.

The second part of the caution, should explain as much as possible, the movement; and then the order to perform the movement is simply—march.

As for instance, you have command of a battery of ten pieces; they being in column, you wish to form battery on the first piece, (that being in front,) and face the front; you give the caution,

Column will form battery.

By this it is known what is to be done; a battery is to be formed; but how and when, no one as yet knows.

On the first piece-facing the front.

This sufficiently describes the manner of performing it, and the command—march, gives the time when.

To march the pieces in echelon.

CAUTION.

Pieces will advance in direct echelon.

By pieces—From the right in succession—At wheeling dictance—March.

As soon as the word is given—march, the first piece will advance directly to the front, and when they have gained the wheeling distance, the second piece will advance; and when it is seen that the first piece has gained sufficient ground to the front, they halt, and the second piece comes up and dresses by the first.

The following table shews the different quantities of powder necessary to be used in different calibers, and with different shot.

Calibers.	12	9	6	3
Charges required to throw canister shot.	4 lb, 4 oz.	2 lb, 12 oz.	1 lb. 12 oz.	1 lb. 0 oz.
Charges required to throw round shot	4 lb. 0	2 lb; 8 oz.	1 lb. 1 oz.	0 lb. 12 oz.

A twelve pounder loaded according to the above table with round shot, will throw a ball 636 yards point blank; and an eight pounder the same distance; and a four pounder 536 yards.

• FORM OF PARADE FOR A BATTALION OR REGIMENT • WITH THE REVIEW AND INSPECTION.

REMARKS.

The artillery regiments in this state are organised at present to consist of twelve companies and three battalions; but as this is a very inconvenient number in the evolutions, and as much uneasiness is manifested in consequence of the great extent of territory for each regiment, I would suggest the propriety of arranging them into regiments or battalions of eight companies each, and of attaching to each regiment two companies of rifle-men, taken from those regiments of infantry that have four or five annexed to them. This I conceive would greatly lessen the

difficulty we experience in the evolutions of the line; sewell as conform to the law of congress, which directs that each regiment or battalion (as it is stilled in the field) shall consist of ten companies.

ARRANGEMENT OF COMPANIES IN LINE.

Whether the regiment consist of ten or twelve companies, the companies which compose a battalion will be arranged in their own order without reference to the regiment, according to prescribed rules of formation.

The law of Congress makes it imperious on all the militia to observe the same rules and regulations in regard to the position of companies in line, as is observed by the regular army of the United States; which directs that the rank of companies in line be determined by the dates of the commissions of the officers commanding them; which, in a battalion consisting of four companies, is as follows-The company commanded by the oldest captain, on the right, the second on the right of the second grand division, or the third company from the right, the third on the left of the first grand division, the fourth on the left of the second grand division, or the left of the battalion. This gives the command of the first grand-division to the first captain, and the second to the second captain. This is the arrangement of companies in each battalion, whether they are to do duty by battalion or regiment, and all the officers are to remain with their respective companies unless the colonel detach one to command a company that may be deficient.

When the battalion consists of eight companies of the line, they will be divided into two wings denominated right and left wings, and into four divisions, numbered from right to left, and the companies will be arranged in line with the officers from right to left in the following order—First, Fifth, Third, Seventh, Second, Sixth, Fourth, Eighth. And if there be light companies attached to the battalion they will be posted on the right and left according to seniority, the oldest on the right and the youngest on the left in one rank.

When the line consists of two battalions the first will be posted on the right and the second on the left; and when three battalions perform together, the oldest will be on the right, and the next on the left and the third in the centre. And when the line consists of more than three battalions they will be arranged in the same order in which the companies are posted in line.

THE DUTY OF THE ADJUTANT IN PARADING THE REGIMENT.

The first duty of the adjutant will be to receive the morning reports of each company, containing the number of men on parade fit for duty, which report the adjutant will hand over to the colonel, and inquire if a parade guard are to be detached, as likewise bearers of colours and markers, and if so, he will make out an order to each captain of the number to be furnished by each company, and he will then proceed to mark out the parade ground and plant the camp colours.

At this time the inspection will be performing as hereafter described which will be performed before the regiment is paraded; which time will be occupied by the adjutant in giving instructions to the captains in regard to forming the line, and the manner of marching on; and also inform them what companies are on their right and left, that there be no mistake in taking their posts, as the companies are liable to shift their places every year, it will be necessary to be particular in pointing them out.

The guard and all detached from each company will be sent to the right of parade as soon as inspected, to receive instructions from the adjutant. And before the inspection is completed the musick will also be assembled on the right of the line, and as soon as the inspection is closed the musick will beat the long roll from right to left and from left to right, and as soon as they again arrive on the right, will commence playing quick time, at which the companies will immediately march to their respective places in line, and dress by the centre. A vacancy of ten paces will be lest between the first and second battalions for the musick. As soon as the adjutant perceives the line to be properly dressed and the officers all in their proper places, he will notify the colonel that the regiment are paraded and ready to receive him, and will accompany him on parade and take his post on the left of the line.

