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INFANTRY DRILL 1896.

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KEY TO PLATES.

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Officers, Warrant officers, Non	n-commissioned officers, &c.		
COMMANDING OFFICER	MARKER		
MAJOR	SUB-SECTN. COMMANDER		
ADJUTANT	STAFF SERJEANT		
CAPTAIN	PRIVATE, FRONT-RANK.		
SENIOR SUBALTERN .	PRIVATE, REAR-RANK .		
JUNIOR SUBALTERN . &	PIONEER		
STAFF OFFICER	BAND MASTER		
QUEEN'S COLOUR	BAND SERJEANT		
REGIMENTAL COLOUR &	BANDSMAN		
SERJEANT-MAJOR .	DRUMMER		
GUIDE	signaller P		
Brigade Officer.			
BRIGADE MAJOR			
OPIGINAL MODISATION (Front Rank			
ORIGINAL FORMATION . { Front Bank			
FINAL FORMATION {Front Bank Rear Bank			
DIRECTION OF MOVEMENTS			

### EXPLANATION OF PLATES.

- 1. In Plates VI and VII, the positions of all ranks are shewn; but in order that the figures may be drawn on as large a scale as possible, the battalion is shewn, in Plates VIII and IX, as consisting of four and six companies respectively. The supernumerary rank and line of subalterns are omitted in Plate IX, and subsection commanders in Plate VIII.
- 2. The remaining plates shew only sufficient details to illustrate the text.

### DEFINITIONS

### GENERAL DEFINITIONS.

Alignment. Any straight line on which the front of a body of troops is formed, or is to form.

Point of The point on which a formation is formation. based.

Base company The company, or battalion, from which or battalion. a formation is regulated.

Base points. The points given by markers as a base for an alignment in prolongation of that base.

Battalion. The unit of infantry. It is divided into two half-battalions.

Brigade. Two or more battalions.

Column of half-battalions in line, on parallel and successive alignments, at a distance from one another equal to their own in line. frontage.

### xxiv

Column of companies.

Companies formed on parallel and successive alignments, at a distance from one another equal to their own frontage.

The word column will be used through-

out to describe this formation.

Column of half companies.

Half companies formed on parallel and successive alignments, at a distance from one another equal to their own frontage.

Column of sections.

Sections formed on parallel and successive alignments, at a distance from one another equal to their own frontage.

Quarter column.

Companies on parallel and successive alignments, at a distance from one another of six paces.

Company.

The eighth part of a battalion. divided into two half-companies, each of which is again divided into two sections.

A sub-section is the half of a section, formed under a selected leader, for purposes of fire discipline, and manœuvre,

when the section exceeds ten files.

Defile.

A narrow pass.

To Defile.

To pass in a narrow formation.

To Deploy.

To move out from column into a shallower formation.

Depth.

The space occupied by a body of troops from front to rear.

Diagonal march.

A march by which troops move to a flank at an angle less than a right angle with their front.

Distance.

The space between men, or bodies of troops, from front to rear.

Division.

Two or more brigades.

To Dress.

To take up the alignment correctly.

Drill.

Training preparatory to work in the field.

Echelon.

A formation of successive and parallel units fronting in the same direction; the on a flank and to the rear of the unit in its front.

File.

A front rank man and his rear rank man.

Fire unit.

Any number of men firing by the executive command of one man.

Flank, inner.

That nearer to the point of formation or direction.

Flank, directing.

That by which units march.

Flank, outer.

That opposite to the inner or directing flank.

Front. (a) The direction of the enemy, real or supposed.

#### xxvi

(b)* The direction in which soldiers face when occupying the same relative positions as when last told off.

Frontage. The extent of ground covered laterally by troops.

Front, Taking up a new alignment either meeting, or intersecting, the former alignment.

Interval. The lateral space between men, units, or corps.

Interval, deploying. Intervals between bodies of troops in line of columns or quarter columns equal to their own frontage in line and the named interval.

Battalions in quarter column, on parallel and successive alignments with any named distance between battalions.

A movement by which a body of troops moves altogether off its ground, either to the front, rear, or a flank, and reforms on a new alignment.

Line of Battalions in column or quarter column, formed on the same alignment, with any named interval between them.

Manœuvre. The application in the field of the movements learnt at drill.

Mass. Battalions in quarter column, on

Position, change of.

^{*} This definition is retained for purposes of drill, but it must be recollected even at drill that the word front refers to the direction of the enemy.

### xxvii

Rank. A line of men, side by side.

Squad. A small number of men, formed for recruits' drill, or for work.

Super- The non-commissioned officers, &c., numeraries. forming the third rank.

Strategy. The science of moving troops within the theatre of war.

Tactics. The art of using troops on the field of battle.

DEFINITIONS OF TERMS IN SHELTER-TRENCH EXERCISE.

Berme. A space left clear of earth, between the foot of the slope of the parapet and the excavation from which the earth was taken to form the parapet.

Breast works. Low parapets are sometimes called breast works.

Cross section. A representation of the surface that would be exposed if the object were cut vertically across.

Cutting line. The line drawn along a man's front, on which the length of his task is marked.

Ditch. An excavation made in front of a parapet.

To Intrench. To increase the power of defence of a locality by the use of field works, defensible posts, or shelter trenches.

### xxviii

A mass of earth or other material, raised Parapet. to screen or protect the defenders from the

fire of the enemy.

Plan. A drawing of an object as seen from above on a horizontal surface, which is represented by the drawing paper.

Profile. The outline of the vertical cross section of a work perpendicular to its length.

Ramp. Roads to enable men, guns or wagons to pass up or down steep slopes in works.

The slope at the rear of a trench. Reverse slope.

To Revet. To make a revetment.

Revetment. A support of any kind retaining earth at a slope steeper than that at which it would stand by itself.

An excavation for the use of a single Rifle pit. man, or file.

Shelter trench. A shallow trench, sufficient with its parapet to cover troops in single rank, kneeling or lying.

Task. The amount required to be done by one man (or a working party) in one period of work.

An excavation made in rear Trench. parapet.

## INFANTRY DRILL, 1896.

### PART I.

RECRUIT OR SQUAD DRILL, PHYSICAL TRAINING, AND DRILL OF A SECTION IN EXTENDED ORDER.

### 1. GENERAL RULES.

1. Instruction of the recruit.—The instructors must be clear, firm, and concise in giving their directions. They must allow for the different capacity of recruits, and be patient.

The instructor, who should invariably carry a rifle if the squad is receiving rifle instruction, will teach by illustration rather than by a repetition of explanations.

Recruits should fully comprehend one part of their drill before they proceed to another. When first taught their positions, they should be properly placed by the instructor: when more advanced, they should not be touched, but taught to correct themselves when admonished. They should not be kept too long at any one part of their exercise. Marching without arms should be intermixed with the rifle instruction. In nearly all cases the recruit should receive his rifle after a month's drill.

The exercises in 46 will be carried out in conjunction with those contained in the remaining Sections of Part I, and the Rifle and Firing Exercises.

All recruits of ordinary capacity should be thoroughly acquainted with Part I, and the Rifle and Firing

Exercises, after three months' instruction.

2. Duration of drills, &c .- Short and frequent drills are preferable to long lessons, which exhaust the attention both of the instructor and recruit. Recruits should be moved on progressively from squad to squad according to their merit, so that the quick intelligent soldier may not be kept back by men of inferior capacity. To arrive at the first squad should be made an object of ambition to the young soldier.

3. Words of command. - Every command must be distinctly pronounced, and sufficiently loud to be heard

by all concerned.

Every command that consists of one word must be preceded by a caution. The caution, or cautionary part of a command, must be given slowly and distinctly; the last or executive part, which, in general, should consist of only one word or syllable, must be given sharply and quickly; as

Company-Halt, Half Right-Turn. A pause will invariably be made between the caution and the executive word.

The words given in the Balance step and Physical training exercises must be given sharply or slowly and

smoothly, as the nature of the motion may require.

When the last word of a caution is the signal for any preparatory movement, it will be given as an executive word, and separated from the rest of the command by a

pause; thus, Right-Form, Quick-March, as though there were two separate commands, each with its caution and executive word.

When the men are in motion, executive words must be completed as they are commencing the pace which will bring them to the spot on which the command has to be executed. The cautionary part of the word must, therefore, be commenced accordingly.

Officers and non-commissioned officers will frequently be practised in giving words of command. Commanding officers are responsible that all are taught the exact

time.

The cautions and commands are, as a rule, given with regard to one flank only, but the same principle applies equally to movements to the other flank, which should also be practised.

The words in the margin printed in italics are the com-

mands to be given by the instructor.

### RECRUIT OR SQUAD DRILL, WITH INTERVALS.

### 2. Formation of squads.

1. A few men will be placed in line (that is, side by side) at arm's length apart; while so formed, they will be

termed a squad with intervals.

- 2. If necessary, the squad may consist of two such lines of men, in which case the men in the second line will cover the intervals between the men in the first, so that in marching they may take their own points, as directed in 11.
- 3. Recruits will, in the first instance, be placed by the instructor without any dressing; when they have learned to dress, as directed in Sec. 5, they will be taught to fall in, as above described, and then to dress and to correct their intervals. After they have been instructed as far as 22,

they may fall in in single rank, and then, if required to

drill with intervals, be moved as directed in 23.

4. Recruits formed into a squad will be directed to observe the relative places they hold with each other; while resting between the exercises they will be permitted to fall out and move about; they will be instructed on the words Fall in to fall in as they stood at first. This should be constantly practised.

Recruits will, if possible, be instructed singly as far as

22.

### 3. Position of the soldier.

The exact squareness of the shoulders and body to the front is the first principle of the position of a soldier. The heels must be in line and closed; the knees straight; the toes turned out, so that the feet may form an angle of 45 degrees. The arms should hang easily from the shoulder, elbows to the rear, slightly bent, the hand partially closed, the backs of the fingers touching the thigh lightly, thumb close to forefinger, the hips rather drawn back, and the breast advanced, but without constraint. The body should be straight and inclining forward, so that the weight of it may bear principally on the fore part of the feet; the head erect, but not thrown back, the chin slightly drawn in, and the eyes looking straight to the front.

### 4. Standing at ease.

### 1. By numbers. Caution.—Stand at ease, by numbers.

On the word One, open the hands, raise the arms from the elbows, left hand in front of the centre of the body, as high as the waist, palm upwards; the right hand

as high as the right breast, palm to the left front; both thumbs separated from the fingers and the elbows close to the sides.

On the word Two, strike the palm of the right hand on that of the left, drop the arms to their full extent, keeping the hands together, and passing the right hand over the back of the left as they fall; at the same time draw back the right foot 6 inches, and slightly bend the left knee.

Two.

When the motions are completed, the arms must hang loosely and easily, the fingers pointing towards the ground, the right thumb lightly held between the thumb and palm of the left hand; the body must incline forward, the weight being on the right leg, and the whole attitude without constraint.

When the soldier falls in for instruction he will be taught to place himself in the position above described.

Squad, On the word Attention, spring up to Atten—tion. { the position described in 3.

2. Judging the time.—Caution.—Stand at ease, judging the time.

Stand at— Ease. On the word Ease, go through the motions described in the standing at ease by numbers, distinctly but smartly, and without any pause between them.

Squad, Atten—tion. As before.

No deviation from the position of stand at ease will be permitted unless the command Stand—easy is given, when the men will be permitted to move their limbs, but without quitting their ground, so that on coming to Attention no one shall have materially lost his dressing in line. If

(I.D.)

men are required to keep their dressing accurately, they should be cautioned not to move their left feet.

On the word Squad being given to men standing easy, every soldier will at once assume the position of standing at ease.

## 5. Dressing a squad with intervals.

On the word Right, the eyes will Eyes-Right. \ be directed to the right, the head being

smartly turned in that direction.

On the word Dress, each soldier, except the right-hand man, will extend his right arm, palm of the hand upwards, nails touching the shoulder of the man on his right. At the same time he will take up his dressing in line by moving, with short quick steps, till he is just able to distinguish the lower part of the face of the second man beyond him. Care must be taken that he carries his body backward or forward with the feet, keeping his shoulders perfectly square in their original position.

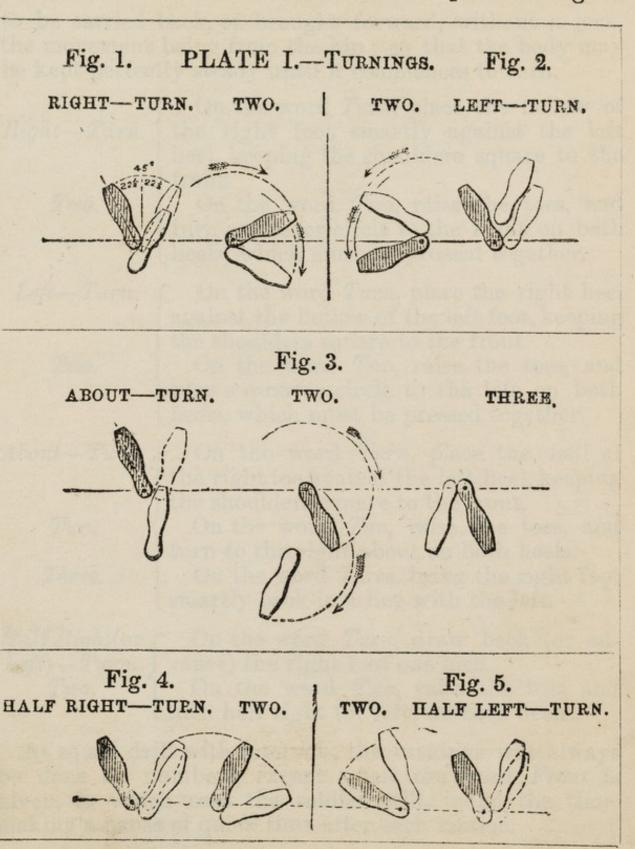
On the word Front, the head and eyes Eyes - Front. will be turned smartly to the front, the arm dropped, and the position of the soldier, as described in 3, resumed.

Turnings.—(PLATE I.)

In going through the turnings, the left heel must never quit the ground, the soldier must turn on it as on a pivot, the right foot being drawn back to turn the body to the right, and carried forward to turn it to the left: the body must incline forward, the knees being kept straight.

In the first of each of the following motions, the foot is

Dress.



to be carried back, or brought forward, without a jerk, the movement being from the hip; so that the body may be kept perfectly steady until it commences to turn.

Right-Turn.

On the word Turn, place the hollow of the right foot smartly against the left heel, keeping the shoulders square to the front.

Two.

On the word Two, raise the toes, and turn a quarter circle to the right on both heels, which must be pressed together.

Left-Turn.

On the word Turn, place the right heel against the hollow of the left foot, keeping the shoulders square to the front.

Two.

On the word Two, raise the toes, and turn a quarter circle to the left on both heels, which must be pressed together.

About-Turn.

On the word Turn, place the ball of the right toe against the left heel, keeping the shoulders square to the front.

Two.

On the word Two, raise the toes, and turn to the right about on both heels.

Three.

On the word Three, bring the right foot smartly back in a line with the left.

Half Right(or Left)—Turn.

On the word Turn, draw back (or advance) the right foot one inch.

On the word Two, raise the toes and turn half right (or left) on both heels.

At squad drill with intervals, the turnings will always be done by numbers, except when the word *Front* is given, in which case the soldier will judge the time making a pause of quick time after each motion.

## 7. Saluting .- (PLATE II.)

1. Saluting to the front.

Caution.—Salute, by numbers.

One.

On the word One, bring the right hand smartly, with a circular motion, to the head, palm to the front, point of the forefinger one inch above the right eye, thumb close to the forefinger; elbow in line, and nearly square, with the shoulder.

On the word Two, let the arm fall smartly to the side.

Two.

Caution.—Salute, judging the time.

Salute.

On the word Salute, go through the two motions described in One and Two.

2. Saluting to the side.

Cautions.—Right (or Left) hand salute by numbers; or Right (or Left) hand salute, judging the time.

The salute will always be with the hand further from

the person saluted.

The procedure will be as described in (1), except that as the hand is brought to the salute, the head will be

slightly turned towards the person saluted.

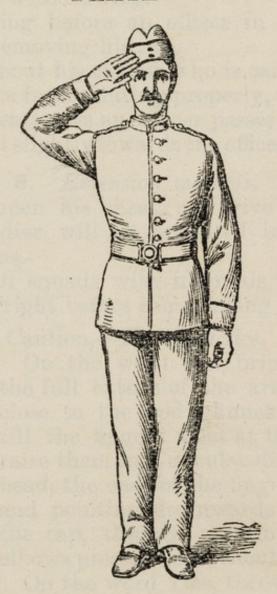
Soldiers should be practised in marching two or three together, saluting points being placed on either side; when several men are together, the man nearest to that point will give the time.

When a soldier passes an officer he will salute on the third pace before reaching him, and will lower the hand

on the third pace after passing him.

A soldier, if sitting when an officer approaches, will rise, stand at attention, and salute; if a number of men are sitting or standing about, the senior non-commissioned

# PLATE II.



SALUTING.

officer or oldest soldier will call the whole to attention and salute.

When a soldier addresses an officer, he will halt two paces from him, and salute as above described. He will also salute when withdrawing.

When appearing before an officer in a room, he will

salute without removing his cap.

A soldier, without his cap, or who is carrying anything that prevents him from saluting properly, will, if standing still, come to attention as an officer passes; if walking he will turn his head slightly towards the officer in passing him.

## Extension motions.

In order to open his chest, and give freedom to his muscles, the soldier will be practised in the following extension motions.

Men formed in squads with intervals will be turned a half turn to the right before commencing these practices.

Caution,—First practice.

On the word One, bring the hands, at the full extent of the arms, to the front, close to the body, knuckles downwards, till the fingers meet at the points; then raise them in a circular direction over the head, the ends of the fingers still touching and pointing downwards so as to touch the cap, thumbs pointing to the rear, elbows pressed back, shoulders kept down.

On the word Two, throw the hands up, extending the arms smartly upwards, palms of the hands inwards; then force them obliquely back, and gradually let them fall to the position of Attention, elevating the neck and chest as much as

possible.

Three.

On the word Three, raise the arms outwards from the sides without bending the elbow, pressing the shoulders back, until the hands meet above the head, palms to the front, fingers pointing upwards, thumbs locked, left thumb in front.

On the word Four, bend over until the hands touch the feet, keeping the arms and knees straight; after a slight pause, raise the body gradually, bring the arms to the sides, and resume the position of

Attention.

The foregoing motions are to be done slowly, so that the muscles may be exerted throughout.

Caution, -Second practice.

On the word One, raise the hands in front of the body, at the full extent of I the arms, and in line with the mouth, palms meeting but without noise, thumbs close to the forefingers.

On the word Two, separate the hands smartly, throwing them well back, slanting downwards; at the same time raise the

body on the fore part of the feet.

On the word One, bring the arms forward One. to the position above described, and so on. On the word Three, smartly resume the

position of Attention.

In this practice, the second motion may be continued without repeating the words One, Two, by giving the order Continue the motions; the squad will then take the time from the right-hand man: on the word Steady, the men will remain at the second position, and on the word Three they will resume the position of Attention.

Four.

One.

Two.

Three.

## Caution,-Third practice.

The squad will make a second half turn to the right

before commencing the third practice.

One.

One.

One, raise the hands, with the fists clenched, in front of the body, at the full extent of the arms, and in line with the mouth, thumbs upwards, fingers touching.

Two. Something the arms back in line with the shoulders, back of the hand downwards.

Three. { On the word Three, swing the arms round as quickly as possible from front to rear. Steady.—On the word Steady, resume the second position.