POSITION OF OFFICERS WHEN THE REGIMENT ARE IN LINE.

When the regiment stand in a line in what is called close order, the officers will take their places as follows—The colonel twenty paces in front of the centre of the line, the other field officers ten paces in front of the centre of the battalion or wing to which they belong. The captain on the right, the first lieutenant on the left, and the second in the centre of their respective companies; the sergeants all two paces in rear, opposite their posts in line. The adjutant on the left, and the other staff officers on the right in line, and in the following order: Chaplain, Surgeon, Quarter-Master, Surgeon's mate, Paymaster, Quarter-Master Sergeant, and Sergeant-Major.

METHOD OF PRESENTING THE STANDARD.

When the regiments are provided with standards they will be carried to the parade and presented in the following manner:—Nine sergeants will be detached by the adjutant in the early part of the day for the standard bearers and their guard, one sergeant to march on each flank of each standard. One company will then be detached, (generally the one from the right,) who will take a select number of the musicians with one of the musick majors, with the sergeants designed to carry the colours, and three guards, and march in open column of sub-divisions with the sergeants in the centre three abreast, to the place of deposit of the colours, without musick, and wheel into line

fronting the door or gate; when the sergeants designed to carry the standards will proceed to receive them accompanied by the adjutant, and as soon as they appear at the door, the musick will give the salute, and play a tune in common time, and the captain commanding the party will give the word to poise swords, and the commissioned officers will salute. They are then wheeled into column right in front, and the sergeants will take post in the centre in the order in which they are to march in line, and the adjutant will lead them back to the right of parade, in common time. As soon as they move to the front, the captain will order his company to form the hollow square, and march in that order until arrived within ten paces of the front of the line, he will then give the word to form column, and the ser_eants will wheel out to the right to pass in front of the line. Previous to the standards appearing on parade, the colonel will order the lieutenantcolonel and majors six paces in front of the line, passing to the front ready to salute the colours when in front of them; and as soon as the sergeants wheel out of the square, (the line being at the advance) the colonel will order to carry swords, which will be the signal for the musick which have remained on parade under the other musick major to give the cheers, and immediately play quick time, the march of the escort having ceased playing as soon as the standard hearers wheel out of the column. The sergeants with the colours and their guard will pass ten paces in front of the line, and those of the first battalion will halt directly in front of the lieutenant colonel, when he will salute with the sword, and then direct them

to take post in line in centre of the battalion. The other standards will be saluted in the same manner by the majors, and ordered to their posts in line; when the adjutant will see that the musick cease playing, and the swords will again be brought to the advance.

The regiment are then ready to pass the standing review.

THE STANDING AND PASSING REVIEWS.

When the colonel discovers the near approach of the general, he will order the company officers three paces to the front, ready to pass the salute, and the field officers will take their stations six paces in front of the line dressed by each other, and in the same order in which they are posted for exercise, and all facing towards the line except the colonel, the adjutant on the left in a line with the company When the general arrives within twenty paces of the right the colonel will give the caution to poise swords and the battalion officer will immediately give the order, poise swords, and then wheel to the front, and all the field officers as also the company officers and adjutant will come to the salute; and the music will also give the cheers, and play quick time, but the colours will not be The officers will stop at the second motion of dropped. the salute, until the general makes his first wheel to the left to pass in rear of the line, when the colonel will first come to the carry, and face to the line, which will be the signal for the other field officers to come to the carry and face to the line. The colonel will then give the order to carry swords, which order will be immediately repeated by the other field officers. When the officers will finish their salute and come to the carry; the colonel will then order the officers to face to the line and see that none of their men turn their heads or move out of their place while the general passes in rear, as that would discover a great defect of discipline. The general having past the right flank, the officers are then ordered to the line, and the musick cease playing, and the regiment prepared to pass in review.

THE PASSING REVIEW.

The general having taken some convenient position to receive the troops in the passing review, the colonel will give the caution, the regiment will pass in review, when the officers will take their several stations, the colonel then gives the caution, regiment will wheel into column to the right, and the battalion officers will immediately give the order—

By sub divisions to the right wheel-March.

The officers and the musicians will then take their stations as follows: The colonel six paces in front of the officer commanding the front sub-division; the lieutenant colonel and majors four paces on the left of the left flank of the leading sub-division of their respective battalions; the adjutant in rear of the rear subdivision. The

other staff officers if they pass in review, will march in rear of the column, three abreast in the order in which they are posted in line. The musicians for this purpose will be posted six paces in front of the colonel. The captain three paces in front of the first sub-division of his company. the first lieutenant the same distance in front of the centre of the third sub-division, the second two paces in rear of the second sub-division; the sergeants not detached for other duty, on the right of their respective sub-divisions, and the corporals on the left, except such as are detached to take command of a sub-division, where the sergeants are detached for other duty. The officers having taken their places, and received particular instructions relative to their duty in this movement, and the swords being brought to the advance, the colonel will order, column forward-March, which order will be quickly repeated by each battalion officer, and they all move to the front in common The column must now extend so as to make room time. for the pieces, which having remained in rear in the standing review, will now form between the sub-divisions, and pass in review being limbered. When the column arrives within twenty paces of the officer to be saluted, the colonel will give the caution for the column to carry swords, and the battalion officers quickly give the order. The music when opposite the general will give the cheers, and immediately wheel out of the column to the left and face him, and continue playing until the column have marched past, when they will again wheel in and follow in rear. As soon as the colonel has passed the salute, he will wheel out of the column to the right, and take post on the right of the general, to watch the performances of his treeps, and hear

what remarks may be made by the general. As soon as the colonel wheels out of the column, the lieutenant colonel will take post at the head, and conduct them back into line on the original ground. Each officer will pass the salute when within a short distance of the front of the officer to whom the honors are paid. The sergeants and corporals on the right flank, having command of a sub-division will give the word poise swords when within four paces of the general, and the word carry swords when the The officers must be careful to look same distance past. the general steadily in the face, when passing a salute. When the column again arrives on parade, they will form with their pieces in line, unless otherwise directed. The standards will not be dropped in the standing or passing review.

OF MARKERS.

Each regiment should be provided with three markers or camp colours, consisting of a staff at least nine feet long, to the end of which is attached a flag of some striking colour; at least three feet by two, which should be carried by three sergeants detached for that purpose, and at all times march on the governing flank of the column, one attached to the first sub-division, and one to the centre, and the other to the rear.

It has been a uniform practice for the artillery regiments to meet two days in succession for their inspection

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and review, and it is found to be extremely useful, particularly where the regiments consist of twelve companies; the first day being principally occupied in the inspection, no time will be had for the review and exercise, unless another day be allotted for this purpose. But when the regiments are to do duty two days in succession, I think it would be well to complete the inspection and review the first day, that the second may be devoted to exercise and movements, and which may be accomplished, if the following rules in regard to the inspection be attended to.

MODE OF INSPECTION.

The inspection is to be completed before the line is formed, and will commence with that company which is first ready, they giving notice to the inspector of their readiness. The companies will be paraded independent of each other, and the pieces limbered and the men dressed by them, with a sub-division on each flank, and the officers and musicians arranged on the right according to grade, and the names of the whole company enrolled on their blank returns in the order in which they are paraded. The inspection will commence on the right, in line. when each officer and private will present his sword for inspection in the manner described in drill. tor will return the sword with the point down, holding it by the guard. The captain will attend the inspector, and give all the information respecting his company and pieces that may be required. As soon as the inspection of each company is completed the captain may march or exercise his company and then dismiss for a short time.

METHOD OF FORMING THE LINE.

When the companies are to march on to the regimental line they should, if practicable march from right to left in rear of the line, and wheel in succession as they arrive opposite their places, and the pieces will march considerably past their sub-divisions, and wheel to the left about and take post in rear of the first and third sub-divisions facing to the right of the regiment, ready to march off in column right in front.

MODE OF BREAKING THE LINE TO MARCH RIGHT IN FRONT.

When the pieces are in rear of the line, and it be wished to march in column right in front, with the pieces limbered, the regiment will file into column to the rear from the right of sub-divisions; which will bring the pieces in centre of the column; but when the pieces are limbered and dressed on the line, the sub-divisions will wheel on the left backwards to march in column right in front; and when the column moves off, the pieces will turn to the left stad follow in the centre of the column.

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METHOD OF LAYING OUT A PARADE.

The adjutant will plant the camp colours on the line of formation, one on each exterior flank and one in the centre, by which the line is to dress; and the limits of the parade should be marked by camp colours, or a stake at each corner and at the intermediate point.

When the line is formed the camp colours in line will be carried by three corporals, who are to mark at all times on the commanding flank of the column, to regulate the dress of that flank: and when in line they will be on the right and left and centre.

PART IV.

OF FLYING, OR HORSE ARTILLERY.

It may be asked, What is Flying, or Horse Artillery? This answer may be given—Flying, or Horse Artillery is the method of marching the common field Artillery, with a sufficient number of horses to enable the men and pieces to reach much more speedily, such positions as the general may think it necessary they should occupy.