Four. { On the word Four, let the arms fall smartly to the position of Attention.

### MARCHING.

## 9. Length of pace, and time.

1. Length of pace.—In slow or quick time the length of a pace is 30 inches. In double time and in stepping out it is 33 inches, in stepping short, it is 21, and in the side step it is 13½ inches.

When a soldier takes a side pace to clear or cover another, as in forming fours (described later), the pace will be 27 inches.

2. Time.—In slow time, 75 paces are taken in a minute. In quick time, 120 paces, equal to 100 yards in a minute, or 3 miles 720 yards in an hour. In double time, 165 paces, equal to 151 yards 9 inches a minute, or 5 miles 275 yards in an hour. The time of the side step is the same as for the quick step.

Distances of 100 yards will be marked on the drill ground, and non-commissioned officers and men practised in keeping correct time, and length of pace.

## 10. The drum, plummet, and pace stick.

No recruit, or squad of recruits, is to be taught to march without the constant use of the drum and pace stick.

The drum will first beat the time in which the men are to march when the squad is halted; then, from time to time, when it is in motion. While the drum is beating at the halt, the men will give their whole attention to the time; when it ceases, the instructor will at once put

the squad in motion.

In order to ascertain whether the time is beaten correctly, a pendulum or a plummet must be used. When no pendulum is at hand, a plummet can readily be made by suspending a spherical ball of metal by a string, the length of which, measured from the point of suspension to the centre of the ball, must be as follows for the different degrees of march:—

Inches. Hundredths.

Slow time - - 24 · 26

Quick - - - 9 · 80 
Double - - - 5 · 18

Thus arranged, the plummet will swing the exact time required. String being liable to stretch, the correctness of the plummet should frequently be tested by reference to a watch.

The length of the pace in marching will be corrected with the pace stick, the accuracy of which should occasionally be tested by measurement.

## 11. Position in marching.

In marching, the soldier must maintain the position of

well balanced on his limbs. In slow time his arms and hands must be kept steady by his sides, care being taken that the hand does not partake of the movement of the leg. In quick time his arms and hands will swing naturally from the shoulder, the right arm swinging forward with the left leg, and the left arm with the right leg, the hand not to be thrown in advance of the leading foot, nor across the body. The hand will not be raised higher than the waistbelt. The movement of the leg must spring from the haunch, and be free and natural.

Both knees must be kept straight, except while the leg is being carried from the rear to the front, when the knee must necessarily be a little bent, to enable the foot to clear the ground. The foot must be carried straight to the front, and, without being drawn back, placed firmly on the ground, but so as not to jerk or shake the body; the toes to be turned out at the same angle as when

halted.

Although several men may be drilled together in a squad with intervals, they must act independently, precisely as if they were being instructed singly. Each soldier must be taught to march in a straight line, and to take a correct pace, both as regards length and time,

without reference to the other men of the squad.

Before the squad is put in motion, the instructor will take care that the men are square individually and in correct line with each other. Each soldier must be taught to take up a straight line to his front, by first looking down the centre of his body between his feet, then fixing his eyes upon some object on the ground straight to his front at a distance of about 100 yards; he will then observe some nearer point in the same straight line, such as a stone, tuft of grass, or other object, about 50 yards distant.

## 12. Balance step.

The object of the balance step is to teach the soldier the free movement of his legs, preserving at the same time perfect squareness of shoulders and steadiness of body. No labour is to be spared to attain this object, which forms the very foundation of correct marching. The instructor must be careful that the soldier keeps his body well forward, and his shoulders perfectly square during these motions.

## 1. Advancing. - Caution. - Balance step advancing.

Front.

On the word Front, the left foot will be raised from the ground and carried smartly to the front, the knee being straightened as the foot is carried forward, toes turned out at the same angle as when halted, the sole parallel to, and about two inches from the ground, the heel about twelve inches in advance of the line of the right toe.

Forward.

As soon as the men are steady in the above position, the word Forward will be given, on which the left foot will be placed firmly on the ground at 30 inches distance from heel to heel, toes turned out at the same angle as when halted, and the right foot will immediately be raised and held extended to the rear, the toe pointing to the spot on the ground it has just quitted, both knees to be kept straight.

Front.

On the word Front, by a slight bend of the knee the right foot will be brought smartly forward, and so on alternately.

Halt.

On the word *Halt*, which should always be given when the moving foot is to the front, that foot will complete its pace, and the other will be brought up smartly in line with it.

2. Retiring .- Caution .- Balance step retiring.

Rear.

On the word Rear, the left foot will be raised from the ground and carried 12 inches to the rear, the toe pointing to the ground; toes turned out at the same angle as when halted, both knees to be kept straight.

Retire.

As soon as the men are steady in the above position, the word Retire will be given, on which the left foot will be brought to the ground at 30 inches from heel to heel, the right foot will be immediately raised and held extended to the front, as described in the command Front in the balance step advancing.

Rear.

On the word Rear, carry the right foot to the rear, as directed for the left, and so on alternately.

Squad— Halt. On the word *Halt*, which should always be given when the moving foot is to the rear, that foot will complete its pace, and the other will be brought back smartly in line with it.

Great care must be taken that the toes remain throughout at the proper angle; that the body accompanies the leg, and that the inside of the heel is placed on the straight line that passes through the points on which the soldier is marching; that the body remains straight, but inclining forward; that the head is erect and turned neither to the right nor left.

## 12A. The Slow march.

The three most important objects in this part of the drill are cadence, length of pace and direction.

The time having been given on the Slow—March. drum, on the word March, the left foot will be carried 30 inches to the front, as directed in 11; the right foot will then be carried forward in like manner, and so on alternately.

Marching in slow time is merely a step in the training of the soldier between the balance step and the usual pace for all drill and manœuvre, i.e., quick time; no more time therefore should be devoted to it than is required to ensure the soldier being properly balanced on his limbs.

## 13. The Quick march.

Quick-March. The time having been given on the drum, on the word March the squad will step off together with the left foot, in quick time, observing the rules given in 11.

## 14. The Halt.

Squad—Halt. { On the word Halt, the moving foot will complete its pace, and the other will be brought smartly up in line with it.

## 15. Stepping out.

Step-Out. 

When marching, on the word Out, the soldier will lengthen the pace by 3 inches, leaning forward a little, but without altering the time.

This step is used when a slight increase of speed, without an alteration of time, is required; on the word Quick—step the usual pace will be resumed.

## 16. Stepping short.

Step—Short. { On the word Short, the foot advancing will finish its pace, and afterwards each soldier will shorten the pace by 9 inches until the word Forward is given, when the quick pace will be resumed.

This step is used when a slight check is required.

## 17. Marking time.

Mark—Time.

On the word Time, the foot then advancing will complete its pace, after which the time will be continued, without advancing, by raising each foot alternately about three inches, keeping the feet parallel with the ground, the knees raised to the front, and the body steady. On the word Forward, the pace at which the men were moving will be resumed.

From the halt, the word of command will be Quick Mark-Time.

(I.D.)

## 18. Stepping back.

- Paces, Step Back-March. In stepping back, soldiers must be taught to take the quick pace of 30 inches straight to the rear, preserving their shoulders square to the front and their bodies erect. In halting, the foot in front will be brought back square with the other.

The step back should not exceed four paces.

## 19. Changing step.

Change-

vancing foot will complete its pace, and the ball of the rear foot will be brought up to the heel of the advanced one, which will make another step forward, so that the time will not be lost, two successive steps being taken with the same foot.

This may be required when any part of a squad, or a single soldier, is stepping wit a different foot from the rest. To change step when marking time, a man will beat twice with the same foot.

## 20. The double march.

Double-

The time having been given on the drum, on the word March, the men will step off together with the left foot. At the same time they will raise their hands as high as the waist, carrying back the elbows and clenching the fists, the flat part of the wrist inwards, arm to the side; the head to be kept erect, and the shoulders square to the front. The knees are to be more bent, and the body more advanced than in the other marches.

The instructor will be careful to habituate the soldier to the longer pace.

Squad—Halt. { As in 14, at the same time dropping and partly opening the hands.

The soldier will be taught to mark time in the double time, in the same manner as in quick time. From the halt, the word of command will be-Double, Mark-time.

## The side step.

1. By numbers.—Caution.—Right close, by numbers.

On the word One, the right foot will be carried smartly 131 inches to the right, the One. shoulders and face being kept perfectly square to the front, and the knees straight.

On the word Two, the left foot will be closed smartly to the right foot, heels

touching.

The word One being repeated, the right foot will be carried as before described, One. and so on.

When the word Halt is given, the left foot will be closed to the right, as on the Squad—Halt. word Two.

2. Judging the time.—Caution Right close, judging the time.

Right Close, Quick-March. or

Two.

Close, Quick-March.

On the word March, each man will carry his right foot direct to the right, and instantly close his left foot to it, thus completing the pace; he will proceed to -Paces, Right \ take the next pace in the same manner: shoulders to be kept square, knees not bent, unless on rough or broken ground. The direction must le kept in a straight line to the flank.

(I.D.)

Front-Turn.

Squad—Halt. On the word Halt, which will be used when the number of paces has not been specified, the men will complete the pace they are taking, and remain steady.

Soldiers should not usually be moved to a flank by the

side step more than twelve paces.

## 22. Turning when on the march.

Right—Turn. { 1. Turning to the right, and then to the front.—On the word Turn, which should be given as the left foot is coming to the ground, each soldier will turn in the named direction, and move on at once, without checking his pace.

On the word Turn, which should be given as the right foot is coming to the ground, each soldier will turn again to the front, and move on without checking his pace.

Left—Turn.

2. Turning to the left, and then to the front.—Soldiers will turn to the left in like manner, the word Turn being given as the right foot is coming to the ground. They will turn again to the front, the word Turn being given as the left foot is coming to the ground.

A soldier will always turn to the right on the left foot; and to the left on the right foot. If the word Turn is not

given as the proper foot is coming to the ground, the soldier will move on one pace and then turn.

3. Making a half turn to the right, or left.—Soldiers will also be practised in making a half turn to the right or left, and then moving on (without checking their pace) in a diagonal direction, taking up fresh points, at once, to march on.

4. Turning about. - Soldiers will also be taught to turn

Number.

Two Paces

Forward,

-March.

about, which must be done by each man on his own ground, in the time of three paces, without losing the time. Having completed the turn about, the soldier will at once move forward, the fourth pace being a full pace as before. When retiring, the squad will turn to the front on the command Front-Turn.

## SQUAD DRILL, IN SINGLE RANK.

The terms front, directing or inner, and outer flanks should be explained.

## Formation of the squad in single rank.

At this stage of the instruction a few soldiers will be formed in single ank at such an interval as will enable each man to sw ng his arms naturally and freely, without touching the mai on his right or left. When armed and equipped each man will be allowed a space of 27 Thus ten men occupy nine paces or four men three yards. Unequipped men take rather less.

The squad will then be ordered to

number from the right.

When a squad in single rank is required Odd Numbers, to drill with intervals, the instructor will direct the odd numbers to take two paces forward.

> To re-form single rank the odd numbers will step back two paces, when the squad will correct the intervals from the right.

#### Dressing when halted. 24.

In dressing, each soldier will look towards the flank by which he is ordered to dress with a smart turn of the head, as described in 5; he must carry his body backward or forward with the feet, moving to his dressing with short quick steps, without bending backward or

forward; his shoulders must be kept perfectly square, and the position of the soldier, in 3, retained throughout.

1. Dressing in Succession. The instructor having placed a flank man a pace and a half in front of the alignment, on the word Dress, the remainder will take a pace to the front, moving Right—Dress. der will take a pace to the faces of up into line in succession. The faces of the men, not their breasts or feet, are the line of dressing. Each man is to be able just to distinguish the lower part of the face of the second man beyond him.

When the instructor is satisfied that the line is correct, he will give the com-Eyes-Front. \ mand Eyes-Front, on which the men will turn their heads and eyes smartly to the

front.

Similarly, a squad will be taught to dress back, the men taking a pace to the rear on the command Right -Dress, and moving back into line in succession.

2. Dressing together .- When soldiers are on the align. ment they have to occupy, and their dressing is simply to be corrected, the command Right-Dress will be given, on which they will move up or back to their places successively, commencing with the man on the named flank.

The instructor should invariably fix upon some object

on which to dress his line.

It will be found most useful to accustom men to dress on an alignment oblique to any well-defined adjacent line, such as the side of a square parade ground.

## 25. Turnings.

The soldier will next practice in single rank, judging

the time, the turnings he has been taught by numbers.

Men are never unnecessarily to stand turned to the rear.

## 26. Marching to the front or rear.

Before a squad is ordered to march, the directing flank must be indicated by the caution, By the right, By the centre, By the left. During the march, the shoulders must be kept perfectly square to the front, the body steady, eyes off the ground. Each man will preserve his position in the general alignment by an occasional glance towards the point of direction.

The squad will first be taught to march straight to the front and rear, by the right, by the centre, and by the left. It will then be practised in all the varieties of step in quick time, and in marking time, after which it will be exercised in double time.

The soldier will be practised in changing the pace, without halting, from quick to double, on the command *Double*, and from double to quick. In breaking from double into quick time, on the word *Quick* the arms will be dropped to their usual position.

The instructor should teach the recruit to select two points to march on, and before approaching the first to take another in advance on the same line, and so on. By occasionally remaining halted in rear of the directing man, and fixing his eyes on some distant object, the instructor can ascertain if the squad is marching straight to its front.

When a soldier finds himself a little behind, or before, the other men of his squad, he must be taught to recover his place in the rank gradually, and not to rush to it, which would make him unsteady and spoil the marching of the rest of the squad.

27. The Diagonal march. (PLATE III., Fig. 1.)

Half Right— Turn. uick-March.

Squad-

1. From the halt.—On the word Turn, the men will make a half turn to the right, and on the word March, each man will step off and move correctly in the diagonal direction, glancing occasionally to the right, and regulating his pace so that his own shoulders are parallel with the shoulders of the man on his right. This man's head should conceal the heads of the other men towards the directing flank.

The right-hand man will direct, and must therefore pay particular attention

to the direction and pace.

On the word *Halt*, the squad will halt; and on the word *Front*, it will turn to its original front.

If the diagonal march has been properly performed, the squad when halted and fronted will be found to be in a line parallel to its original position.

Half Right— Turn. Front-Turn. 2. On the march.—When the squad is marching to the front, and is required to move in a diagonal direction to the right, the word Half Right—Turn will be given, upon which the men will turn half right, and move diagonally in that direction, as described from the halt. When it is intended to resume the original direction, the word Front—Turn will be given, on which every man will turn to his front, and move forward without checking his pace.

The diagonal march will also be practised in double

time,

## PLATE III.

Fig. 1.

## THE DIAGONAL MARCH.

HALF RIGHT -- TURN. QUICK -- MARCH. HALT, FRONT.

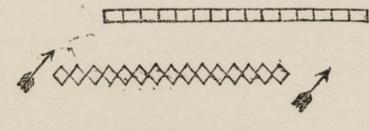
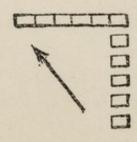


Fig. 2.

# MEN MARCHING AS IN FILE FORMING SQUAD.

FRONT-FORM.

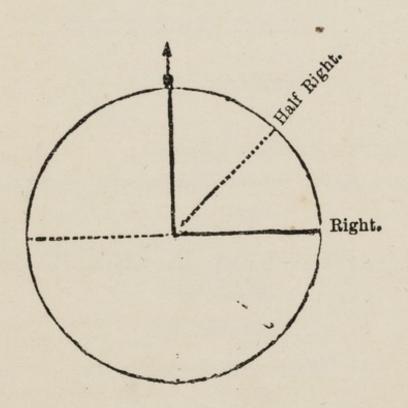
FORWARD OF HALT.



han a-aguan panis. [To lace force 24, o diversity BALLY BLOWN-TURN, - OFFICE-MARCH. SHART, FROME. Sent Stanta DEEL MAINTING VE IN LITTE THOUSING SQUAD.

## PLATE IV.

DIVISION OF THE QUARTER CIRCLE.



When practising the diagonal march the squad will be taught to move at an angle less or greater than 45 degrees on receiving the words of command, Right (or Left) shoulders up.

28. A Single rank, halted, changing front. (PLATE IV.)

Right—Form, and the remainder will make a half-turn in the required direction.

Quick-March. On the word March, all except the right-hand man will step off; each, glancing to the right, will move by the shortest line to his place in the new front, and take up his dressing.

Eyes—Front.  $\begin{cases} \text{On the command } Eyes - Front, \text{ the men} \\ \text{will turn their heads and eyes smartly to} \\ \text{the front.} \end{cases}$ 

- 2. When men are required to form to the rear of the alignment they occupy, they will be turned about, and then form as above described, the squad being fronted and dressed when the formation is complete.
- 3. The squad will also practice changing front at angles smaller than half-right. In this case the Instructor will place the right-hand man in the required alignment, and on the words Right—Dress the remainder will take up their dressing as directed in 24.
- 4. The squad will also be practised in changing front at angles greater than half-right and less than right. In this case the Instructor will place the right-hand man in the required alignment, and then give the command Right—Form when the remainder will make a half turn in the required direction. On the command Quick—March the movement will be performed as in (1).

29. A Single rank, on the march, changing direction.

Half Right-Form, or Right-Form.

1. On the word Form, the right-hand man will turn in the required direction, and mark time, while the remainder will make a partial turn, and move by the shortest line to their places in the new front. Each marks time, takes up his dressing, and looks to his front as he arrives in his place.

As soon as the squad is formed, the command Forward

will be given.

2. When the squad is at the halt, and it is intended to move off on a new front, the word of command will be On the move, Half Right (or Right) - Form, Quick - March, followed by Forward when the required angle has been reached. The men will proceed as in (1).

#### Marching as in file. 30.

1. From the halt. - Soldiers, when standing as in file, must be instructed to cover each other exactly. The head of the man immediately before each soldier, when he is correctly covered, will conceal the heads of all the others in his front.

The strictest observance of all the rules for marching is particularly necessary

when marching as in file.

On the word March, the whole will step off together, at a full pace, and will so continue to step without increasing or diminishing the interval between each Quick-March. other. No looking down, nor leaning back is to be allowed The leader is to

Right-Turn.

be directed to march straight forward on some distant object, the remainder of the men covering correctly during the march.

On the words Halt, Front, the soldiers will halt, and turn to their original front, and, if the marching has been properly performed, their dressing will be found correct.

Squad, Halt, Front.

Right-Turn.

2. On the march.—On the word Turn, the soldier will turn to the right, and move on as in file.

Front—Turn. The original direction is resumed by giving the word Front—Turn, on which the soldier will turn to the front, and then move on steadily in line.

Marching as in file will not be practised in double time.

31. Wheeling as in file.

Right—Wheel.

The squad, when marching as in file, will be taught to change its direction by wheeling to the right or to the left. The leading man will move round a quarter of the circumference of a circle having a radius of four feet. The other men, in succession, will follow on his footsteps without increasing or diminishing their distances from each other or altering the time, but shortening the pace a little with the inner foot, as they wheel.

The squad may be wheeled at any angle by the command Right—Wheel, followed by Forward when the

required direction is obtained.

If a squad is ordered to halt, or mark time, when a part of the men only have wheeled into the new direction, the remainder should be instructed to cover off, if

required, by the diagonal march, on the command, Rear files -- Cover.

32. Men marching as in file, forming squad. (Plate III., Fig. 2).

> 1. Forming to the front.-When the squad, marching as in file to the right, is ordered to form to the front, the leading man will mark time, the remainder will make a half turn to the left, and form upon him, marking time as they come into the alignment, taking up their dressing, and then looking to their front.