It may also be asked, On what occasions is this despatch required, and when is it necessary Horse Artillery should be used? As a van-guard, to occupy a position, a passage, or defile, &c. with a reserve, to reinforce some part of the line, or to strike a decisive blow; and, near the sea-soast, to reach speedily any part which may be threatened by the enemy. These are the occasions in which despatch is required, and when Horse Artillery should be used; and we may say its importance has been fully proved in the events of Europe.

"In support of the simplicity of this improvement," says Tousard, "we will relate the following fact, to sliow that at any time, common field artillery may be converted into, and used, as flying or horse artillery. In 1762, M. de Clauson who was encamped near Wolfenbutel, wishing to

form an expedition that required great celerity, complained to M. de Vugilles, a distinguished artillery officer, of the unwieldiness of the French artillery, and requested his as-Vugilles ordered a single ammunition waggon to each piece; mounted all his cannoniers; doubled the set of horses; set off, and arrived at the place of action at ten o'clock in the morning; the pieces remained three hours in battery, after which he returned to the camp, having travelled forty-eight miles in the same day. The best trained horse artillery at this time, could hardly execute a more rapid movement." And Tousard further observes. "General Dumourier demonstrated all the importance of this artillery in an invasive war, at the end of the campaign of 1792, in Belgium; and there have since occurred other very remarkable instances of success, which have been owing to the horse artillery, both in offensive and defensive operations.

At the battle of Castigleone, after the raising of the seige of Mantua, the emperor having ordered general St. Martin to collect, and place to advantage, several divisions of the flying artillery, broke the line of the Austrians, and decided the fate of Italy.

At the battle of Waterloo, four thousand men of the army of Flanders, manœuvering with horse artillery, (and this testimony is added by officers of the combined army,) sustained the attack of an army of thirty thousand men, supported by a train of artillery at least treeble that of the French.

The horse artillery contributed much to the gaining of

the battle of Eslingen, in which general Moreau, althoughinferior in cavalry, supported his left wing against all the cavalry of the Archduke."

According to a late law of the State, horse artillery companies consist of sixty-four privates, which are abundantly sufficient to manage four pieces: which number, in the preceding work will be considered as attached to a company.

The French horse artillery companies, according to Tousard, manage six eight pounders; but their companies consist of eighty-eight men. But that able officer recommends that four or six pounders be made use of in the United States.

The reason that he gives is this; "Four pounders appear to us sufficient for the horse artillery, especially in a country which is exposed to be attacked only by troops coming from distant countries, who are not supposed to bring with them a much heavier metal; consequently this caliber ought to be generally adopted for the horse artillery of the United States, without excluding altogether the six and nine pounders from that service, as circumstances may render them necessary. Horse artillery being destined to reach and occupy important positions with the utmost rapicity, and to crush troops unexpectedly, this sized caliber is well calculated for this service, and adds much to the celerity with which it ought to execute its movements. case the greater range of the larger calibers be made an objection, we will remove it by asking, Is not eight or twelve hundred yards the distance a gun may fire at, with

any degree of accuracy? The four pounders range that, and overset lines, men, &c."

I have mentioned the number of four pieces to each company of horse artillery, as that will probably be as many as will ever be attached to a company in this country in time of peace. And indeed, I should doubt the propriety of having more in time of war, as it would be of great importance to have a sufficient number in reserve, to supply the places of the killed and wounded in time of action; and certainly, four pieces to a company are amply sufficient for all the purposes of training the men to their use, by occasionally shifting their duty.

The words of command, in every instance, where the motions or exercise of foot artillery corresponds with the motions and movements of horse artillery, is signified by the same terms and the motions and movements are performed in the same way. So in like manner, wherever the motions or exercise of horse artillery correspond with the motions or movements of cavalry, the words of command are the same, and the motions are executed exactly upon the same principles.

"The utility of a common mode of command and action," says Duane, "must be at once perceived by the judicious officer. This uniformity also simplifies the duty of a young soldier, who if intended for the artillery or cavalry, must properly begin by acquiring the infantry duty."

OF THE FORMATION OF A COMPANY OF HORSE ARTILLERY.

A company of horse artillery is formed the same as a company of cavalry; and that being so generally understood, and so many publications on the subject, I shall not here describe it, but refer the reader to Hewes' or Duane's celebrated systems of Cavalry Discipline.

Of the number of horses attached to a piece.

Four horses are amply sufficient to manage a four pounder, on common roads; but there should always be a number of supernumerary horses, that a number may be added in bad travelling.

It might be said that a less number than four would answer for each piece; but I think there can be no objections to a sufficient number to move the piece with ease and facility; as that will in no way interrupt the conveyance of the men; for each draft horse can carry a man if necessary.

Mode of attaching horses to pieces, and their movement.

The four horses attached to a piece, are tackled two abreast, and in the same manner as to a stage.

The movement of a piece managed with horses, differs. from that managed by men in this respect only; that they always move with the muzzle in rear, or trail foremost.