As soon as the squad is formed, the command Forward, or Halt will be given.

This command is only given when the

squad is halted. Heads and eyes will be turned to the front.

2. Forming to the rear.—The movement will proceed as above, except that the men will make a half turn to the right, and form on the right of the leading man.

3. Forming to the right. - When marching as in file to the right, and ordered to form to the right, the leading Right-Form. \ man will wheel to the right, take two paces to his front, and halt; the remainder will form in succession on his left, and be dressed as they get into their places.

The word Eyes-Front will be given

when the squad is formed.

Forming to the right or left will seldom be used, except for guards and ceremonies, and when marching on markers.

Front -- Form.

Squad-Forward, or Halt.

Right-Dress.

Eyes-Front.

## 33. The side step.

The side step will now be practised, the men judging the time, as laid down in 21 (2). Care must be taken that the shoulders are kept square, and the paces made in a direct line to the flank.

## 34. Marching with arms.

Squads with arms will be practised in the different marches, and variations of step, described in the foregoing sections. During these practices, great attention must be paid to the position of the recruit.

The disengaged arm will be allowed to swing naturally. When men parade with arms, they will invariably fall

in at the Order.

All the instructions relating to the position and movement of the rifle, when marching, will be found in the Rifle Exercises.

## SQUAD DRILL, IN TWO RANKS. .

## 35. Formation of a squad in two ranks.

The squad will now be formed for drill in two ranks. The men will take their places in succession, commencing from the flank on which they are ordered to form. Each rear rank man will be placed 60 inches from the man in front of him, measuring from heel to heel, and will cover him correctly, the two men thus placed forming a File. When the squad consists of an uneven number of men, the third man from the left of the front rank will be a Blank (or incomplete) File. The squad will be numbered from right to left. The squad will also be

30

taught to drill in half-squads, which will be numbered from right to left. The file on the left of the right

half-squad will always be the centre of the squad.

If the squad is required to drill with intervals, it will be numbered from the right. The command will then be—Odd numbers of the front two paces forward, even of the rear rank two paces to the rear—March. To re-form the squad, the odd numbers of the front rank will be directed to take two paces to the rear, and the even numbers of the rear rank two paces to the front.

## 36. Dressing.

The front rank will dress as described in 24. The rear rank men will continue looking to their front, and will cover and correct their distances, as the front rank men take up their dressing.

37. Marching to the front or rear, and marching in file.

A squad in two ranks will be practised in the marches,

and variations of step, taught in single rank.

Covering and Distance.—While marching in line, the men of the rear rank must accurately preserve their

covering and distance.

Marching in file.—Marching and wheeling in file will be practised as laid down in 30 and 31, care being taken that the rear rank men dress correctly by their front rank men.

## 38. Taking open order.

The squad, if with arms, will be at the Order when taking open order, at the halt.

Open Order—

Step back two paces in quick time, and on the word Rear rank, Right—Dress, the rear rank will be dressed by the instructor from the right.

Rear Rank, Eyes—Front. {

On the word Front, the rear rank men will turn their heads and eyes smartly to the front.

Close Order— {

On the word March, the rear rank will.

March. { take two paces to the front.

Open-Order. { 2. On the March. On the word Order, the rear rank will mark time two paces.

Close-Order. { On the word Order, the front rank will mark time two paces.

## 39. Changing ranks.

Change— on the word Ranks the squad will turn about.

The instructor will explain to the men that when ranks are changed, the former front rank will act as a rear rank, and the former rear rank will act as a front rank, and that when told off into half-squads, the original right-half squad becomes the left-half squad, and the original left-half squad becomes the right-half squad.

The original right files will act as right files, and the left files as left files. A blank file, after turning about

will occupy the vacant space in the new front rank.

## 40. The diagonal march.

The diagonal march will be practised in two ranks, in the manner described in 27. In addition to the instructions there given, the rear rank men must be cautioned to preserve their relative positions with their front rank men, in order that they may be found to cover correctly when they are halted and fronted.

## 41. Changing front, or direction.

The front rank of the squad will form from the halt, on the march, or on the move, according to the instructions laid down in 28 or 29. The rear rank will not turn on

I.D.)

the caution, but in forming will conform to the move-

ments of the front rank.

When a squad turned about, or moving to the rear changes front, or direction, the rear rank acts as a front rank, and the front rank acts as a rear rank.

## 42. The formation of fours. (PLATE V. Figs. 1, 2, 3.)

It must be explained to the men that odd numbers are

right files, and even numbers left files.

But, in order that the left four may always be complete, the file on the left of a squad will always move back, and the second file from the left always stand fast in forming fours.

Form-Fours.

1. At the halt.—On the word Fours, the left files will take 30 inches to the rear with their left feet, and 27 inches to the right with their right feet in quick time, so as to cover the right files. In this formation the squad will stand in fours.

S₁uad-Front. On the word Front, the left files will move up in line with the right files by taking 27 inches to the left with their left feet, and 30 inches to the front with their right feet.

Form-Fours.

About. (or Right, or Lett).

The squad will turn as ordered.

Squid-Front. { The squad will turn to the front and then proceed as already described.

As already described.

In forming fours, after changing ranks, the left files will step back with the right foot and take the side pace with the left foot, and the two files on the right of the squad will act as they did when on the left of the squad.

2. On the march.—A squad marching to the front, rear, or to a flank in file, will be taught to form fours precisely

as when forming from the halt.

## PLATE V. FORMATION OF FOURS. Fig. 1,-squad with an odd file. TELLING OFF. FORM-FOURS. So Right. N. Right. D. Left. M. Right. D. Right. D. Right. 8 5 3 1 1 9 6 4 4 2 50 30 10 Fig. 2.—squad with a blank odd file. TELLING OFF. FORM-FOURS. 8765432 800 500 500 100 600 400 200 Fig. 3. - Sydad WITH A BLANK FILE. TELLING OFF. FORM-FOURS. 10 9 8 7 6 BREAKING OFF FILES. Fig. 5. Fig. 4.—FIVE FILES ON THE LEFT, FILES TO THE-FRONT. RIGHT-TURN, LEFT-WHEEL. Wallet Halland B. B. 11/1/1/1/3/1/3/1/3/1/3

. 80

When marching to the front, rear, or to a flank in file, or by the diagonal march, on the command Form—Fours, the right files will mark time two paces, while the left files move to their places in fours; if the word Right (or Left) follows, the squad will turn in the direction ordered.

When moving to a flank in fours, each section of fours

will move by the flank ordered to direct.

A squad moving to the front, rear, or to a flank, in fours, may be turned in any direction, diagonal or otherwise.

A squad moving to the front, rear, or to a flank in fours may be ordered to form two-deep; on the command, Form—Two-deep, the left files will step up or fall back into their places in two-deep formation, the right files marking time two paces.

A squad moving to a flank in four, on receiving the command Front (or Rear)—Turn, will turn in the required direction and re-form two-deep as above

described.

## 43. Fours wheeling, and forming squad.

1. Wheeling.—A squad moving to a flank in fours, will wheel to the right or left, in the same manner as it wheels in file; each four wheeling successively round the same point as described in 31.

If the squad be ordered to halt, or mark time, when a part of the fours only have wheeled, the remainder should be instructed to cover off, if required, by the diagonal march on the command, Rear fours—Cover.

2. Forming to the front or rear, or to the right or left.— When a squad moving in fours to a flank is ordered to form to the front or rear, it will form two-deep, and then proceed as in 32 (1, 2), the men taking up their proper places as they come into the alignment.

When forming to the right or left, the squad will first form two-deep. The rear rank will act as in 32 (3), and the front rank men will move round their respective rear rank men, and form successively in front of them.

### 44. Passing obstacles (Plate V. Figs. 4, 5).

A squad will be taught to pass an obstacle on the command—Files on the right, Left—turn, when these files will mark time two paces and then receive the command, Right—wheel; or —Files on the right, Form—fours, Left, Right—wheel, resuming the original formation when the obstacle is cleared, on the command Files (or Fours) to the —Front, when the men will make a half-turn outwards and double into their places. Or the squad may form fours and close on its centre, right, or left, and afterwards re-form two-deep; the named file stepping short during the movement, and the whole advancing the full pace on the command Forward.

### 45. Dismissing a squad.

Right—Turn. { 1. Without Arms.—On the word Turr, the men will turn as directed. Dis—miss. { On the word Dismiss, the squad will break off quietly. Shoulder Arms.—As above, but on the word Dismiss, the men will Port Arms, and, after a pause, Shoulder Arms and break off quietly.

#### 46. PHYSICAL TRAINING.*

#### GENERAL RULES.

1. The object of the following exercises is not display, but the setting up of the soldier, and the strengthening and rendering supple of his muscles.

^{*} For Syllabus see Appendix A.

- 2. The work should be so arranged that it is always changing, keeping in view the fact that the groups of muscles that are used in one exercise should be rested in the next, and that no muscles in the body should be either neglected or unduly tired. A good general rule for an instructor to bear in mind is-Exercises for the legs and exercises for the arms should alternate with one another, and exercises for both upper and lower limbs may be roughly divided into those that bend and those that straighten them, and with the body (trunk) the same, those that bend the body and those that straighten it. The instructor must never lose sight of the fact that what he is aiming at is the development, and consequent strengthening, of the whole of the body, and not of one particular part. Everything depends upon the instructor, and if he is capable it is certain that good results will ensue. He must never forget that for a man to be of use as a soldier he must be strong all over, active, intelligent, and full of life and dash.
- 3. Too much importance cannot be placed on the position laid down for each exercise being rigidly adhered to, this especially holds true in "free gymnastics," where, unless the correct position is maintained, the exercise is useless, requiring no muscular exertion whatever; for instance, in bending and stretching the arms with the hands on the ground, if the body or legs are relaxed and allowed to bend, little muscular exertion is made by the arms, shoulders, and chest, and the value of the exercise is lost.
- 4. A strictly military position must always be observed, as it accustoms the man to that erect, soldier-like attitude that is best for him, both as a soldier and a man, since it tends greatly to the free and full action of the heart and lungs, and the consequent development of the whole body.

5. When working in the drill shed, belts, frocks and caps will be taken off, and the braces tied round the waist.

6. Great attention must be paid by the instructor to the mobility of the chest walls of the men under instruction, and for this purpose "deep breathing" exercise must be frequently practised. The method of performing this

exercise will be as follows :-

From the position of Attention, slowly exhale as much as possible the air from the lungs, bringing the head and shoulders well forward whilst doing so in order to contract the chest. From this position slowly make a deep inspiration, gradually throwing back the head and shoulders and assuming an erect position, the air being inhaled through the nostrils and not through the mouth. After the chest has been fully expanded, and the air held in the lungs for one or two seconds, slowly expire it through the mouth, bringing the head and shoulders well forward in doing so. This exercise should be repeated at least six times.

7. Not only during physical training, but also while recruits are at gymnastic instruction, their soldier-like bearing and general setting up will be the first care of the gymnastic instructor. Men will be allowed to stand easy when in the ranks, but when it comes to their turn to do an exercise, they will spring smartly to Attention without any command, and take their places ready for work without any word from the instructor, so that there may be no delay. Every movement must be done smartly and with the greatest precision. On arriving in their places after the completion of the exercise they will, without further word of command, stand at ease, and then stand easy.

8. In the marching exercises, the proper method of using the legs and feet must be insisted upon, bracing the knee and pressing the ground with the toes at each pace,

which must be at least 30 inches in length, the arms swinging in alternate action with the legs. When hopping, the leg off the ground will be held straight to the rear, with the toe pointed to the ground. The body and head upright, the shoulders back, and the eyes directed to the front at their own level. When "Rapid Marching," the instructor must exercise the greatest care to graduate an increased speed, so that the object may be attained without undue exhaustion, and the distance must be very short at commencement.

9. All exercises with apparatus will be preceded by marching, free gymnastics, hopping, or similar work, so as to warm the body by increasing the circulation, and the subsequent exercises so arranged that legs and arms, pulling and pressing muscles, are all equally exercised.

10. The position, when hanging by the hands, must be shown to, and learnt by, the recruit, so that at any time he is placed upon, or gets on to the bar, it will be correct. The hands must be the width of the shoulders apart, the eyes directed to the bar, the back hollowed, the legs together and straight, the feet together, and the toes pointing to the ground.

11. After the first few lessons the instructor must carefully select those men who are fitted by their muscular strength, activity, and intelligence, for harder work, and these men may be pushed on, and the weaker and less

intelligent kept at easier exercises.

12. Recruits are not to be considered fit to be passed into the ranks as physically trained until they (a) have a fair knowledge of quick guarding and pointing with the dummy rifle (attack and defence); (b) can cover a mile of ground in seven minutes without excessive fatigue supervening; (c) are well set up, strong, active, and precise in their movements; (d) are easily able to surmount an ordinary obstacle, such as a wall, ditch, or fence, carrying

arms, &c., and (e) show that they are possessed of sufficient pluck, life, and dash, to be of use to the Service.

#### 13. LEG EXERCISES.

The squad will be formed in two ranks; before commencing the exercises it will be turned into file.

### Marching.

Quick- As laid down in 30.

Rise.

With the legs quite straight, rise on the toes as high as possible, and at the On the Toes - same time place the hands on the hips, the cadence remaining the same as in Quick March, but the length of space reduced to 18 inches.

Break into quick time-Quick.

Resume the Quick March, making a beat with the left foot the first time it I meets the ground.

# Hopping.

On the Left Foot-Hop.

Place the hands on the hips and hop forward on the toes of the left foot at a pace of about 18 inches, head erect, chest thrown well to the front, elbows and shoulders forced backwards and downwards; the right leg perfectly straight and kept well to the rear, toe pointed. Repeat the practice not less than 12 times.

Change Feet. Break into quick time-

As above, but hopping on the right foot. Drop the hands to the sides and resume the ordinary Quick March, making a beat with the left foot to mark the change.

Hopping on the left and right foot alternately.

Hop as before, changing feet at each hop, the intermediate stride being a pace of at least 30 inches. On the Left Foot-Hop.

N.B.—The men should always be made to hop as high as possible.

Break into quick time— } As before.

Rapid marching.

(Up to the rate of about 5 miles an hour.)

Rapid March-Commence.

Step out 33 inches, and quicken the time until the utmost possible speed is attained.

Break into quick time-Quick.

Resume the quick march.

Gymnastic march.

For Gymnastic March -Open Out.

Rear files will step short until full intervals are obtained.

In Slow Time-March.

Bend the knee and raise it as high as the waist, with the toe pointed downwards, and at the same time place the hands on the hips, and without any pause extend the leg and plant the flat of the foot on I the ground, the weight of the body being thrown well forward, and the knee well braced back. Immediately the rear foot leaves the ground, the toe must be pointed downwards; and the body kept perfectly upright throughout the exercise.

Break into quick time-Quick.

Resume the ordinary Quick March, making a beat with the left foot to mark the change, and at the same time drop the hands smartly to the sides.

On the Leading File ? -Close.

The leading file will step short, and the remainder close to correct distance; the word Forward will then be given, when the quick pace will be resumed.

### Double march.

Break into double time-Double.

As laid down in 20, but the arms must move with freedom at the shoulder joints with the action of the legs, and the heels must never touch the ground.

Without throwing the feet to the front, Iift the knees well up in line with the waist, body and head upright, chest well advanced. Resume the Double March.

As you were.

Knees up.

N.B.—During the above exercises the squad should be frequently halted and practised in taking up their dressing with the utmost quickness and precision,

### 14. FREE GYMNASTICS.

The squad will be formed in two ranks, and be numbered from right to left.

Full Interval from the Left. Right-Close. Quick-March.

The whole, except the file named, will close as ordered. Each front rank man will raise the left arm, palm of the hand upwards, nails touching the shoulders of the next man, and take up his dressing; the rear rank to cover correctly.

Eyes-Front.

Head and eyes will be turned smartly to the front, and the arm dropped to the side.

For Free Gymnastics— Prepare.

The rear rank will take two paces to the rear.

March.

Odd numbers of the front rank will take four paces to the front, and the even numbers of the rear rank four paces to the rear.

Hands on Hips. Place the hands smartly on the hips, fingers together and extended to the front, thumbs to the rear, elbows and shoulders forced well back.

On the Toes—Rise.

Keeping the body erect, slowly rise on the toes as high as possible, legs perfectly straight, heels together.

Sink.

Slowly sink on to the heels.

N.B.—This exercise, being chiefly for the calves of the legs and insteps, should be repeated at least 20 times.

Knees, bending and stretching.

On the Toes—Rise.

As before.

Double Knee—Bend. Keeping the body and head erect and elbows forced well back, slowly lower the body until almost sitting on the heels (which must not be allowed to separate), the knees forced well apart.

Stretch.

Slowly straighten the legs by stretching up as high as possible on the toes, heels together.

Attention.

Sink on the heels, at the same time bring the hands smartly to the sides and resume the position of Attention.

## Arms, bending and stretching.

Smartly bend the arms at the elbows, bringing the back of the hands, which Arms—Bend. \ must be firmly clenched, close to and nearly in line with the shoulders, the whole body being braced up to its fullest extent.

Out.

Smartly extend the arms to their fullest extent in line and level with the shoulders, backs of the hands up, fingers and thumbs I fully extended and close together.

In.

Smartly resume the first position.

Up.

Keeping the palms to the front, smartly stretch the thumbs, fingers and arms directly upwards to their fullest extent.

In. Out.

As before. As before.

In.

As before.

Attention.

Smartly resume the position of Attention.

On the Hands-Down.

Lower the body by bending the knees outwards, place the palms of the hands, fingers to the front, on the ground, 12 inches in front of the feet, and the width of the shoulders apart.

Two.

Keeping the arms perpendicular, shoot the legs to the rear, the head, body and and the weight of the body resting on the hands and toes only.

Arms-Bend.

Keeping the head, body, and legs rigid, and in a straight line, slowly bend the arms until the chest almost touches the ground.

Stretch.

By slowly straightening the arms resume the previous position.

On the Feet—Up.

Reform— Ranks.

March.
On the
Left—
Close—Quick
—March.

Keeping the hands on the ground, assume the first position of On the Hands—Down, and then smartly spring to attention.

The odd numbers of the front rank

will turn about.

The odd numbers of the front rank will take four paces to the rear, halt, front. The odd numbers of the rear rank will take two, and the even numbers of the rear rank six paces to the front, and halt.

The squad will then be closed.

### 15. PHYSICAL EXERCISES WITH DUMMY RIFLES.

The squad will be formed in two ranks with shouldered arms, and be numbered from right to left; it will then open out as for free gymnastics, the words physical exercises being substituted for free gymnastics.

# Chest expanding.

Ready.

Carry the left hand smartly across the body and grasp the rifle in line with the shoulder, finger nails to the front and elbow square.

Two.

Bring the rifle smartly down to a horizontal position close to, and in front of, the body, arms fully extended, backs of the hands to the front, sling downwards.

Hands to Distance.

Slide both hands outwards until sufficient distance is obtained to admit of the rifle being passed over the head with straight arms.

Keeping the arms straight, slowly raise the rifle above the head and continue the motion without any pause until the rifle rests on the buttocks. Throughout this exercise the head and body must be kept erect and motionless, the chest forced well forward, the grasp unrelaxed and the arms

rigidly straight.

Two.

One.

Slowly raise the rifle behind the back and continue the motion over the head until the To Distance position is resumed, head, body, chest and arms as in One.

N.B.—This exercise must be practised several times daily, especially during the early period of the recruit's training.

Lunging with the point.

As in Bayonet Exercise. Engage, &c. N.B.—This is a preliminary training for the "Points" in the Bayonet Exercise. Reform ranks, } As before directed.

#### 16. PHYSICAL DRILL WITH ARMS.

The squad will be formed in two ranks with arms at the Shoulder, and be numbered from right to left. The squad will then be opened out as for free gymnastics, the words physical drill being substituted for gymnastics.

Caution .- Ready. By numbers.

Ready.

Raise the left hand smartly to the right shoulder and grasp the rifle, finger nails to the front, thumb downwards, hand close to and in line with the shoulder.

Two.

Bring the rifle quickly to a horizontal position in front of the body, sling downwards, the right hand quitting the both arms at their full extent; at the sametime carry the right foot about 12 inches to the right, keeping the knees straight.

Caution.—First practice. By numbers.

Bend quickly over with the arms and One. knees straight, lowering the rifle to the

insteps.

Swing the rifle above the head, with the arms and knees straight, reaching Two. well out to the front in doing so; eyesdirected towards the rifle.

Bend the arms and drop the rifle to theshoulders, behind the neck, forcing the chest well forward, the eyes directed to the front.

Four. Resume the second position smartly.

Bring the rifle to the Ready position

by bending the arms.

Bring the right heel to the left, at the same time raise the rifle to the shoulder.

Drop the left hand to the side.

Caution. - Second practice. By numbers.

As before. Ready. Two.

> Swing the rifle sideways to the right to a horizontal position, and parallel with the shoulders, above the head, butt leading, with the arms straight, and wrists

(ID.)

Three.

Steady.

Arms.

Two.

Shoulder-

One.

I bent back, body turned on the hips to the right, back hollowed, eyes directed to the rifle, knees braced up; rising well upon the left toe, the right foot flat on the ground.

Troo.

Swing the rifle down, with the muzzle leading, and up to the left, as described in One, substituting left for right, and vice versâ.

Steady. Shoulder Arms.

Swing down to the Ready position.

As before.

Caution.—Third practice. By numbers.

Ready.

Two. { As before, except that the heels are to be kept close together.

Right-Lungs.

Keeping the left foot flat on the ground and the left leg straight, lunge to the right about 36 inches, the right leg from the knee downwards to be perpendicular, body turned to the right and bent backwards from the hips; at the same time throw the rifle to a horizontal position and parallel with the shoulders above the head, wrists bent back, eyes directed to the rifle.

Two.

Without bending the left leg, spring to the Ready position.

Front-Lunge. Two.

As in right lunge but lunging to the front.

As before.

As in right lunge, substituting left for Left-Lunge. right, and vice versa.

Two. ShoulderAs before.

As before.

In making the above lunges the leading foot must point in the direction given, the heel of the rear foot to be kept

firm on the ground, rear knee braced back.

On the caution Judging the time, this practice may be performed by giving the command Right (or Left) Lunge, Commence. On the command Right Lunge, Commence, all the foregoing movements will be repeated in the above order as often as required; if the command Left Lunge, Commence, is given, the left leg will be used in lunging to the left and to the front. On the word Steady, come to the Ready position.

Caution—Fourth practice. By numbers.

Ready. Two. As in third practice.

One.

Throw the rifle out to the front, arms straight, backs of the hands up and in line with the shoulders, sling to the front.

Bring the rifle smartly to the breast, about 6 inches below the chin, elbows close to the sides, sling of the rifle upwards, forcing the chest well forward.

Right-Lunge.

While at Two, lunge to the right, as in third practice, body and head turned to the right but kept upright; at the same time throw the rifle out to the front.

Troo.

As before.

About.

While at Two raise the toes, and by a quick movement turn left about on the heels, reversing the position of the legs, viz. :- the left knee bent, the right leg straight, throwing the rifle out, as before.

Two. As before.

Recover. { Bring the right heel to the left, and, turning to the front throw the rifle out, as before.

Two. As before.

Steady. { From Two drop the rifle to the Ready position.

Shoulder— } As before.

In this practice One, Two will be repeated in each position as often as required.

Each of the above practices will be repeated a certain number of times, either by numbers, or by the command Judging the time, Commence. When performed to music, any slow march will be applicable for first, second, and third practices; any quick step for fourth practice.

## Caution.—Fifth practice. By numbers.

Ready—Two. As in third practice.

One. As in fourth practice.

Two. Rise on the toes as high as possible.

Three. Gradually lower the body as far as possible, by bending the knees, forcing them well apart, body and head erect, eyes

directed to the front.

Four. { Resume the second position by slowly straightening the knees.

Five. Lower the heels to the ground.

Steady. Smartly resume the Ready position.

Shoulder— } As before.

In this practice repeat Two, Three, Four, and Five as often as required, before giving the word Steady.

Until recruits have acquired an easy balance of the body in the above practice, it will be found advisable to ground arms and perform this exercise without rifles.

# Physical Drill. Judging the time.

The foregoing practices will be performed on the following words of command.

## Caution.—Physical drill.

The squad will be opened out as before detailed.

If a company is performing this exercise, on the word Prepare the supernumerary rank and subalterns step back two paces; and the captain and guides turn about.

On the command March, the supernumerary rank and subalterns will step back four paces; and the captain will take post in rear of the centre of the companymoving the shortest way-one pace in rear of the line of subalterns. The guides will step off and halt and front in the supernumerary rank. During the drill the supernumeraries will remain at the Order, officers at the Slope.

## Caution.—First practice.

Ready. Judging the time-Steady.

Shoulder-

As before directed.

To music, the practice will be repeated 8 times; without music, until the com-Commence. Lmand Steady is given.

As before directed.

As before directed.

When the first four practices are performed to music the music will cease on the word Steady.

## Caution.—Second practice.

Ready. Judging the time, Commence.

As before directed. If performed to music, swing the rifle 8 times to the right, and 8 times to the left alternately; without music, until the word Steady is given.

Steady. Shoulder-Arms.

As before directed.

# Caution.—Third practice.

Ready. Judging the time. Commence.

Right Lunge,

Steady.

Left Lunge, Commence.

Steady. Shoulder-Arms.

As before directed, lunging to the right, then to the front, then to the left, again to the right, and so on. If performed to music, the command Steady will be given when coming to the Ready position after the third lunge to the front.

As before directed.

As before directed, repeating the Practice as above, commencing with the left foot.

As before directed.

# Caution.—Fourth practice.

Ready. Judging the time, Commence.

Steady.

As before directed. When performed to music, repeat 4 times in each position, i.e., to the front 4 times, to the right 4 times, to the left 4 times, and, on recovering, again to the front 4 times; without music, until the command Steady is given.

As before directed.

Shoulder— } As usual.

It will be found that a body of men work together better, and with more spirit, when the above Practices are performed to music.

Caution .- Fifth practice.

Ready.
One.
Judging the time,
Commence—
Steady.
Shoulder—
Arms.

As before directed. The word Steady will be given after the heels have been brought to the ground.

The fifth practice should not be performed to music.

Reform— Ranks. March. As before directed. In reforming ranks if a company is performing the exercise the captain, subalterns, guides and supernumeraries will resume their respective positions in line on the command *March*, the captain moving by the right flank.

### Competitions.

In competitions in Physical Drill, and the Bayonet Exercise, between companies in the same battalion, or between parties of different battalions, the companies or parties must always be of the same strength. At these competitions in Physical drill the first and second practices may be combined as follows:—

After the first practice has been continued for a certain number of times, and when at the position *Four*, the second practice may be commenced without any

First and Second Practices Combined. Commence.

pause on the command Change, when the body will be turned on the hips to the left, and the rifle swung downwards to the right, as in the first position, second practice.

When performed to music, each practice will be repeated 8 times, i.e., the first practice 8 times, and then on the word Change, second practice 8 times, i.e., 8 times to right, and 8 times to the left alternately.

### 17. DUMB-BELL EXERCISES.

The squad, having fallen in two deep with a bell in each hand, will open out as for Free Gymnastics, the words dumb-bell exercise being substituted for free gymnastics.

1st Exercise—Bending and stretching the body.

1st Practice. Half Right-Turn. One.

The squad will turn half right. On the word One, raise the right arm above the head, keeping it straight, and reach as low down as possible with the left arm, bending well over to the left at the waist.

Two.

Lower the right arm and raise the left. as directed for the right, bending over to the right.

-Change.

On the word Change, drop the left arm 2nd Practice | down in front of the body, and swing both arms up to the right, keeping the hands apart with the width of the shoulders.

Two.

On the word Two, swing both arms down in front of the body and up to the left, head and eyes in both practices to be directed to the hands.

Attention.

On the word Attention, which should be given when the hands are up to the left, bring the hands to the shoulders, and then drop them to the sides.

### 2nd Exercise-The lunge.

The squad will be turned to the front.

1st Practice Right— Lunge. On the word Right Lunge, lunge to the right with right foot, right arm well extended above the head, and the left hand on the hip, head and eyes directed towards the bell.

Two.

Bring the right foot back to the left, drop the arms to the sides and turn to the front.

To the Front with the Right Foot— Lunge.

Repeat the same to front, both bells above the head.

Two.

Recover as before, forcing the arms well back in doing so.

To the Front with the Left Foot—

Repeat same with the left foot forward.

Lunge.
Two.

Recover, as before directed.

Left-Lunge. { her

Lunge to the left, left arm above the head, and right hand on the hip.

Two. Recover as before.

3rd Exercise-Front, side, and back muscles of shoulders.

The squad will be turned half right.

1st Practice Ready. Carry the bells in front of the thighs, arms rigid, and backs of the hands to the front.

One.

On the word One, keeping the right arm rigid, slowly raise the bell well to the front, as high as the chin.

Slowly lower the right bell, and at the

same time raise the left.

Attention.

2nd Practice

Two.

-One. Two. Resume the position of Attention.

Slowly raise both arms in line with the shoulders, backs of the hands upwards. Slowly lower the arms to the sides.

Change.

Swing the right arm to the front, and the left to the rear.

Two.

Swing the left arm to the front, and the

right arm to the rear.

Change.

Bring the right bell to the front, raise both bells above the head, backs of hands up, rising on the toes, describing a circle downwards to the rear.

On the second word Change repeat with

finger-nails up.

Attention.

Drop the arms to the sides.

4th Exercise—Swinging the bells.

One.

Raise both bells above the head and carry the right foot 18 inches to the right.

Two.

Bend the back, swinging the bells down between the legs.

Three.

Swing the bells up above the head.

Four.

Lower the bells to the shoulder, elbows close to the side.

Attention. { Bring the right foot back to the left, and drop the arms to the sides.

5th Exercise -- Working the shoulders.

The squad will be turned to the front.

Ready. Raise both bells to the shoulders, elbows close to the sides.

One. Raise the right bell above the head. Two. Lower the right and raise the left.

Change. { Lower the left, lunge to the right and strike out with the left bell.

Two. { Draw in the left arm and strike out with the right.

Change. { Bring in the right bell, turn about, striking out with both bells to the left.

Two. Bring both bells in.

Attention. Ering the right foot back up to the left, turn to the front and lower both bells to the sides.

6th Exercise-Bending and stretching the arms.

The squad will be turned half right.

Ready. Keeping the arms extended, raise them smartly in line with the shoulders, backs of the hands downwards.

One. Grasping the bells firmly and without lowering the elbows, slowly bend the arms until the bells are over the shoulders.

Two. Slowly extend the arms to the Ready position.

Attention. Drop both arms to the sides.

7th Exercise—Chest expanding.

Ready. Keeping the arms straight, smartly raise the bells to the front, level with the chin, backs of the hands outwards.

One.

Two.

Attention. Front.

Reform— Ranks, &c. Without lowering the arms, force them smartly backwards as far as possible. Quickly resume the *Ready* position. Drop the arms to the sides.

As before directed.

18. JUMPING.

The squad will be formed up in front of, and about 15 paces from the Jumping Standards.

Number One— Ready.

Go.

On the command Ready, the right-hand man will spring smartly to Attention, step out, and place himself one pace in front of the centre of the squad and stand at Attention.

Slowly commence running, and gradually increase the pace. When within a foot or so of the "Jump," bend the knee and spring up off the forepart of the foot, bringing the knees up as high as possible, Drop lightly on the forepart of the feet. bending the knees and turning them well out; then straighten the knees drop on to the heels, and stand to Attention. Turn smartly to the right, march back to former place in the squad, and Stand at Ease.

Immediately the right-hand man starts to run, his rear-rank man will take his place in the same manner, and so on with

the rest of the squad.

Jumping by files.

First File— Ready. As before; but the rear-rank man will place himself on the left of his front-rank

Go.

As before, the right-hand man giving the word "Jump" when at jumping distance; on landing, both turning and marching off together.

Immediately the right file has started to run the next file comes out and so on.

Jumping by sections.

First Two
Files—
Ready.

As before.

Go.

As before, the right-hand man of the section giving the word "Jump" when at jumping distance; all turning and marching off by the right-hand man on landing. On rejoining the squad, they will Halt and Stand at ease together. Each two files coming out to the front in their turn as ordered above.

### 19. HORIZONTAL BAR.

The squad will be formed up at half interval, one pace from the bar.

Pulling to the bar with the ordinary grip.

Under the Bar— Ready. The front rank will step under the bar, the rear rank stepping forward and seizing them by the waist, fingers to the front, thumbs to rear.

On the Bar _Up,

With the assistance of the rear rank the front rank will spring up and grasp the bar, with the hands the width of the shoulders apart, thumbs close to the forefingers, arms straight, back hollowed, legs tegether, toes pointed towards the ground. The rear rank will then seize the front rank below the knees.

To the Breast—Pull.

Lower.

Stand Clear.
On the
Forepart of

the Feet— Down.

Change— Ranks.

Two.

Keeping the head well thrown back, bend the arms and raise the body until the breast meets the bar, the rear rank assisting.

Slowly lower to the full extension of

the arms.

Rear rank will step back two paces.

The front rank will drop on the forepart of the feet, bending the knees and turning them well out, and smartly resume the position of *Attention*.

The rear rank will take a pace to the front with the right foot, and a pace to the *left front* with the left, thus placing themselves on the left of their front rank men.

The front rank will take two paces to the rear, and the rear rank one to the right. Repeat the exercise with the rear rank.

Pulling to the bar with hands reversed.

This exercise is done in precisely the same manner as the above, except that the grip of the hands is reversed. In the ordinary grip the finger-nails should be to the front, whilst in this exercise they are turned inwards towards the body.

Raising and lowering the lower limbs.

Under the Bar—Ready.

As before.

As before with the ordinary grip, except that when the front rank are on the bar each rear rank man will place himself on the left of his front rank man, and facing him, at the same time placing the palm of his right hand against the front rank's stomach, and the left hand behind the knees.

Up.

Raise.

Keeping the legs straight and the toes pointed, slowly raise the legs until they are at a right angle with the body. The rear rank will assist the front rank by lifting the legs with the left hand, and pressing lightly on the stomach with the right.

Resume the former position.

Stand Clear. As before.

Change— Ranks.

Lower.

As before. Repeat the exercise with the rear rank.

Travelling to the right or left.

Travel to the

Right—
Ready.

Hands

Reversed-

Up.
To the

Breast-

Pull.

As before, except that each file will, in turn, place themselves under the end of the bar.

As before.

As before.

Commence.

Advance the right hand about 4 inches, followed by the left the same distance, keeping the arms bent, chest close to the bar, the rear rank man assisting by also moving to the right.

Lower the body to the full extension of

Halt. the arms.

Stand Clear.

On the

Fore-part of the Feet—

Down.

Change— Ranks. (I.D.) As before.

As before.

As before.

The rear rank man will repeat this exercise. After changing ranks again, the words of command will be Next File—Ready, when the next file will march out and take their place.

When the recruit has made sufficient progress, all the foregoing exercises should be done without the assistance

of the rear rank.

After a little practice in changing ranks, the word Two may be dispensed with, the squad going through the whole of the movements on the command Change—Ranks. In all slow movements, such as Pull, Lower, &c., the word is to be delivered slowly, i.e., according to the nature of the action required, and in quick movements, such as Ready, it is to be given very sharply and decidedly.

### 20. PARALLEL BARS.

The squad will form up two paces from and facing the end of the bars, and as it comes to each man's turn to perform an exercise, he will spring smartly to Attention, placing himself in the position required.

On the completion of each exercise, he will again smartly resume the position of Attention, and march back to his place in the ranks facing the opposite end of the bars.

The following simple exercises should be performed

daily:

Clear the Right Bar to the front.

", Left ", "ear.
" Left ", "

Pressing up between the bars by fours.

The instructor must insist that at all times when resting on the hands above the bars, the head is thrown back eyes directed to their own level, chest forced to the front, back hollowed, shoulders forced downwards and backwards arms fully extended, legs and feet close together

and forced to the rear, and toes pointing towards the

ground.

He will also insist that at all times when the recruit alights on the ground he will drop upon the toes, bending the knees outwards, but keeping the body and head perfectly upright, immediately after which he will drop on the heels and smartly resume the position of Attention.

### DRILL OF A SECTION IN EXTENDED ORDER.

#### 47. GENERAL RULES.

1. The recruits having been thoroughly instructed in Squad Drill will be formed as a section, under a capable commander, and taught the principles and practice of working in extended order for purposes of the fight.

The section will be instructed with arms and wills represent the smallest fire unit. Men in extended order work in single rank, with arms carried at the trail, unless the rifles are loaded, or magazines charged, when they

will be carried at the slope.

2. This instruction should be carried out without hurry and on diversified ground whenever it is available, the teaching being practically illustrated from time to tim by the movements of a section of trained soldiers.

3. The following must be explained to the recruit :-

(a) That all bodies of troops moving when there is the least chance of contact with an enemy should be protected by scouts (usually a selected file per section or sub-section), or by a screen of men extended at considerable intervals, whose duty it is to prevent the main body being surprised.

(b) That troops advancing under fire are necessarily in

open formation to avoid losses.

(c) That a closer formation of men is necessary for the purpose of attacking the enemy: the main points to be (1.D.)

observed in this formation being the fullest development of firing power, the minimum of exposure to the fire of the enemy, and enough men at any point first to silence the fire of the enemy, and then to drive him from his position.

4. In this part of the instruction, the intelligence of each individual recruit should be developed as much as possible, and, subject to the general directions of his section leader, he should be encouraged to think and act for himself.

5. Instructors will explain that natural objects and undulations of ground, however small, afford protection from the enemy's fire, and will practically shew the recruits how they can best use the cover that is always available.

The move from cover to cover, unless specially ordered to the contrary, must be made in an upright position, in which the movements and signals of their leader can be

most readily observed.

It must be impressed on the recruits that cover is only a means to an end, and that when the soldier has been launched in the attack, he must push forward at all hazards; they must be taught that, when they come under effective fire and approach the enemy's position, the chances not only of victory, but of personal safety, are increased by bold and determined action.

6. Men in extended order must ever be on the alert for the word of command, bugle sound, whistle or signal and they must move as soon as they clearly understand

the order.

7. Although instructions are only given for extending, closing, changing front, or direction, in quick time, these movements, in case of necessity, may also be carried out in double time on the command double. If the section is on the move, the front rank man of the file on which the movement is made will continue to lead on in quick time, the remainder will break into quick time as they arrive in their places.

### 48. Extending.

The extension may be made from any part of the section.

The interval between extended men is measured from the heels of one man to the heels of the man next to him. The rear rank man will, in extending, always move up on the left of his front rank man. In extending when retiring, the front rank men will move up on the left of their rear rank men.

to Single Rank, or to— Paces, Extend.

(Forward.)

1. From the halt.—All except the front rank man of the named file will turn outwards, step off, and forming single rank, extend the ordered number of paces, halt, and front, as soon as the ordered extension is completed.