OF THE SWORD EXERCISE OF HORSE ARTHLERY.

The sword exercise of the horse artillery is the same as the exercise of the cavalry; therefore it will not be necessary for me to describe it in this place, but refer you to ether authors; but it would be well for the horse artillery to understand the exercise of the foot artillery, that they may act as such if required.

OF THE MANAGEMENT OF A PIECE.

The management of a piece drawn by horses, (as it respects the loading,) is precisely the same as that drawn by men; and having treated of that in the Third Part of this work, it will not be necessary to repeat it.

OF LIMBERS.

In moving a piece with horses, the limber constitutes the fore part of the carriage; and to which is attached a tongue or pole, such as is used with stage coaches; the old method was with a single horse, in what was called a thill, like the two shafts or thill of a common one horse waggon; this thill limber is now discarded for the tongue.

Manœuvre of the limber.

Advance—Limber.

The drivers bring the limbers, marching so obliquely, that having come to the trail, and turning to the left, they shall be opposite to the trail transom. The two cannoniers and the second matross on the right, pass their hand spikes to the second matross on the left, who, with the assistance of the first on the left, fixes them in the places prepared, or in the cheeks of the carriage. The cannoniers raise the trail, and with the assistance of the second matross, lift up the trail and carry the carriage by hand to the limbers, which remains four paces in rear. The two first assist in pushing at the wheels, and as soon as the pintle is in the pintle hole, the cannonier on the right fastens the trail with the lashing chain.

Unlimber-Pieces.

The third matross on the right carries the beam high enough to facilitate the unhooking of the chain of the limbers: the cannonier on the right unlimbers the carriage, raises the trail assisted by that on the left, and by the second matross; as soon as the pintle is clear of the pintle hole, the driver of the limber moves to the rear till he hears the word—halt.

These movements are supposed to be done before any of the men are mounted.

OF CAISSONS, OR HORSE ARTILLERY AMMUNITION WAGGONS.

Ammunition for the horse artillery follows the pieces in common ammunition waggons, or what the French call caissons; they being suspended on springs to prevent the may be promptly conveyed to any part where it may be required.

In service, each piece has one of these caissons attached to it, on which the men ride, who have the management of them; the construction for which General Duane has given directions in his system of Horse Artillery.

OF THE PROLONGE.

This I shall describe by way of question and answer, taken from Duane.

- "What is a prolonge?
- "A well made rope, of a thickness suitable to the weight of the gun, and from thirteen to fourteen yards long, is provided with thimbles, cross link pins, and the like; one end of this is fasted to the guides of the limber, where also it is placed in figure of eight coil when not in use; the prolonge rope being fast to the guides is past over the limber, and a round turn is taken on the pintle, the other end is run through the lashing ring of the trail, if the ammunition box be on the limber, as it should be in retreat firing; the prolonge should be so placed as to secure it without interrupting the access to ammunition when required.
 - "But how does it operate?
- "The design being to retreat, or to reach a destined point, a horse or horses are put to the limber, and the prolonge being extended, the horses draw away the lim-

bers with the gun after it; the limbers being being curved like the runners of a sleigh at the ends of the cheek, they are drawn like a sleigh. The gunners and their aids if foot artillery, carry each their implements; if the march is to be long, the horse artillery place their implements in the place assigned them, and mount; proceeding in ranks before and behind the gun. When it is proper to form in battery, it is done; if it is required to fire and to load while retreating, the gun being always loaded, there is no material loss of time; they halt, fire, and load at command."

GENERAL REMARKS.

It will always be necessary for a company of horse artillery to have drag ropes, or bricoles,* that they may move the piece by hand when required. When the pieces are in battery and it becomes necessary to take a little ground to the front, (the pieces being unlimbered,) they will be moved by hand. But if the distance be considerable, the pieces must be limbered and wheeled about, and march to the place of destination.

Or if the pieces be unlimbered and attached to the limber by the prolonge; it will be quicker to detach the prolonge and move the piece by hand, than to limber the piece and wheel.

So also in retreating, if the distance be short, the piece may be moved by hand, in preference to limbering; but if they be connected by the prolonge, they move in that way.

The limbers and caissons must at all times so manoeuvre as to keep the pieces between them and the enemy; although it will many times bring them in front of the pieces, as the pieces must always move when limbered, with the trail in front.

The bricole is a belt three inches broad hung over the shoulder, with which each matross is provided; and these are attached to ropes of different length by which the pieces are drawn.

Words of command for a company of Horse Artillery, in the exercise of a four pounder, as laid down by DU-

The corps is supposed to come on the ground in detachments, and the officer in command gives the word,

Form battery.
Halt.
Dismount.
To your posts.
Unlimber.
Fix the drag.*
Prepare hand-spikes.
Port tumbril, or caisson.