2. On the march.—The extension will be made on the same principles, the front rank man of the named file continuing to move straight on, and stepping short, the remainder making a half turn outwards, moving into their places in quick time, and then stepping short. When the extension is completed, on the word Forward the whole will advance.

From No. ——
or
From Private
—— to ——

3. Increasing intervals. — Intervals between men of an extended line may be increased at will.

A man, usually the centre man of the section, should be named to direct, and the point on which he is to advance clearly pointed out to him, and to the commander of his section who will see that the right direction is kept.

When halted, unless directed to kneel or lie down, the

men will stand at ease.

4. When the section is thoroughly instructed in the principles of extending from the halt and on the march, it should be practised in extending in any direction oblique to its front. Thus on the order Half right (or left) from No.—, &c., the front rank man of the named file will turn in the required direction, and the remainder of the section will carry out the extension as above described. This will be performed both from the halt and on the march.

49. Closing.

On No. ——
or
or
Close.

1. From the halt.—All except the man named will turn inwards and move off, halting, fronting, and standing at ease as they reach their places. The man on whom the section is to close may be turned in any direction; the remainder will then form on him as above.

2. On the march.—The man named will continue to move on, stepping short; the remainder will make a half turn inwards and close in quick time, turning to the front and stepping short as they reach their places. When the closing is completed, on the word Forward the whole will advance.

(Ferward.)

on No. — or on Private — to — l'aces, or to Single Rank, Close.

3. Decreasing intervals. — Intervals between men of the extended line may be decreased at will.

A section will be closed, when retiring, on sin ilar principles.

50. Advancing or retiring.

Section,
Advance or
Retire.

Advance.—The men will step off.

Retire.—The men, whether at the halt or on the march, will turn about and step off.

The instructor will see that the man ordered to direct moves on the given point, and that the remainder pre-

serve their intervals.

51. Moving to a flank.

Right (or Left)
Incline.

The line will make a half turn, and move in the direction indicated, resuming the original direction to the front or rear on the word Advance or Retire.

52. Changing front, or direction.

Change Front (or Direction) Half Right (or Left), on No.—. (Forward.) Changes of front or direction, which should not, as a rule, exceed the angle of a half turn, will be made in a specified direction. The named man will turn towards the named direction, and if on the march, step short, the remainder of the section will move into the new alignment in quick time. Each man will halt, or step short as he arrives in the new alignment. When the proper direction is attained the section will, if on the march, advance on the command Forward.

53. Firing while advancing, and retiring.

These drills should be carried out, if possible, in the open away from the barrack square, and the objects aimed at should be a few men to represent a defending force, or light canvas or wooden targets representing men kneeling, cavalry, a gun, &c. (the targets to be provided regimentally).

Blank ammunition will be used after the first few day's instruction. The necessity for fire discipline must be carefully explained to the recruit. Hasty unaimed fire is worse than useless, being a mere waste of ammunition, doing no harm to the enemy, but, on the contrary, encouraging him.

The necessity, also, for care in expenditure of am-

munition must be thoroughly explained.

The section should be commanded by a capable non-commissioned officer, under the supervision of the instructor. In order to carry out the system of command, two sections should work together, one to be composed, if practicable, of trained soldiers.

The strength of the sections should not exceed 20, or be less than 7; they should be formed up in single rank extended at one pace interval, with an interval of two

paces between the sections.

The advance may be in a general line, or by separate advances of sections; a section should be told off as the

directing section.

On the caution from the instructor, volleys, or independent firing (with or without magazines), the section commander will give the executive words of command, when the section will halt. The whistle is to be used to control the firing. In order to teach fire discipline the instructor should occasionally assume the sudden appearance of cavalry, guns, &c., and order rapid volleys or independent firing with magazines. When it is no longer possible to advance in a general line, owing to the sections coming under a heavy fire, the instructor will indicate to the commander of the directing section the point where he proposes to make the next halt. The section leader will give the command or signal to advance to his section, opening fire immediately he is halted. When he halts the section

will halt, kneel, or lie down in line with him. The section will immediately recommence firing by order of its commander. The section in rear will then advance in like manner, join the front line, and open fire. The lying down position will not be practised within 500 yards of the target.

Each advance, as a rule, should be from 40 to 50 paces, but this and the pace must depend on the nature of the

ground and the distance from the target.

If from the nature of the ground the men cannot see to fire lying down or kneeling, they must stand, dropping on the knee to load; and if a section cannot see the object at all, the section commander should not give the commandfor firing. The leaf, but not the slide, of the backsight, if raised, should be put down when the men advance.

Fixed sights should be used at and within 500 yards from the targets. Independent firing with magazines is to be opened at about 300 to 200 yards, but not more than 5 rounds should be so expended. Bayonets should

be fixed at about 350 yards from the targets.

In firing when retiring, the procedure as regards firing, will be as above. Sections will retire alternately; a section after delivering its fire will retire beyond the other section, which will then open fire. A retirement should usually be performed in quick time.

## 54. Formation to meet an attack by cavalry.

It should be impressed upon the men that on open ground a foot soldier has nothing to fear from a single trooper, and that on broken ground the advantage is on his side, provided he remains calm and collected. It is to be explained that groups of well disciplined infantry on broken ground or with their backs to banks, hedges, or any obstacle, may defy relatively larger numbers of cavalry.

The immediate presence of bodies of cavalry may demand

a closer formation than that of the extended line.

In such cases the men of the section may be ordered to form round their leader. At drill, this will be signified by the command Cavalry, when the men will double to their commander, form round him, fix bayonets, and turn towards the direction in which the cavalry is advancing. If possible, the commander should select ground whence effective fire can be brought on the approaching cavalry. When a commander finds the fire of his section masked by an intervening section on his flank, he should rapidly move it to the front or rear.

Extend.

Re-forming. - The section will be Unfix Bayonets. ] ordered to unfix bayonets, and the men will resume their former order, moving by the shortest line.

# Assembly after dispersal.

The section will be dispersed, and the men taught to assemble on their commander on the word Assemble, forming at the double in two ranks in their original positions, on his right or left, as ordered.

#### The Charge. 56.

The section will also be instructed in delivering the Section commanders will lead in the charge. charge.

As a Front Rank, Prepare to Charge.

Bring the rifle to the port, without losing the square position of the body or the regularity of the step.

Charge.

Break into double time, and, as the section closes with the enemy, bring the rifle to the position of the charge.

As a Rear Rank, Prepare to

Charge.

Continue to move at the slope.

Charge.

Break into double time, continuing at the slope.

Section—Halt. { Halt; the front rank coming to, the rear rank remaining at, the slope.

57. Field-calls, signals, and whistle sounds.

#### Field-calls.

The recruit having been instructed in the foregoing sections by word of command, will be taught to execute them by bugle sound and signal.

The following calls will be used :--

i. Extend. ii. Close. iii. Advance. iv. Retire. v. Halt. vi. Fire. vii. Cease Fire. viii. Assemble. ix. Incline. x. Wheel. xi. Alert. xii. Cavalry. xiii. Quick. xiv. Double. xv. Lie Down. xvi. Rise. xvii. Charge. xviii. March at Ease. xix. Attention. xx. Advanced Guard. xxi. Rear Guard. xxii. Flank Guard. xxiii. Signallers.

The Halt annuls all previous sounds except the Fire.

The Alert is a call of warning; when it is sounded the men in movement will at once halt, and if retiring, front, waiting, if necessary, for orders, if the danger cannot be seen.

#### Signals.

1. Extend.—Both arms extended horizontally in line with the shoulders.

2. Close.—Both arms raised as for the Extend, and then

lowered to the sides.

3. Advance, or Forward, or Reinforce.—Arm swung from rear to front, finishing with the hand pointing to the front.

4. Retire. -- Arm with weapon circled above the head.

5. Halt.—Arm raised perpendicularly.

6. Incline.—Arm extended horizontally in the required direction.

7. Change direction.—Circular movement of extended arm in line with the shoulder in the required direction.

In order to prevent the Change direction being mistaken for the Advance, it is important that the hand should be kept level with the shoulder in the former signal.

8. Quick step.—Arm raised, elbow bent, wrist in line

with the shoulder.

9. Double.—Clenched hand moved up and down

between thigh and shoulder.

10. Lie down.—The open hand lowered a few times, from the height of the waist, towards the ground.

11. Rise.—The Advance signal.

Any of the above signals made with the headdress held in the hand will apply to the enemy.

12. Enemy in sight-In small numbers.—Sword or rifle

held horizontally over the head.

13. Enemy in sight-In force. - As in 12, but weapon

raised and lowered frequently.

- 14. No enemy in sight (also a negative signal). The rifle or sword held up perpendicularly at the full extent of the arm.
- 15. Running short of ammunition.—Two men crossing weapons,

#### Whistle sounds.

Whistles are to be used only to attract attention to orders or signals about to be given. To this order there is but one exception, namely, a long shrill whistle, which means discontinue firing. The whistle should not be used to attract attention when with troops actually firing.

# PART II.

#### COMPANY ORGANISATION, AND DRILL.

#### 58. GENERAL RULES.

In Part I. rules are given for the instruction of the recruit in elementary drill. When he has been thoroughly

instructed, he will be drilled with his company.

1. Organisation.—A company commanded by a captain is divided permanently into two half-companies, the right and the left half-company, each under a subaltern officer. Half-companies are permanently divided into two sections, each under a non-commissioned officer. The sections are numbered one to four from the right of the company.

A section, when it exceeds ten files, is divided into two

sub-sections, the right and left sub-sections.

When a section is divided as above, the section commander will command one sub-section, and the next senior non-commissioned officer, belonging to the section, will command the other.

2. Objects.—This organisation will be maintained both in barracks, and in the field. The men accustomed to act together will acquire the spirit of true comradeship, and confidence in each other, while the non-commissioned officers will be habituated to command and to act on their own initiative.

By such means alone can the fighting value of the company be fully developed; and its proper direction

and command under hostile fire, when superior control

becomes impossible, be maintained.

3. Equalizing, and sizing.—Companies are not to be equalized, sized, or mixed, except for purposes of ceremonial. When fewer than ten files of a company are present they should be attached to another company, but will retain their own organisation, irrespective of that of

the company with which they act.

4. Formation and telling-off. — The company will fall in for inspection by its captain in two ranks, in column of half-companies, with an interval of two paces between sections (or sub-sections). On the completion of the inspection, the intervals will be closed, and the company will be formed as a company in column by the left. The men will be numbered from right to left of sections (or sub-sections). (See Plates VI and VII).

The left-hand man of the right half-company is the

centre of the company.

5. Application of squad drill.—All the rules laid down for the instruction of a squad in two ranks are equally applicable to the movements of a company; it will, therefore, only be necessary in this Part to describe the positions and duties of the officers, and non-commissioned officers during these movements, and to add the different formations and movements of half-companies and sections.

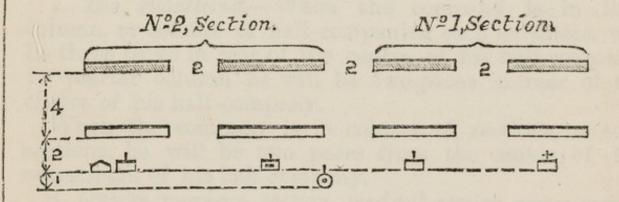
6. The captain.—The duties of the captain require that he be allowed great independence as regards his position.

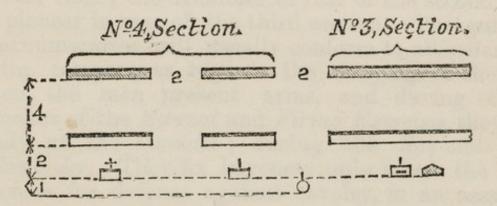
As a general rule he will be six paces in front of the centre of his company in line, or column; in quarter column two paces from the left, and in line with the front rank of his company; and in column of half-companies, sections, or sub-sections, three paces from the centre of the column on the directing flank.

In the absence of the captain, his place will be taken

#### PLATE VI.

A COMPANY AT OPEN ORDER FORMED FOR INSPECTION BY ITS CAPTAIN.





Nos. 1, 2, and 4 Sections, over 10 files each, divided into sub sections.
No. 2 Section, 10 files, not divided.

.

by the next in rank; a similar rule will be followed

within the half-company, section, or sub-section.

A captain, in giving words of command, should carefully observe the rules laid down in 1 (3). He will give as few commands as possible. On raising his right or left arm when advancing, the men of the company should be instructed to bring up their left or right shoulders to correct, if necessary, the interval; but all corrections should be made gradually.

7. The subalterns.—When the company is in line, column, or column of half-companies, each subaltern will be three paces in rear of the centre of his half-company. In quarter column he will be two paces in rear of the

centre of his half-company.

When the company is in column of sections, or subsections, he will be two paces from the centre of the

outer flank of his half-company.

8. Guides, markers, section, and sub-section, commanders.—Section, and sub-section, commanders will be formed in a third, or supernumerary rank, two paces distant from the rear rank; the drummer in rear of the second section; the pioneer in rear of the third section. The guides and supernumeraries will usually conform to all orders given to the company as regards the carrying of their arms. When the men present arms, and during the performance of the Manual and Firing Exercises, they remain steady at the shoulder; during the Bayonet Exercise at the order. They fix bayonets only when the men fix bayonets for defence against cavalry, in an assault, and when escorting the colours.

The four section commanders will act as guides and markers when required to do so. When the company is in line, column, or quarter column, the commander of a flank section (or sub-section) of a company will act as a guide, the commander of a centre section (or sub-section) as a marker.

In each section, or sub-section, a selected private soldier will be trained as leader, and will take command in the absence of the non-commissioned officer.

No change in the command of sections, or sub-sections, will take place except by the direct order of the captain. Corporals and lance-corporals not required to command

their sections, or sub-sections, will be in the ranks.

In line both right and left guides will be on the flanks of the company, and, in the absence of the colour party, the left guide of the right centre company will direct on the left of the front rank; the remaining companies will march by their inner flanks.

In column, quarter column, and column of half-companies, the commanders of the sections (or subsections) on the inner flank will be on the right (or left)

of the leading rank.

In column of sections, or sub-sections, commanders will lead their respective sections, or sub-sections, on the right (or left) of the leading rank.

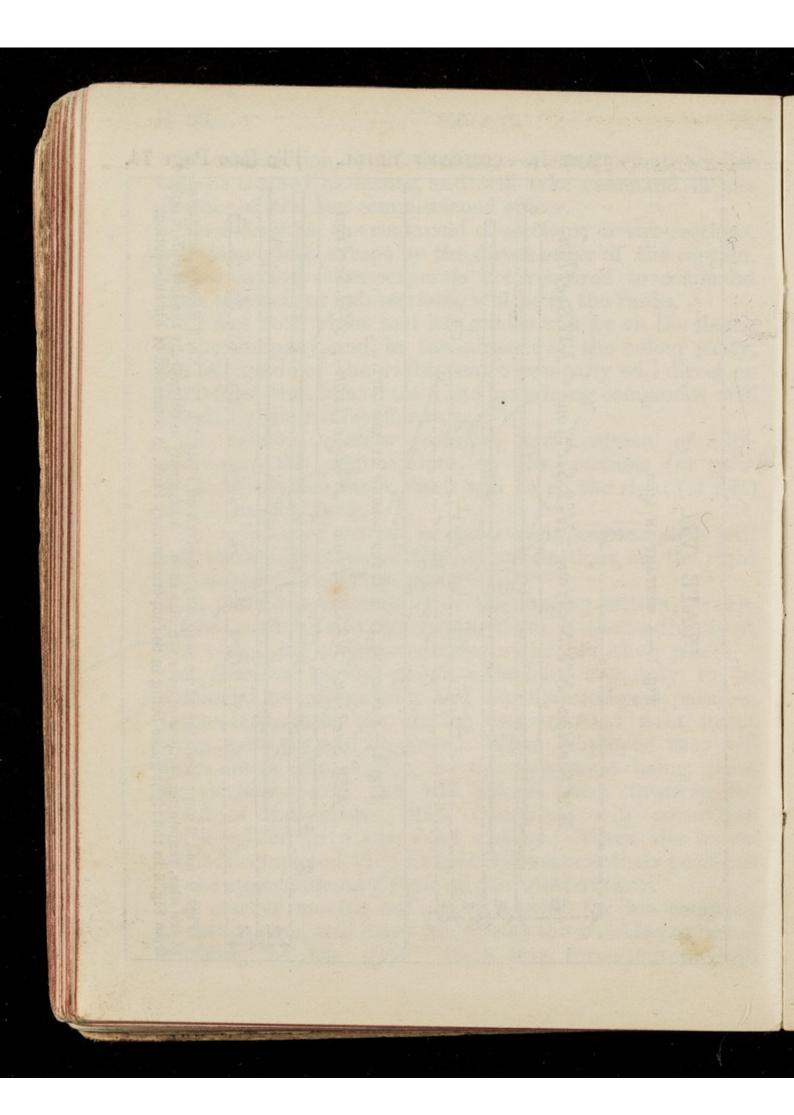
In fours, the commander of the leading section, or subsection, will be on the directing flank of the leading four. The remaining supernumeraries will retain their places.

9. Markers giving points.—Markers are only to be employed at ceremonial, and on instructional parades. In the latter case the caution the company will drill with markers will be given. When employed they will move out on the caution for the movement being given by the instructor, and will always turn towards the point of formation. The instructor will cover the markers, and give the word steady. When the movement is completed, the markers will resume their positions in the supernumerary rank on the word STEADY.

A marker moving out to give a point for his company to dress upon, will carry his rifle at the shoulder, or, when doubling, at the trail. In a line formation he will

# Nº1. Seclion Nº1. Section FIG. 2.-A COMPANY IN CUARTER COLUMN BY THE LEFT. Nº2. Section Nº2. Section Fig. I.-A COMPANY IN LINE. PLATE VII. Nº4. Section Nº3. Section Nº4. Section Nº5. Section,

Figs. 1 and 2 represent the same company as given on Plate VI, i.e., No. 3 Section, composed of ten files, remaining sections of over ten files each. A company in column by the left differs only from Fig. 1 in the right guide being in the supernumerary rank, in command of his sub-section.



stand with recovered arms, turned towards the point of formation, at arm's length in front of the alignment, to mark the point where the flank, to which he is marker, should rest; when the men approach, he will hold out his inner arm at right angles to his body with the fist clenched, on which the line will dress. The markers, on the words Eyes—Front from the guide, will resume their hold on their rifles.

A marker, when giving a point for his company to form on in column, or quarter column, will recover arms while being covered, coming to the same order as the company when correctly covered; or when covered simultaneously with other markers, as when markers are given for companies to form on parade, on the word Steady. When the guide comes up to take his place in column, the marker will resume his post in the supernumerary rank.

10. Companies to be exercised on rough ground, and with the ranks changed.—A company should be exercised on rough and broken ground when available. Companies should also be exercised with the ranks changed during the drill, in order that every man may be equally well practised to

act as a front or a rear rank man.

11. Derangements in telling-off to be quickly remedied.—Great pains must be taken to accustom the men to remedy quickly, of their own accord, any derangement in

the order in which they were last told off.

12. Marching on points, and judging distance.—Non-commissioned officers are to be thoroughly trained in these important duties; they will frequently be practised separately in marching on points, as described in 26, the instructor standing still in rear of the serjeant, to see that he marches perfectly straight to his front, just clear of the point on which he is moving. In judging distance and frontage, the number of files

for which it is taken should be previously named, and the instructor should practically prove the distance or frontage.

13. Flank by which men are to dress, and march, to be named.—When men are ordered to dress, the flank is always to be named; when ordered to move, the flank of direction will be given. As a general rule, the men will take up their own dressing when moving into column or quarter column. They will be dressed by the guide on the inner flank when forming line, or changing front in line.

14. Officers' swords, when to be drawn and returned.— When the men are under arms, officers will draw their swords as they fall in; the commander of a parade will not draw his sword. Swords will be at the Slope, except when men are at the Shoulder and on the saluting base, in marching past, when they will be at the Carry.

Swords will be returned when troops are employed in the exercises described in Parts V, VI (II), VII, VIII, X (II); but will be drawn when bayonets are fixed.

15. Cautions and Commands.—Cautions and commands are given for formations to, or from, one flank only, but the same rule applies when forming to, or from, the other flank, which will also be practised.

The cautions and words of command printed in capitals are given by the instructor, those in small type by the

captain or guides.

#### FORMATIONS AND MOVEMENTS.

59. Formation of a company.

The company will fall in as shown in PLATE VI.

60. Inspecting, and proving a company.

A company on parade will be inspected and proved as follows:—

Fix-Bayonets.

Open Order — March. The rear rank will move as directed in 38, and the supernumerary rank will step back two paces. The nearest section (sub-section) commander in the supernumerary rank will give Rear rank, Right—Dress; and having dressed it, will give—Rear-rank. Eyes—Front.

The inspecting officer will pass down the ranks to see that the appointments, clothing, &c., are clean, and in good order.

Unfix—Bayonets. Shoulder—Arms. For Inspection. Port—Arms. When at the Port open the cut-off and breech and grasp the small with the right hand,

thumb pointing to the muzzle.

The officer will inspect the breech action, and will here and there take a rifle from the soldier's hands and examine the barrel by looking down it. As the officer passes the file next to him, each man will close the cut-off and breech, press the trigger, order arms from the port, and stand at ease.

Attention. Close Order-March.

The company will then be formed as a company in column by the left, and proved as follows:—

By sections (or sub-sections)—Number.

Form-Fours. Front.

The company will then change ranks and be proved as above. When proved, ranks will be again changed.

#### 61. Advancing or retiring.

1. Advancing.—The instructor, having stated the supposed order of the battalion, will proceed as follows:—

THE COMPANY

WILL

ADVANCE. BY THE LEFT.

QUICK (or DOUBLE)

-MARCH.

On the word ADVANCE, the left guide will select points to march on.

As described in 37.

2. Retiring.—On the caution THE COMPANY WILL RETIRE, the left guide will turn about, take two paces to the rear, and align himself with the rear rank; if the company be in line the right guide will also, on the above caution, turn about, and align himself with the rear rank. The instructor will then give the command ABOUT-TURN. BY THE RIGHT. QUICK (or DOUBLE)-MARCH.

The diagonal march.

27 and 40. The guide on the flank to which the company is moving will lead the leading rank, whether the company is in line or column.

63. A company in column forming into line.

INTO LINE,

1. From the halt.—As in 28 and 41. On the word FORM, the left guide will step LEFT-FORM. | back and cover the front rank man of the left file.

QUICK (or DOUBLE) -MARCH. Eyes-Front.

On the word MARCH, the right guide will place himself on the right of the front rank. The left guide will move up on the left of the company and dress the files as they come up into line, and having completed the dressing, will give Eyes—Front, and fall in on the left of the front rank.

INTO LINE, LEFT-FORM. FORWARD, BY THE ---. (or HALT).

2. On the march.—As in 29 (1) and 41. The right guide will take post on the right of the company on the word—FORM. If the company be halted, the captain will order it to dress by the left, the left guide will dress it, give the word Eyes— Front, and take post on the left of the company. Before forming to an outer flank, the company will be ordered to march by that flank.

- 3. On the move.—When the company is at the halt, and it is intended to move off when line is formed, the command will be on the move, into line, &c.
- 64. A company in line forming forward, and back, into column.
- 1. Forming forward, from the halt.—A company in line will form forward into column on the command into column, right—form, quick—march. The men will move as in 28 and 41. The right guide will take post in the supernumerary rank on the command quick—march. The left guide will remain on the left flank of the company. The captain will order the company to dress by the left, when the men will take up their own dressing, and then look to the front.
- 2. On the march.—A company in line will form into column on the command into column, right—Form, when the company will form to the right, and the right guide will take post in the supernumerary rank. When the company is square the command will be given. Forward. By the left, or halt, Left—Dress, when the men will take up their dressing by the named flank and then look to the front.

3. On the move.—If, when the company is at the halt, it is intended to move off at once, the command will be on the move, into column, right—form. Quick (or Double)—march. Forward. By the left.

4. Forming back into column.—This movement will

only be performed on occasions of ceremonial.

COLUMN TO On the word TURN, the company will turn about, except the left guide, who will turn to the right.

RIGHT—FORM. The men will move as in 28 and 41.

The left guide, on the word MARCH, will take two paces to his right front, and

(or DOUBLE) | the right guide will take post in the

-MARCH. | supernumerary rank.

Company-Front. Left -Dress.

The captain will front the company and order it to dress. The men will take up their dressing by the ordered flank, and I look to the front.

65. A company changing front as the base company of a line formation.

A change of front will always be made on a flank company to the front.

CHANGE FRONT, HALF RIGHT, (or RIGHT). Half Right

(or Right) -Form, Quick

-March. Eyes-Front. ]

On the word March, the men will act as in 28, and the right guide will dress the files as they come up into the alignment. When the dressing is completed he will give the words Eyes-Front and resume his position on the right of the company.

A company will also be practised in changing front at an angle less than half right. The captain will place the flank man of the front rank in the required position, and give the word Right-Dress. The company will be dressed by the right guide, who will give Eyes-Front when the company is dressed.

A company in column, changing direction.

A company in column, on the caution CHANGE DIREC-TION, RIGHT (or HALF RIGHT), will form into the new direction as laid down in 29, by the captain's command-Company, Right (or Half-Right) - Form, followed by Forward when the formation is completed. In changing direction to an outer flank, the guide of that flank will move up.

#### 67. The formation of fours.

In forming Fours, the men will move as explained in

42. Commander of leading section as in 58 (8).

The captain, subalterns, and supernumeraries will turn in the required direction, on the word About (or Right or Left).

68. A company marching in fours, forming to the front or rear.

These formations will be made as described in 32 (1, 2) and 43 (2), on the command into line (column), front (or rear)—form. If the company be halted (and fronted) on forming into line, the captain will give the command Right (or Left)—Dress, the guide of the flank of formation will dress the men, give the word Eyes—Front, and take post.

69. The side step.

A company will be practised in the side step as explained in 21 and 33.

70. Changing ranks.

A company will change ranks as follows:—On the word RANKS, the company will turn about, and the supernumeraries will turn outwards and double round to the new rear, the captain moving round at the same time by the outer flank.

The instructions laid down in 39 are also applicable to the company; but the sections will retain their numbers. In changing ranks the directing flank will be re-named.

If the company be in quarter column the captain will change his flank.

CHANGE---

or LEFT).

above instructions as regards the captain, subalterns, guides, and supernumeraries, are applicable to changing ranks on the march, but the company will not turn about.

# Formation of half-companies, and sections.

Columns must always move with as large a front as the ground allows, and the interior formations of a company should as a rule be made by sections or sub-sections.

The instructor, acting as battalion commander, will give the command, which

I will be repeated by the captain.

COMPANIES FROM THE RIGHT. Half-Left— Turn.

COLUMN OF

HALF

The half-company commander will give the command, when the half-company Left Half will turn to the right, mark time two paces, and then advance. When its leadRight—Turn. ing file is in rear of the centre of the preceding half-company, its commander will order it to make a half-turn towards Front-Turn. | the front, and as it arrives in column of half-companies will turn it to the front.

By the Left. Column of sections or sub-sections will be formed on the same principle; each section or sub-section, commander giving the executive orders to his section, or sub-section. A diminution of front may be effected by turning to

a flank in fours, and wheeling to the front.

The above movements will be performed on the march. A company may also move to a flank by half-companies or sections, on the principles laid down in 64 (2, 3.). The instructor's cautions are COLUMN OF HALF COMPANIES (SECTIONS) TO THE RIGHT, on which the captain will give

the executive words, Into column of half companies (sections) Right-Form, followed by Forward, By the left,

or, On the move, &c.

An increase of front from fours to sections or half-

companies, may be effected on the principles laid down in 43 (2). When it is required to increase the front from sub-sections to sections, or sections to half companies, or from half-companies to company, the instructor will give the words form—sections, &c. This order will be repeated by the captain, and the rear subsections will move into line with the leading sub-sections by the diagonal march in quick time, or, if on the march, in double time, on the words from the sub-section, section, and half-company commanders—Form—Sections, Form—Half-companies, Form—Company.

#### 72. Passing obstacles.

Front will be diminished by breaking off files, or by forming half-companies, sections, sub-sections, or fours,

as may be necessary.

When a stream, ditch, or bank is to be crossed it will be generally found that instead of diminishing the front the contrary should be done, not only by causing the files of each section to gradually open out before they arrive at the obstacle, but by forming sections, half-companies, and company.

# 73. A company meeting an attack by cavalry.

FROM THE RIGHT (or LEFT, or FRONT, or REAR)—

On the caution from the instructor the captain will give the command Right (left)—Form, Double—March, Fix—Bayonets.

Back—The flanks, or if the cavalry is approaching from the front Fix—Bayonets. Back—The flanks, or, if from the rear Change—Ranks. Fix—Bayonets. Back—The flanks.

Usually the flanks should be only slightly dressed back, in order that a maximum amount of fire may be delivered, but, if necessary, they may be further dressed back to

form a circle. The captain will be in rear of the centre; section or sub-section commanders in rear of their respective sections or sub-sections.

Volley Firing
(or
Independent
Firing).
(Both ranks
Standing.)
Ready, &c.

The captain will give the executive words for firing and ceasing fire. He will decide whether firing is to take place standing or otherwise, which must depend on whether the enemy is screened from men in the kneeling position.

REFORM-COMPANY.

The captain will give the word (Cease—fire). Order—Arms. Unfix—Bayonets. Up—the flanks, and turn, or form, the company into its original position.

#### 74. A company dispersed, re-assembling.

The captain will place either the right or left guide with recovered arms turned towards the front. On the word Assemble the men will double in and form on him in their original places under the direction of the captain.

#### 75. Dismissing a company.

The officers having been ordered to fall out, a company will be dismissed as described in 45.

The company will next be instructed in The Company in Attack, 125.

# PART III.

# BATTALION DRILL.

#### 76. GENERAL RULES.

1. Application of company drill.—The movements of a battalion are effected by combinations of the movements that have been described in company drill. The rules laid down in Part II. for officers, non-commissioned officers, and privates, are generally applicable to all the movements of a company when with the battalion.

2. Battalions to move as component parts of a brigade.—
The movements of a battalion should be frequently practised as though it was acting as a battalion in brigade.

A battalion should sometimes be divided into two, each formed in single rank, for the purpose of practising brigade movements.

#### A battalion on parade.

#### 3. In line.

Arrangement of companies.—When a battalion is formed in line, there is to be no interval between the companies.

Posts of mounted officers.—The two senior officers with the battalion, and the adjutant, are to be mounted. The senior will be described as the commanding officer, the next senior as the major. The commanding officer will be twelve paces from the rear rank, in rear of the centre of the battalion. The major will be ten paces from the rear rank in rear of the centre of the right halfbattalion, and the adjutant in a similar position in rear of the left half-battalion. They will not change half-battalions if a movement reverses their positions.

Colour party.—The colours, each carried by an officer (as directed in the Queen's Regulations), will be placed between the two centre companies; the Queen's colour on the right, the regimental colour on the left, with a serjeant between them, and two non-commissioned officers or selected privates, covering them in the rear rank. The officer carrying the Queen's colour will command the party.

Post of serjeant-major.—In rear of the centre of the battalion, and in line with the subalterns.

Posts of staff officers and staff serjeants, pioneers, band and drums (or bugles), cyclists, machine gun, regimental transport, stretcher section, and signallers (if on parade as such), are shewn in Plate VIII.

#### 4. In column and in quarter column.

Arrangement of companies. — As described in the definitions. As a rule, a battalion will assemble on parade in column by the left.

Posts of mounted officers.—The commanding officer will be four paces from the directing flank of the leading company; the major four paces from the centre of the outer flank of the leading half-battalion, and the adjutant in a similar position on the outer flank of the rear half-battalion. They will not change half-battalions, if a movement reverses their position.

Colour party.—When in column, in rear of the leading centre company, its front aligned with the supernumerary rank covering the fourth, fifth, and sixth files from the directing flank.

# PLATE VIII. A BATTALION IN LINE. 0 5 \$ 事一品品 우 = = 8 ONE PACE BETWEEN MEN 000000000000 0000000000 5 STRETCHER SECTION. CYCLIST SECTION. 5 WAGONS. MULES. MACHINE CUN. DISTANCES ARE GIVEN IN PACES.

FART III - BATTALION DEFLA. [To face page 87 00000

THE FIRST HAME OF THE STONESSEE AND THE BLANK BEEN BANK OF THE COLUMN.

DESTANCES AND INTERVALS ARE CIVER IN PARES.

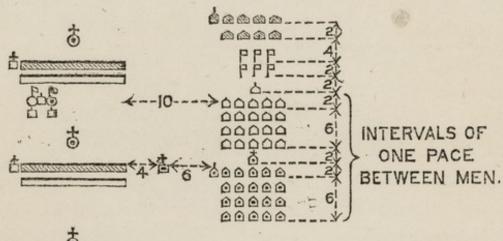
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#### PLATE IX.

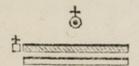
A BATTALION IN COLUMN, BY THE LEFT.



5 A MACHINE CUN. CYCLIST SECTION.



MULES. WAGONS.



THE FIRST RANK OF THE PIONEERS AND THE LAST RANK OF THE BAND SHOULD BE EQUIDISTANT FROM THE FRONT AND REAR OF THE COLUMN.

DISTANCES AND INTERVALS ARE GIVEN IN PACES.

When in quarter column, as above, but the two non-commissioned officers in the rear rank will move up respectively on the right and left of the colours.

Post of serjeant-major. - Four paces from the outer flank

of the front company of the rear half-battalion.

Posts of staff officers and staff serjeants, &c., are shewn in Plate IX.

5. Mounted officers.—The major and adjutant should be able to take up the distance or frontage required for the whole or any part of the battalion; the eye will be found

the most convenient guide in judging distances.

When mounted officers give points, they are to place their horses at right angles with the alignment, turned towards it; if the horses are unsteady, they are to dismount and mark the points on foot. In line formations, the horses' heads will be covered at arm's length from the alignment.

*When a column or quarter column is on the march, the commanding officer, should be consider it desirable, will instruct one of the mounted officers to superintend

the direction.

In line of half-battalion columns (or quarter columns), the mounted officer of the half-battalion ordered to direct will superintend the direction of its advance, the mounted officer of the other half-battalion will look to its dressing and interval, if not required, as in brigade, to mark the deploying interval.

6. Mounted points, guides, base markers and markers.—In deployments and changes of front or position, the mounted officer nearer the point of formation will superintend the

formation of the companies into the alignment.

At ceremonials, or when specially ordered for instructional purposes by the commanding officer, who in the latter case will give the caution THE BATTALION WILL DRILL WITH MARKERS, the following rules will be observed by markers:—

The base markers will move out, when required, on the battalion caution by the commanding officer.

The mounted officer will cover them, and give the word

88

Steady, when the formation will proceed.

On the completion of the formation, markers and base markers will resume their places on the word Steady

from the mounted officer at the point of formation.

In deployment to a flank, or in a change of front, base markers will be aligned by the mounted officer whose place in line is nearer to the flank of formation, the other mounted officer will give a point where the outer flank of the battalion will rest.

In a deployment outwards the base markers will be aligned by the battalion commander, assisted by the serjeant-major, one mounted officer marking the right, the

other the left flank, of the battalion.

The bedies of markers will be covered in the same line

s the horses' heads of mounted points.

In deployments, and changes of front or position, each company as it arrives within 20 paces of the alignment will furnish an outer marker, who will cover on the base markers.

When it is necessary to dress a battalion in line on markers, the commanding officer will give the words on markers, right (or left) dress, on which the right or left markers, according to the flank of dressing, and the marker on the distant flank of the line, will double out to the front, looking to the mounted officer on the named flank.

The commanding officer will then give the words QUICK — MARCH; each captain will halt his company independently.

dently.

To ensure the alignment being kept clear, companies

will be formed or halted four paces in rear of it.

In deployments, changes of front or position and dressing a battalion in line, the guide nearer the

point of formation will dress the men of his company into the general alignment, and then take post on the flank of his company.

7. Degrees of march.-The quick step is the usual pace to be applied to all general movements of the

battalion.

The double march is not applied to the movements of large bodies of troops for a longer distance than is required in a charge or a short rush to seize a position; nor, unless ordered, in the movements of companies during the interior formations of a battalion.

8. The front .- All interior movements of the battalion

are made with reference to the front.

9. Companies to be numbered.—When the battalion is formed, companies will be numbered from the front company if in column, from the right if in line, on the commanding officer's order—Tell off the battalion. When the companies are numbered, he will divide the battalion thus:—No. 1 to No. — RIGHT HALF-BATTALION. No. — To No. — LEFT HALF-BATTALION. Officers commanding companies are, on completion of a movement, to re-number if the order of the companies be changed. The battalion will also be re-numbered when ranks have been changed.

10. A battalion firing.—Volley-firing will, at the discretion of the commander, be by sub-sections or any larger fire unit. The whistle will be used to control the fire.

When firing volleys by a smaller fire unit than a half-battalion, should it be desirable to prevent the volleys being given simultaneously, the caution will be given to fire from the right or left of half-battalions, or companies; the *Present* of the preceding body being the signal for the *Ready* of the next. After the completion of the first volley by each fire unit, it will fire by order of its commander without reference to the remainder.

11. A battalion dispersed, re-assembling.—A battalion should frequently be practised in assembling when dispersed. Each company will assemble by order of its captain, as described in 74, and will then be moved into any formation ordered by the commanding officer.

12. Closing to correct intervals.—After forming into line any intervals will be corrected. The centre of the bat-

talion should remain unmoved.

13. Directing flank.—The directing flank will always be named.

14. Making way for an officer, or marker, to pass through the line.—When a mounted officer requires to pass through the line at any point, the two files at that point will make way, the front and the rear rank men taking a pace to the rear, and both files then taking a side pace outwards from each other, resuming their places when he has passed; should he require to pass between two companies the guides will make way, in the same manner as the front rank men of the two files.

When a guide has to make way for an officer, or a marker, to pass, he will take one pace to his rear, and a side pace inwards, resuming his post when the officer, or

marker, has passed.

When a file has to make way, it will take one pace to the rear, and a side pace to the right, resuming its place as above.

15. Words of command.—Words of command are to be given as described in 1 (3). When, from wind or the noise of firing, the commanding officer's words are indistinctly heard, they should be repeated by as many leaders as are necessary to ensure the transmission of the order.

In battalion movements the orders given by the commanding officer are printed in capitals, those by the major covering markers, and by officers commanding companies, are printed in italics. The cautions are usually

given to, or from, one flank only.

16. Drill in single rank, and skeleton drill.—When there is not a sufficient number of men to form a complete battalion, the companies should be formed for practice in single rank. When there is not a sufficient number of men to form a battalion in single rank, the following method of forming a skeleton battalion, for the instruction of young officers, and non-commissioned officers, will be adopted.