The third aids of the right and left remove it to the rear.

Key hands-spikes. Fix prolonge. Prepare for action.

The first and second aids face to the gun; the second gunner advances on the left with his thumb piece.

To action.
Load.
Handle Rammer.
Tend vent.
Prepare port-fire.

This is in addition to Duane.

Ram cartridge.
Clear vent.
Prepare wad.
Prime with fuze.
Aim—Handle port-fire.
Fire.
Spunge—Tend vent.
Serve cartridge.

The whole face to the front, ram and prime as before.

Prepare to advance in battery. Hook bricoles. Forward-March Dress-Halt. To action-Fire. Prime-Load, &c. as before. Prepare to retreat. Right about face. Unhook bricoles. Prepare to mount, Mount. March. Dress-Halt. Dismount. Right about. To battery. To action-Fire, &c. Cease fire. Limber gua. Unfix prolonge.

Coil prolonge.

Stow handspikes.

Fix tumbril.

Prepare to mount.

Mount.

In column ranks of six in front.

March.

Halt—Dismount.

MOVEMENTS OF HORSE ARTILLERY.

The following movements of Horse Artillery I have taken from general Kosciusko, as translated by Jonathan Williams.

The movements I have endeavoured to explain as there laid down; but in many instances in different words, and have used different words, that might correspond with t he preceding work.

Kosciusko, has laid down these movements for a company having eight pieces; but the movements may be as well understood, and perhaps as well practised in a company of four pieces as eight; but perhaps some of the movements may not at all times be so proper with so small a number; that I leave for the officer to judge; but it is certain that they are better adapted to the movements of a regiment. I have therefore inserted them as he has directed.

"Horse artillery," says Kosciusko, "should, on the field of battle, constantly manœuvre with the prolonge or drag; and in order that the display of columns in battery may be performed with the more promptitude. the pieces should always march in two columns, unless it should be necessary to march in one to pass a defile, a bridge, a causeway, or in any place which will not allow of sufficient room to march in two. The captain will indicate when and how two columns are to be formed when marching in one, or when and how one column is to be formed when marching in two. On leaving the park, the pieces will always form single column, when the captain will indicate the distances that are to be preserved between the pieces and the ammunition waggons or caissons, and between each other; these distances will always be kept as accurately as the nature of the ground may permit; and the gunners of the pieces in front will take care to regulate their march so that the rear may not be too hard pressed, to preserve their distances.

Supposing the company to have four pieces, they should be numbered, No. 1. No. 2. No. 3. No. 4. from right to left.

The caissons of each piece will form a line in rear at prescribed distance; these caissons will make the same movements that the battery does, and each one will always keep immediately after the piece to which it belongs, (when in battery,) taking care never to be in its way, and by no means to embarrass its movements, by being too near; it is essential that each caisson be under

the direction of an intelligent and experienced gunner who is well acquainted with all the manœuvres.

When the pieces march in column, the caissons form column in their rear, and march in the same way.

FIRST MANŒUVRE.

To detach the limbers and make fast the prolonge or drag.

When the column is arrived near to the field, whether it be for exercise or battle, the captain commands—Hall—Dismount—To your posts—Unlimber. When the commanding officer perceives that the drag is fixed, he will give the word—mount, and all will stand ready to march at the word.

SECOND MANŒUVRE.

The battery being in one column to form two.

Take care to form divisions! Even numbered pieces! (that is the second and fourth,) to the left oblique—march! As soon as the even numbered pieces have obliqued out of the column, the odd pieces close up within two paces of each other and dress. The second piece which will make the leading piece of the second column, will advance and dress by the first piece on the right; (No. 1.) taking care to preserve the same distance between the columns that is necessary to preserve between the pieces in battery. The right column will then be composed of pieces forming the half battery on the left.

The caissons will obey the order given to their pieces in precisely the same manner; it will consequently be found that the odd numbered caissons will be in the rear of the right column and the even numbered caissons in the rear of the left column.

THIRD MANŒUVRE.

The battery being in two columns, to form them into one on the march.

Column open ranks—March. At this word, the pieces in front quicken their pace, and the pieces in rear slacken their pace, until the columns are extended sufficient for the even numbered pieces to form in column with the odd numbers. When the captain perceives the intervals well and distinctly marked, he gives the order—Second division—To the right oblique—March. The left pieces enter the intervals; the two columns of caissons perform the same manœuvre precisely in the same manner, and on the same words of command.

The whole is then in one column, the pieces and caissons being in the order they were before.

OF THE MARCH IN COLUMN.