A skeleton battalion will be formed of companies composed of two, four, or eight men each; representing, if there are two, the flanks of the company; if there are four, the flanks of half-companies; if there are eight, the flanks of sections. The interval between the flanks will be preserved by means of a piece of rope held at the ends,

which must at all times be kept at its full extent.

The ropes may be made to represent any number of files, the space for each (namely, 27 inches) being marked by a small piece of red cloth. Short pieces of wood should be fastened across the ends of the ropes, to enable the men to hold them.

# 77. Advancing, or retiring in line.

THE BATTALION WILL ADVANCE.

Steady.

BY THE CENTRE. QUICK-MARCH.

1. Advancing.—On the caution the adjutant will select points for the centre serjeant to march on, and will give the word Steady, when the line of direction is determined. With no colour party the left guide of the right centre company will direct. The remaining companies will march by their inner flanks.

The dressing will be by the centre. The adjutant will remain in rear until he sees the true line of direction is being followed.

BATTALION, HALT.

As usual.

THE BATTALION WILL RETIRE.

Steady.

2. Retiring.—On the word RETIRE, the colour party and guides will turn about, the centre serjeant and guides will then take two paces to the rear, and align themselves with the rear rank. The adjutant will pass to the front to superintend the direction and give the word Steady, as above.

ABOUT—TURN. BY THE CENTRE. QUICK—MARCH.

As in (1.)

BATTALION, HALT, FRONT.

Guides and centre serjeant will resume their posts, and the adjutant will return through the line to his place.

78. A line passing obstacles, or moving over broken ground.

A line will pass obstacles on the principles laid down in 72, by word of command from the captain of the company encountering the obstacle, or by the commander of larger bodies when necessary. If the entire battalion be required to break into fours, the command will be advance (RETIRE) IN FOURS FROM THE LEFT (RIGHT) OF COMPANIES. FORM—FOURS. LEFT (RIGHT). RIGHT (LEFT)—WHEEL. The company to direct should be named; and, if necessary, guides will change to the flank of the leading four, which is nearer the company of direction. The mounted officer of the half-battalion to which the named company belongs, will lead the battalion on the directing flank of that company.

A line may be reformed on the command into LINE, FRONT (REAR)—FORM, FORWARD, BY THE CENTRE, OF HALT,

(FRONT).

79. A column and quarter column forming into line.

INTO LINE,
LEFT—FORM.
QUICK,
(or DOUBLE)
— MARCH.
Eyes—Front.

1. From the halt.—As in 63 (1). The colour party will turn to the left on the word March, and move into line between the two centre companies. The drums, band, &c., will move into their positions in line. If drilling with markers, both markers of the leading company, and the markers of the inner flanks only of the remaining companies, will give points. The mounted officer of the rear half-battalion will move to the point of formation to cover the markers, and to see that the companies form correctly into the alignment.

2. On the march.—The command will be INTO LINE, LEFT—FORM. FORWARD, BY THE CENTRE, or HALT. The

companies will move as described in 63 (2).

3. On the move.—As in 63 (3).

4. From quarter column.—On the caution LINE TO THE LEFT ON No. —, the captain of the rear company will at once form it to the named flank, and order it to halt and dress. The guide will dress the company, and give the word Eyes—Front. Each of the other captains will form his company into line in like manner, as it gains its proper interval. If drilling with markers, the rear company will furnish the base markers, and the right markers of the remaining companies will each mark the outer flanks of their companies. The mounted officer of the rear half-battalion will superintend the covering of the markers and the formation of the companies in the alignment, the other will mark the distant flank.

- 80. A line forming forward, and back, into column.
- 1. From the halt.—The cautions and commands will be as directed in 64 (1). The mounted officer of the half-

battalion to lead in column, will cover the guides from the front, and give the word Steady. The colour party will wheel independently and move by the shortest line to its position in column; the other mounted officer and band will also move to their places in column during the formation.

2. On the march.—As in 64 (2). A battalion retiring in line will form into column on the same principles.

3. On the move.—As in 64 (3).

RIGHT.
ABOUT—TURN.
RIGHT—FORM,
QUICK
(or DOUBLE)
—MARCH.

4. Forming back into column to the right.—As described in 64 (4). On the word TURN, the colour party will turn to the right, and on the word MARCH will wheel to the right and take post in column.

The major will cover the left guides, give the word

Steady, and take post.

Each captain will give the order No.—Front. Left— Dress. The men will take up their dressing and look to their front.

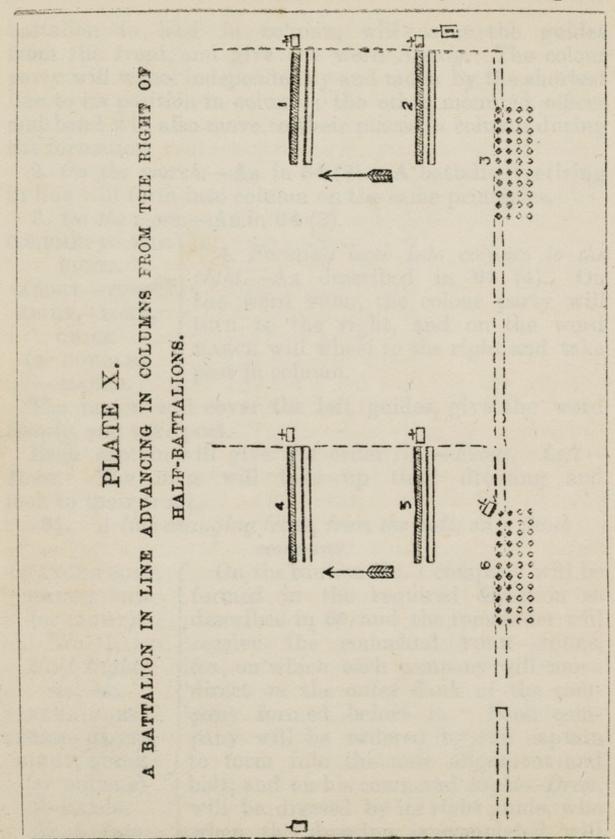
81. A line changing front, from the halt, on a flank

company.

CHANGE FRONT,
HALF-RIGHT
(or RIGHT).
No. 1,
Half-Right,
etc., etc.
REMAINDER,
FORM—FOURS,
RIGHT, QUICK
(or DOUBLE)
—MARCH.
No. 2, Into

On the caution No. 1 company will be formed in the required direction as described in 65, and the remainder will receive the command form—fours, &c., on which each company will move direct on the outer flank of the company formed before it. Each company will be ordered by the captain to form into the new alignment and halt, and on his command Right—Dress, will be dressed by its right guide, who when the dressing is completed will

LIE III. - RATTAI -- III THAT 20



tine, Front
—Form, etc.

give the command Eyes—Front. One mounted officer will mark the distant flank of the battalion, and the other, moving up to the flank of formation, will see that the companies form correctly in the alignment.

82. Formation of column, or quarter column, or columns (or quarter columns), of half-battalions, from line.

All formations of columns or quarter columns from line will be made in rear of the named company or companies on the command column or quarter column by the Left (or right) on no. — (or on nos. — and —); remainder, form—fours, right (left, or inwards), quick (or double)—march; the remaining companies moving in fours by the shortest line, and passing left arm to left arm if moving in from both flanks. As each company arrives in its place in column or quarter column, the captain will give the word No. — Halt, Front, Right (or Left)—Dress. The nearer mounted officer will look to the covering, and give steady.

In column or quarter column, the colours will move to their positions as detailed in 76 (4). In columns or quarter columns of half-battalions, they will move to the rear of the front company of the left or right half-battalion, according as the advance is from the right or left of

half-battalions.

83. A line advancing in column, or columns of half-battalions. (Plate X.)

No.—, or Nos.—. To THE FRONT. REMAINDER, FORM—FOURS, RIGHT (or LEFT, or INWARDS.)

Advancing in column.—On the word MARCH, the named company or companies will advance. The companies in fours will step off at the same time, and each in succession will be ordered by the

BY THE LEFT,

(or RIGHT),

QUICK—MARCH.

No.—, Half

Left (or Right)

—Turn, Front

—Turn.

By the—.

captain to make a half turn towards the front, when its leading four is in rear of the centre of the preceding company, and to turn to the front as it arrives in column.

Mounted officers will follow the in-

structions in 76 (5).

The colours will follow the instructions in 82.

If companies move into column from both flanks, they

will pass each other left arm to left arm.

2. This movement may be done on the march. The words of command as in (1), but omitting QUICK—MARCH.

84. A column, or quarter column, or columns (or quarter columns) of half-battalions, deploying into line.

Deployments will invariably be made on the leading

company of battalions or half-battalions.

1. To a flank.—The right guide will dress the company on the captain's

word, and then take post.

The remaining companies will be led by the shortest line to the spot where their inner flank will rest. Each will then change direction and move parallel to the alignment, and when opposite to its place in line will be halted, fronted, and ordered to dress by its captain. When dressed by the right guide, he will give the command Eyes—Front, and fall in.

The colour party and band will move to their places during the deployment. One mounted officer will superintend the companies moving into line, from the point of formation; the other mounted officer will mark the distant flank.

DEPLOY TO THE
LEFT.
FORM—FOURS,
LEFT.
QUICK
(or DOUBLE)
—MARCH.
No. 1.

Halt, Front, Right—Dress. Eyes—Front.

Right—Dress. Eyes—Front.

No.--

2. To both flanks.—The deployment will be made on the principle above described. The caution and command will be DEPLOY OUTWARDS, ONE COMPANY or TWO, or MORE COMPANIES) TO THE RIGHT, FORM-FOURS, OUTWARDS, QUICK (or DOUBLE)-MARCH. As a general rule, the company, or companies, next in succession from the front, will move to the right. One mounted officer will mark the right, the other the left of the line. The commanding officer, assisted by the serjeant-major, will superintend the formation of the companies.

3. In an oblique direction. - The company of formation will be formed or dressed into the required alignment, by command of its captain, on the caution LINE, HALF-RIGHT. The deployment will then be carried out as

already described.

4. From columns (or quarter columns) of half-battalions.— Each half-battalion will deploy as a column (or quarter

column) deploying to a flank.

5. On the March. - A battalion may be ordered to deploy while advancing towards an intended alignment, the leading company or companies being halted or ordered to form when the remainder form fours: the battalion command to form fours should be given 4 paces from the alignment. If moving to a flank in fours when ordered to deploy, the leading company or companies will be halted and fronted on the battalion caution to deploy.

# 85. A column closing to quarter column.

1. From the halt. - A column may be closed to quarter column on any company. The companies in front of the named company will be turned about. The words of command are QUARTER COLUMN ON NO. - (COMPANIES IN FRONT, ABOUT - TURN). QUICK (or DOUBLE) - MARCH. No. -, Halt, Left-Dress--(No. -, Halt, Front, Left-Dress), &c. When the column is being closed, the mounted

officer of the half-battalion to which the named company belongs will cover the guides, from the directing guide of

the named company and give Steady.

2. On the march.—The command is QUARTER COLUMN ON NO. 1 or NO. 8. The captain of that company will give the command No. — Halt (and if the column be retiring —Front), Left—Dress, the remaining companies will close (and front) in succession.

3. Without halting.—The command is on the Move, QUARTER COLUMN ON NO. 1 or NO. 8, REMAINDER—DOUBLE.

No. - Quick, &c.

5. 86.

86. A quarter column opening to column.

1. From the front.—The word of command is COLUMN FROM NO. 1. REMAINDER, ABOUT—TURN. QUICK—MARCH. Each captain, having gained company distance, will give the command, No.—, Halt, Front, Left—Dress.

2. From the rear.—The orders are COLUMN FROM NO. —, REMAINDER, QUICK—MARCH. No. —, Halt, Left—

Dress, &c.

3. The above cautions can be applied to opening from

or closing on a central company.

In 1, 2, and 3, the mounted officer of the half-battalion to which the named company belongs will cover the guides from the directing guide of the named company, and give the word Steady.

4. On the march.—When it is required to open from the rear, the caution will be COLUMN FROM NO.—, when the rear company will be halted by the captain, the

movement will then proceed as in (2.)

5. Without halting.—The command is on the move, column from no.—, remainder—double. The companies in front of the rear company will be ordered by their captains to break into quick time as they gain the company distance of the company immediately following them.

6. A battalion in quarter column, if required to advance in column, will receive the caution advance in column, will receive the caution advance in column, when the captain of the front company will give the words No. 1, By the Left (or Right), Quick—March, and the remainder will follow in succession at company distance. If the command RETIRE IN COLUMN be given, the companies will be turned about in succession, commencing with the rear company, and march off in like manner.

## 87. A column diminishing and increasing front.

When a column on the march requires to defile, captains will act as in 71 and 72.

## 88. A column changing direction.

A column may change direction by the successive formation of its companies round the same point on the principles laid down in 66. In changing direction, to an outer flank, outer guides will retain their relative positions; any stronger company in rear will form before it reaches the point, any weaker company after passing it. If the column be halted before all the companies have changed their direction into the new alignment, on the words REAR COMPANIES—cover, these companies will be moved into it in fours by their commanders.

## 89. A quarter column wheeling.

Wheeling at any angle from the halt.

1. On the command LEFT -- WHEELthe battalion, excepting the front
company, will make a partial turn
to the outer flank, the right guides
will move up in line with the front
ranks, the mounted officer belonging to

BATTALION,

(QUICK (or DOUBLE)— MARCH.)

BATTALION, HALT. the front half-battalion will move to the left, and the mounted officer of the rear half-battalion to the right of the front company. The outer flank will direct, but when companies are of unequal strength they will retain the same relative positions they held before

commencing to wheel.

On the word MARCH the battalion will step off, each man moving round on the circumference of a circle, of which the left hand man of the front company is the centre, the men of the front rank of the front company gradually coming round, and glancing towards the inner flank, under the superintendence of the mounted officer on that flank. other mounted officer, from the outer flank of the leading company, will regulate its pace; in order to do so, he must watch the guide on the outer flank of the rear company who will continue to march at a full pace throughout the wheel, and on whose movement the march of every man in the quarter column should be made to depend.

When the battalion has circled round to the required angle, the command, HALT will be given, on which all will turn to the front and remain steady. The guides on the outer flank will resume their posts. If when the leading company is at the required angle, the remainder are not in position, the words

MARK-TIME will be given, on which the companies will turn to the front and gain their correct positions in the new alignment. The word half will follow.

If the battalion is by the right, and is ordered to wheel to the left, the left guides will move up on the caution.

- 2. If the quarter column is on the march and it is intended to halt after the completion of the wheel, the movement will be performed as in (1), on the command LEFT—WHEEL.
- 3. A quarter column moving to a flank in fours, will wheel as in (1); the leading fours of all the companies will wheel in the same manner as the leading company of a quarter column, the men on the outer flank preserving their distances and covering, the remainder being guided by them during the wheel. The leading guides will change to the inner flank if not already there.
  - 90. A quarter column wheeling on the march, and from the halt when it is intended to move off in the new direction.
- 1. The general principles described in 89 (1) will be followed, the caution and command being on the move, half left (or left)—wheel. Quick (or double)—March; upon which, in order not to materially check the pace, the leading company will move round at a short pace, the man on the inner flank turning in the required direction and stepping short. When the commanding officer sees that the companies in rear have circled round into the new alignment, he will give the word forward, and all will resume the full pace. If the change of direction has been performed in double time the command will be forward—Quick.
- 2. A quarter column moving to a flank in fours, and wheeling will act on similar principles.

91. A column or a quarter column changing ranks.

A column or quarter column will change ranks on the principle described in 70. The mounted officer of the front half-battalion will correct the covering of the guides, and give Steady, when the commanding officer will, if necessary, give the order to dress.

92. Changing the order of a column, or a quarter column.

Should it be necessary for any special purpose to change the order of the companies of a column, or quarter column, it may be effected by forming fours, the companies passing through each other in succession as required by the commanding officer.

93. A column, or a quarter column, moving to a flank in fours.

MOVE TO THE
RIGHT
IN FOURS.
FORM—FOURS,
RIGHT.
NO. — WILL

DIRECT.
QUICK—MARCH.

Any company may be ordered to direct; each of the remaining companies will be led by the leading guide on the flank nearer to the flank of direction.

94. A column closing on, or a quarter column opening from, any named company, when moving to a flank in fours.

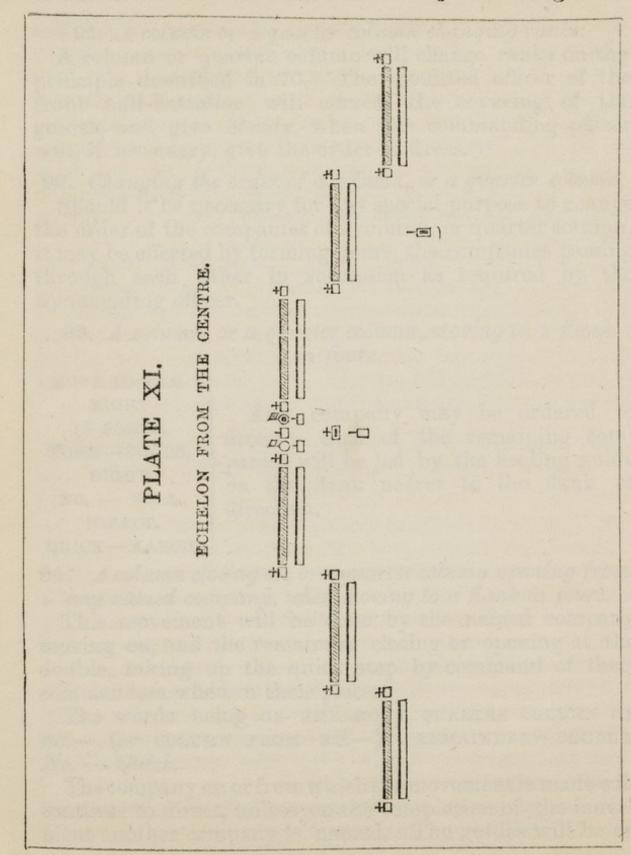
This movement will be done by the named company moving on, and the remainder closing or opening at the double, taking up the quick step by command of their commanders when in their places.

The words being on the move, Quarter column on no.— (or column from no.—). REMAINDER—DOUBLE.

No. — Quick.

The company on or from which the movement is made will continue to direct, unless on the completion of the movement another company is named. The guides will be on

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the flank of the leading four which is nearer the company of direction.

95. A line advancing or retiring in echelon.

ADVANCE (or
RETIRE) IN
ECHELON AT—
PACES DISTANCE
FROM THE RIGHT
(or LEFT.)
No.—By the—
Quick—March
or
No.—
About Turn
by the—

1. In echelon from either flank— The companies will invariably be ordered to preserve a specified distance.

The captain of the named company, if the battalion is to advance, will at once march it to the front, and when it has gained the required distance the next company will be marched off by its captain, and so on in succession till all are in motion. If the advance is from the right, the right guide of the leading company will direct, if from the left, the left guide, the remaining companies marching by their inner flanks.

The colours will move on the outer flank of the leading

centre company.

Quick-March.

If the battalion is to retire, the companies will be turned about in succession, and marched off one after the other at

the required distance as above described.

The mounted officer belonging to the leading half-battalion will place himself in rear of the directing guide of the leading company. The other mounted officer will

see that the guides preserve their distances.

2. In echelon from the centre.— An advance in echelon may be made from the centre, on the word advance in echelon, at — paces distance, from the centre. The two centre companies will advance, marching as in line by the command of the senior captain. The remainder will move off in succession at the named interval and march by their inner flanks. (Plate XI.)