When the battery marches in one column, the commanding gunner of each piece will take care to observe the proper distance; they will march exactly two paces from the piece immediately preceding, and make the drivers of the leading horses of their pieces keep at the same distance behind them; they will take care that the pieces be what may be called file leaders to the next behind, in such a

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manner that in flank facing the pieces by only turning upon their own centres, may be at once dressed in line. As soon as a change in the line of march shall be indicated to the commanding gunner of the piece in front, he will give the word—To the right (or left) wheel! according as the order may be. After arriving at the pivot where the first piece began to wheel, the second piece will perform the same movement, and so on to the end.

When the battery marches in two columns, the commanding gunner will pay the same attention to the distances, and to the exact covering the file-leading pieces immediately preceding: but especially the commanding gunners of the pieces in front of each column, will strictly observe that there be always between them, to the right of one and left of the other, the same distance that there should be when formed in battery.

FOURTH MANŒUVRE.

The divisions marching in two columns* to display to the right and left of the two leading pieces, and form battery.

Take care to display columns to the right and left on the front pieces, and form battery—March.

At the word—march, the two front pieces continue to move directly to the front, but check their pace. The commanding gunners of the other pieces in rear give the word to the right (or left as the case may be,)—half turn, and quicken their pace, and take a sweep of ground proportionate to their distance, and come up in line and dress by the centre pieces. During the time that the pieces of the two columns require to arrive at their positions in the line, the gunners who were before at the sides of the draft horses, will check their speed, and fall in rear of the wheels of the pieces to which they belong.

It is highly essential when marching in advance in battle array, that the line be preserved with the most scrupulous exactness; for on the accuracy of the line when

^{*} Horse artillery in order to make its display with the greatest prompitude, should always be in two columns wherever the ground will permit. Single file is always a forced form of march, when the narrowness of the passage will not allow breadth sufficient for two columns.

marching, depends its accuracy when halted in battery for action; there will then be no time to rectify mistakes and to dress; the line must be perfect at the halt. Which duty the commanding gunners must attend to with strictmess.

FIFTH MANŒUVRE

The battery marching in advance and in order of battle, to change the direction of the march either to the right or left flank, and present the same order.

Battery to the right (or left) wheel-March.

At the word—March, (suppose it the right) the first piece on the right, wheel to the right, turning as nearly as possible on its right wheel as a centre, and it will halt until all the pieces on the left shall have come up. The pieces on the left in forming the line, will increase their pace in proportion to their distance from the pivot. When the new line is formed, all will march at the same pace.

SIXTH MANŒUVRE.

The company marching in battery, to form columns on the two centre pieces.

Ballery-On the two centre pieces form columns-March.

At this word the commanding officers of the two centre pieces give the word—Trot! The commanding officers of the pieces, on the right, give the word—To the left oblique! and those on the left—To the right oblique! The centre pieces go off in a trot at the word—march; but the commanding officers of the other pieces, in succession, give their word only according as they find space left by the pieces in advance. When the commanding officer sees that the front pieces have gained sufficient to the front for the column to form on, he will give the word—Walk.

Columns might in like manner be formed on the flanks, or indeed on any two of the pieces; but they should never be formed on any two pieces on the same flank, as that would take longer time in forming and displaying.

SEVENTH MANŒUVRE.

The battery marching in advance in order of battle, to change front for action.

It will be here observed, that as the carriage is drawn by the trail, the mouths of the guns are always in rear of the horses, as I have before observed; consequently when marching in front toward an enemy, each piece must come to the right about to present the mouth of the gun to the enemy. But as the caissons are kept in the same position, whether in battery or in march, when the word to form battery is given, they have only to halt without wheeling.

Pieces will wheel about for action.

Pieces-To the left about wheel-March.

At this word the commandants of pieces give the word—
To the right oblique! and when they have gained the width of the piece to the right, they will wheel about to the left so as to occupy the ground where they stood before wheeling. As soon as the pieces are in battery, every man will go instantly to his post with vivacity, fix the trail handspikes, and distribute all the utensils. At the word—Commence the fire! they will proceed to load, point, and fire with vigour.

EIGHTH MANGEUVRE.

The battery marching in advance and in order of battle, to form battery for action on the left piece facing the right flank.

Company-To the left wheel and form battery-March.

At this word the commandants of pieces will give the word—To the left wheel! As soon as the left piece has wheeled to the left, and formed at right angles with the old line, the commandant of this piece will give the word—Halt! Alight! and immediately commence the fire.

The remaining pieces will wheel by a circular movement, and form a line with the left piece.

As soon as the words of caution are given, the caissons will halt; and lest they should be before the mouths of the pieces, they will wheel into column to the left, and go with the greatest celerity possible, each one to the piece to which it belongs.

N. B. The circular motion of the pieces when they form battery, which is unavoidable to bring the mouths of the guns towards the enemy, is difficult and dangerous in time of action; the drivers, therefore, should be well exercised in this respect, so as not only to perform without the least confusion, but also in a quick trot.

The battery may be formed in this way to either fank.

NINTH MANŒUVRE

The pieces marching in advance in columns to form battery on the right and left of the two front pieces.

Columns—To the right and left of the two front pieces—
Form ballery—March.

At this word the commandants of the two front pieces command a wheel to the left about, which brings their muzzles in front; but previously to the wheel, they continue their march in obliquing a little to the right, till they have obtained as much space to the right as they are to lose by wheeling to the left, at the same time they give the words to their gunners—Halt and alight!

The commandants of the pieces of the right column, give the word—To the right oblique—March! The commandants of the left column, give the word—To the left oblique—March! The two front pieces having made the wheel about indicated, and placed themselves in battery, will commence firing; the other pieces as fast as they come up in front will perform their wheel about, and commence their fire with all possible vivacity. The commander of each piece will repeat the words—Halt! Alight! and go into action in the manner indicated for the two front pieces. The caissons will display to the right and left, and form a line in rear of their respective pieces without wheeling.

TENTH MANŒUVRE.

The pieces being in battery to march forward on the two centre pieces in columns.

On the two centre pieces in column-Forward-March.

At this word the commandants of the several pieces give the order—Left and right about! that is, each piece turns outwards from the centre. As soon as the pieces are wheeled, the commandants of the centre pieces give the word—Trot! and the movement is performed the same as No. 6, excepting the pieces on the flanks do not move till they are unmasked from the centre.

ELEVENTH MANŒUVRE.

The pieces being in battery to march in advance toward the enemy.

Battery-Forward-March.

At this word all the commandants of pieces perform the wheel to the right and left about, from the centre each way, and then give the word, Gunners to horse! Mount! At the word March! All will wheel together, and the gunners will take the same position in the rear of their pieces as indicated in the march in battle array. The caissons have only to march on in battle array, following their pieces, their positions being already in the order they are to march.

TWELFTH MANŒUVRE.

The pieces being in battery to march in retreat in order of battle.

Retreat-March

At this word the commandants of pieces give the order, Gunners to horse! Mount! At the word March! the gunners take up the line of march in file abreast of the draught horses, according to the march in column. At the word of caution, the gunners who have the caissons in charge, will take care that they wheel about briskly, and precede the battery at such a distance as not to impede or embarrass its movement.

FORM OF WARNING FOR ANNUAL TRAINING IN MAY.

To either of the non-commissioned officers of the———
Company——Regiment of Artillery.

You are hereby commanded to give legal warning to all the members of said company to appear on ——— on the first Monday of May next at 8 o'clock, A. M. armed and equipped as the law directs, for exercise and inspection.

A. B. Capt. of said company.

April-

When a company have one uniform place of parade, the blank may be filled up with, the usual place of parade: but if they have more than one place of parade, then the place must be designated.

The captain must send the above order in writing to each of the non-commissioned officers who are to warn the company, which writing, in the words of the law, 'is to be read in the hearing of, or a copy thereof to be left at the usual place of abode of the person to be warned. If the non-commissioned officers are to warn the several members by leaving a copy, then printed copies may be used; and certified on the back, by the officer who warns them in the following manner:

The within is a true copy of the original order.

Attest. C. D. Sergeant (or corporal)
of said company.

No reading of a warning is considered legal, unless it be the original order, and that in writing. FORM OF A WARNING FOR THE CHOICE OF A CAPTAIN AND OTHER OFFICERS, EXCLUSIVELY.

To either of the non-commissioned officers of the——Company —— Regiment of Artillery.

In pursuance of an order from the Brigadier General of the —— Brigade of Artillery—You are hereby commanded to give legal warning to all the members of said company, to appear on —— on —— the —— instant at 2 o'clock, P. M. with arms and uniform, for the choice of a captain and to fill all vacancies.

A. B. Captain of said company.

Dated-

If the company be commanded by a lieutenant, he will sign the order,

E. F. Lieut. Commanding said Company.

FORM OF A WARNING FOR BATTALION REVIEW.

To either of the non-commissioned officers of the——Company —— Regiment of Artillery.

In pursuance of an order from the Colonel of the ——Regiment of Artillery, you are hereby commanded to give legal warning to all the members of said company, to appear on the parade [describing the place] on [the day of the week] the [the day of the month] at [the hour of the

day] o'clock, A. M. armed and equipped as the law directs, for inspection, review and exercise.

A. B. Capt. of said company.

Dated -

After closing the exercises of the day, and the captain wishing to warn his company to appear on a subsequent day, he will make out one of the foregoing warnings, which is to be read in the hearing of the company by one of the non-commissioned officers, which is considered as legal warning for all the members present.

This book should be returned to the Library on or before the last dates stamped below.

A fine of five cents a day is incurred by retaining it beyond the specified time.

Please return promptly.

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