3. Echelon may be formed from column or quarter column by the companies moving out in fours, and column

or quarter column formed from echelon on the same principle.

## 98. Forming line from echelon.

1. On a parallel alignment.—A battalion in echelon, may form line on any named company, on the words line on no. — (companies in front, about — turn) when the captain will halt (if retiring, front) and order the named company to dress. The guide will dress it, and give the word Eyes—Front. The other companies will move up in succession into line.

2. On the two centre Companies.—On the commanding officers' word, line on the two centre companies, the senior captain will halt them. If markers are employed the centre serjeant will mark the point of formation, turning to the right. The companies will be ordered by their captains to dress by the left and right. The remaining companies will move up into line in succession.

3. At an angle.—A battalion in echelon may form into line at an angle to the original alignment, by a named company being formed in the required direction and the remainder forming on it. If it is intended to reform line to the right or left of the original alignment, it will be found most convenient to march off at company distance. If line is to be formed obliquely, the distance between companies should be rather less than company distance, to obviate the companies moving into the new alignment by a long flank march. The word will be COMPANIES HALF-RIGHT (or LEFT)-FORM. When the companies have formed into the required angle, FORWARD, LINE ON NO. -, REMAINDER, FORM-FOURS, RIGHT (LEFT or INWARDS) on which the named company will advance five paces and be ordered to halt and dress by its captain. The remaining companies will close on it, being ordered to halt, front, and dress by their captains.

## 97, Meeting attacks by cavalry.

When infantry is threatened by cavalry in force, a formation suitable to the moment must be adopted. It will usually be sufficient in open ground to dress back the threatened flank of a firing line, and the unmolested flank may, if desirable, be dressed up, the words of command being BACK, NO. —, UP, NO. —.

## 98. Formation of Squares.

1. In savage warfare, it may sometimes be necessary to form a square two deep. This can be formed from line on the two centre companies, the companies further out forming the side faces, and the flank companies the rear face, all moving in by fours. On the caution on the two CENTRE COMPANIES FORM-SQUARE, the captains and guides of the two centre companies will take post for firing and if the colours are with the battalion, they will drop to the rear four paces. On the word REMAINDER, FORM-FOURS, INWARDS, the captains of the two centre companies will each close their companies five paces inwards and then order them to fix bayonets. On the command DOUBLE-MARCH, Nos. 2, 3, 6, 7 will double to the points where their flanks will rest in square, rear form, halt, front, and fix bayonets. Nos. 1 and 8 will halt and turn to the rear to form the rear face. The company officers and supernumeraries will run into the square round their leading fours. Each company as it gets into position will be ordered to fix bayonets. The captains will give orders as to firing, subject to directions from the commanding officer. Line may be reformed by reversing the above movements, on the command REFORM -LINE, UNFIX - BAYONETS, FORM-FOURS - OUTWARDS, DOUBLE-MARCH.

2. Square may be formed from column on the order FORM-SQUARE, when No. 1, if on the march, will be halted and bayonets will be fixed, REMAINDER-DOUBLE, or DOUBLE -MARCH, when the companies to form the side faces will be formed successively to the right and left, the rear company will form the rear face. Each company as it gets into position will be ordered to fix bayonets. If there is an uneven number of companies in the battalion, the rear company but one will form column of half companies on the march, halt inside the square and fix bayonets. Column will be reformed by reversing the above COLUMN. on the command REFORM movements UNFIX-BAYONETS, SIDE FACES ABOUT-TURN. will then step off at the double by word of the captain, while the captain of No. 7 will give the command On the Move, Right - Form, Double - March, the remaining companies will move off in succession. If the number of companies be uneven, the rear company but one, which will turn about with the side faces, will follow the rear company and reform company on the march. The adjutant will mark the point where the flank of the rear company will rest in column, and when the company reaches this point, the captain will halt and front it. The remaining companies will be halted and fronted at company distance from the preceding company.

3. A square may be moved to the front or rear, right or left, on the command the Battalion will advance (retire or move to the right (or left).—Faces, form—fours inwards, when the captain or captains commanding the company, or companies, in the new rear will turn it, or them, about. The flank to direct should be named before the order quick march is given. On the command Battalion—halt, the side faces will front and the company or companies forming the rear face will turn

about.

# PART IV.

# FORMATION OF A BRIGADE

OR A

# DIVISION FOR ASSEMBLY OR MANŒUVRE.

#### MOVEMENTS IN BRIGADE.

#### 99. GENERAL RULES.

1. Orders, cautions, and words of command.—The brigade commander will give his orders verbally to battalion commanders, and explain his intentions to them. Orders of importance should be written.

Cautions given by the commander of a parade will be passed by commanding and mounted officers, who are responsible that such are distinctly conveyed to, and

understood by, the next unit.

On the caution commanding officers will give all necessary orders, and be prepared to march off their battalions together on the signal or order of the brigadier. The cautions given by the brigadier are printed in capital letters, and refer to movements to the right only; those given by commanding officers will be found in the sections of battalion drill to which reference is made in the text.

When from any cause the progress of an order is interrupted, commanding officers will conform, as quickly as

possible, to the movement they see in execution.

2. Intervals and distances.—Intervals and distances of at least 30 paces between battalions and brigades, and 60 between divisions, will be preserved in all formations, unless special orders are issued.

3. Point of direction.—Battalions, or half battalions, in line, will move by their centre, in column, by the flank, preserving their intervals from the battalion of

direction, which is invariably to be named.

4. Points of formation.—Mounted points only will be given; and these may be dispensed with, when the brigade is working at close intervals. The brigade-major will dress the mounted points from the brigade point of formation. The point of formation will be marked by the nearest mounted officer of the battalion of formation, the other marking the outer flank of the battalion. A mounted officer of each of the remaining battalions will mark the point where the outer flank of his battalion will rest in the new alignment. In central formations, mounted officers of the battalion of formation will mark both flanks, and a mounted officer of the remaining battalions will mark where the outer flank of their battalions will rest in the new alignment.

5. Movements to be by the shortest lines.—In all interior movements of a brigade, battalions will move to their places by the shortest lines, cutting off angles, when

possible, by the diagonal march.

6. Principles applicable to divisional drill. — These principles apply equally to the formations of divisions or larger bodies of troops.

## FORMATIONS AND MOVEMENTS.

100. Wheeling from mass into line of quarter columns, and from line of quarter columns into mass.

(Plate XII, Fig. 1.)

A brigade can be wheeled into line of quarter columns

## PLATE XII.

Fig. 1.— WHEELING FROM MASS INTO LINE OF QUARTER COLUMNS.

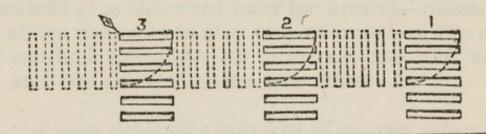
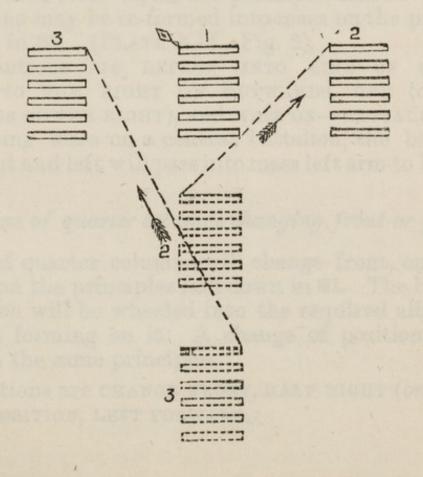


Fig. 2.—A MASS DEPLOYING INTO LINE OF QUARTER COLUMNS, OUTWARDS.



from mass, and vice versa, by the battalions wheeling as described in 89 and 90.

In wheeling into mass from line of quarter columns, the guides will be covered, from the front, by the brigademajor, when they are correctly covered, battalion commanders will give the word LEFT (or RIGHT)—DRESS.

The above movements may be performed on the march. The cautions are LINE OF QUARTER COLUMNS TO THE

RIGHT, and vice versa, MASS TO THE RIGHT

# 101. A mass deploying into line of quarter columns, and a line of quarter columns forming mass.

A mass may deploy into line of quarter columns at any ordered interval, on the principles laid down in 84; and this line may be re-formed into mass on the principles laid down in 82. (Plate XII., Fig. 2).

The cautions are DEPLOY INTO LINE OF QUARTER COLUMNS TO THE RIGHT (or OUTWARDS, ONE (or more) BATTALIONS TO THE RIGHT), and MASS ON—BATTALION.

In forming mass on a central battalion, the battalions on the right and left will pass into mass left arm to left arm.

# 102. A line of quarter columns changing front or position.

A line of quarter columns will change front, on a flank battalion, on the principles laid down in 81. The battalion of formation will be wheeled into the required alignment, the others forming on it. A change of position will be effected on the same principles.

The cautions are Change front, half right (or RIGHT). Change position, left forward.

103. Advancing or retiring in line, or line of quarter columns.

When a brigade advances or retires in line, a battalion of direction will be named. Each battalion will march by its centre. A mounted officer of each of the battalions not directing should ride in rear of the flank next to the regulating battalion, and notify to the commanding officer whether interval is being correctly kept or not. Signals should be agreed on for this purpose; the commanding officer should watch for them, and direct the movement of the battalion accordingly.

It may sometimes be found more advantageous to advance in echelon than in line; intervals will be pre-

served on the same principles.

A line of quarter columns will advance, or retire, on the same principles, but the directing battalion will march by a flank, and the remaining battalions will march by the flank nearer to the battalion of direction.

104. Advancing, or retiring, in line of columns or quarter columns at deploying interval.

When a brigade advances in line of columns or quarter columns at deploying interval, a mounted officer will accompany the movement at such interval, on the outer flank of his battalion.

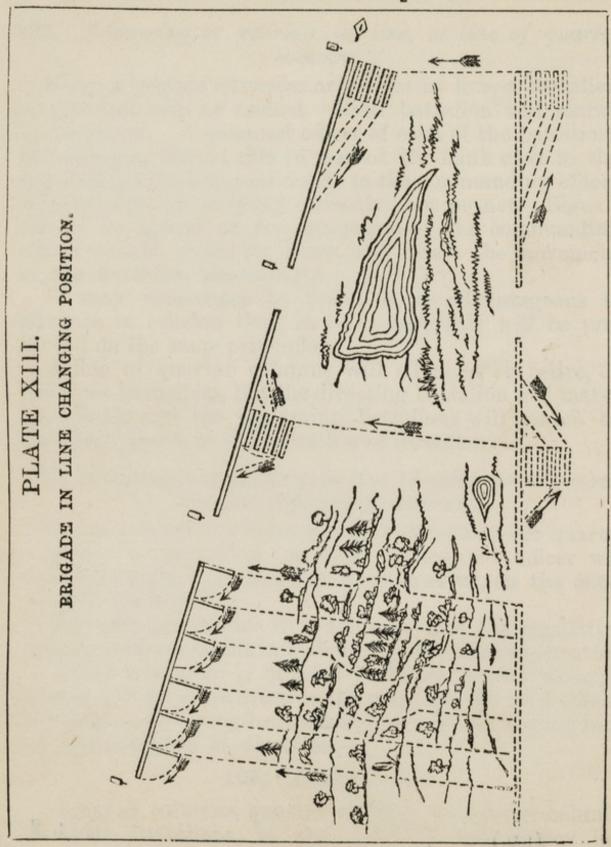
In these movements it is assumed that the regulating battalion moves on the intended brigade point of formation.

When a brigade is ordered to retire, similar arrangements will be made towards the rear, the mounted officers moving, at deploying interval, in line with the leading rank of the battalion of direction.

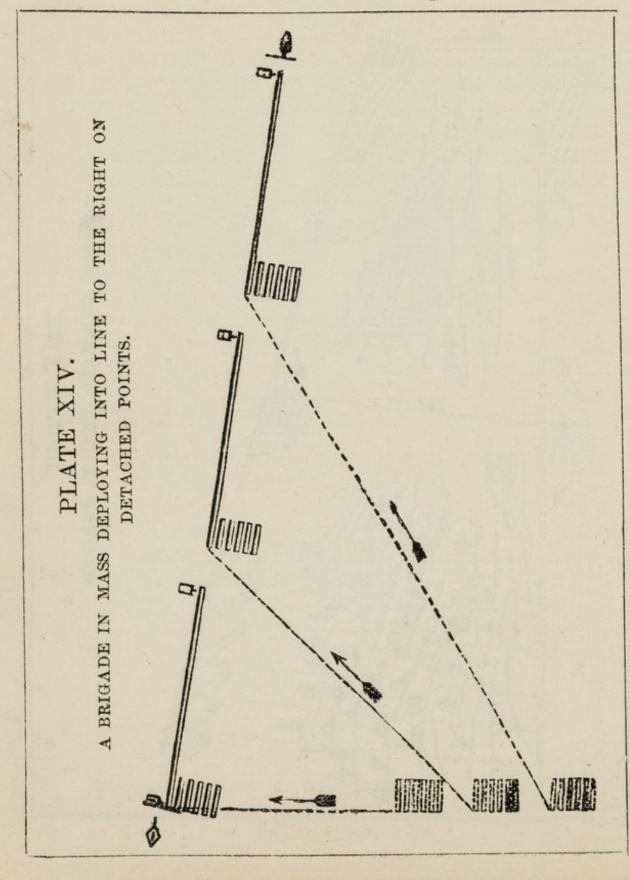
## 105. Deployments.

Lines of columns, quarter columns, or quarter columns of half battalions, at any interval, will deploy into

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PART IV. - BRIGADE DRILL [To face Page 111.



line, each battalion in succession following the procedure in 84, and commencing its deployment on arriving at 30 paces from the mounted officer on the outer flank of the battalion next to it in line. A line of half battalion quarter columns will, as a rule, deploy to a flank.

The cautions are DEPLOY INTO LINE ON-BATTALION, WHICH WILL DEPLOY TO THE RIGHT (or OUTWARDS,

-COMPANIES TO THE RIGHT).

A brigade in mass may deploy into line on the leading battalion without previously forming line of quarter columns; in this movement, the leading battalion will deploy at once; the remaining battalions will move by the shortest lines to the points where their inner flanks are to rest in the line, and will then deploy in the usual manner.

The cautions are DEPLOY INTO LINE TO THE RIGHT.

—BATTALION WILL DEPLOY TO THE RIGHT (or OUTWARDS—

COMPANIES TO THE RIGHT).

106. A brigade in line advancing in columns, or columns of half-battalions.

This movement will be performed as described in 83.

The cautions are ADVANCE IN COLUMNS FROM THE RIGHT OF BATTALIONS (or HALF BATTALIONS).

#### NOTE.

PLATES XIII. and XIV. show combinations of the above-described movements.

of attack and of delenge, but the duiding or

# PART V.

#### 1. COMBINED TACTICS.

#### 107. GENERAL OBSERVATIONS.

1. The subject of tactics can be treated at great length, but it is intended to deal only in general terms in this section with the combined employment of cavalry, artillery, and infantry. It is essential that every infantry officer should be thoroughly acquainted with the general rules in the cavalry and artillery drill books and know the principles governing the employment of the other arms, in order to obtain the fullest possible advantage from their own commands.

2. Generally speaking, an engagement between two hostile forces, be they large or small, begins either by one side in motion attacking the other while stationary, or by

the collision of both sides when in movement.

3. The attitude originally assumed by either, or both, of the opposing forces, may be reversed during an engagement. A vigorous counterstroke by an army offering battle in a defensive position may throw the adversary on the defensive; or an assailant may fight a delaying or retaining action in one part of the field, while in another part his action may be essentially offensive; but these and other variations in a combat resolve themselves in every case into attack and defence.

4. There are essential differences between the tactics of attack and of defence, but the guiding principle underlying each is the development of the special power of each arm, and the harmonious combination of all three arms for the attainment of one object, i.e., superiority of force at the decisive point.

force at the decisive point.

5. With no great disparity between the opposing forces as regards arms, training, and discipline, a commander, in deciding whether to attack or defend, will be guided by the strength of the force at his disposal, as compared with that of the enemy. With a superiority in strength, the initiative confers on him not merely the moral advantages which must always rest with a bold attack, but the power of choosing the nature, direction, and even the time, of delivering his attack.

#### ATTACKING AN ENEMY IN POSITION.

## 108. Information.

1. The front and flanks of a force moving in a hostile country, are usually covered by a screen of cavalry, which, while protecting from surprise, and concealing from the enemy the movements of the main body, reconnoitres and

reports the dispositions of the enemy.

2. One of the so-called secrets of success lies in obtaining accurate and early information of the enemy's movements, so as to enable a successful forecast to be made of his intentions. Without such information a commander is unable to decide in what manner his force should be utilised so as to obtain the best results.

3. It may be expected that an enemy awaiting attack in a defensive position will have pushed to the front his cavalry, horse artillery, and some infantry to force his adversary to an early deployment and to delay his advance. Against these troops the attacking cavalry, horse artillery, machine guns, and mounted infantry, will act with vigour, and will endeavour, by capturing prisoners, and driving in the enemy's advanced troops, to ascertain the nature and disposition of the force in their front. When these troops can make no further progress owing to the presence of the enemy in superior force, they draw off to the flank or flanks, and the advanced guard

come into direct contact with the enemy's advanced

troops.

4. The subsequent action of the attacking cavalry will depend on the nature of the ground and the number and distribution of the hostile cavalry. Patrols should, however, remain in observation of the enemy's flanks to give timely notice of any impending counter-attack. If the ground be favourable, the attacking cavalry will be best employed in vigorous action against the enemy's flanks, and against the hostile cavalry; but in any case it should remain in observation of the enemy's proceedings.

## 109. Advanced guard.

1. The officer in command of an advanced guard must be acquainted generally with the line of action which the commander of the force intends to adopt, and will, subject to orders he may have received, take up the most advanced position possible, and hold his own against any partial attacks by the enemy; but he will be careful not to commit himself to the offensive without direct orders, for such action is calculated to seriously embarrass his commander by bringing on a premature engagement, or by forcing him to employ a considerable force to extricate the advanced guard.

If the enemy is surprised, the sudden development of

artillery fire against him may have great effect.

2. The commander of an advanced guard having secured his position, will endeavour to drive in advanced parties of the enemy by the use of artillery fire, and to induce the enemy to open fire, and thus disclose his dispositions, and facilitate the reconnaissance of the position.

### 110. Reconnaissance.

1. The commander of the force will base his plan of attack on the information gained by a thorough recon-

naissance of the enemy's position and the approaches to it. If it be found to offer no cover to troops attacking, he should seek to attack a flank, or threaten the enemy's rear, in preference to attacking him in front, as unless the ground offers peculiar advantages for the artillery of the offence, a direct attack across open ground is costly and difficult.

2. During this reconnaissance, the main body of the infantry will close up from column of route and will, in convenient situations for the subsequent advance, form mass or line of battalion quarter columns, or other suitable formation beyond the range of the enemy's artillery, or nearer, if sheltered by the formation of the ground.

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#### 111. Distribution.

1. When the commander has decided generally on his plan of attack, orders for the distribution of the force will be issued.

2. The general principle on which troops are disposed for an engagement is that they are formed in greater strength, especially in depth, opposite the point or points where it is intended to drive the attack home, and in lesser strength opposite those portions of the enemy's line where it is intended merely to hold him to his ground. Their distribution should, in every possible manner, be

concealed from the enemy.

An attacking force is formed into three bodies distributed in depth: the first to develop the attack, the second to support, reinforce, and complete it, the third to confirm a success, cover a retreat, or meet any emergency.

3. There is a further reason for distribution in depth and it applies to the smallest fractions of a force in the same degree as to the largest. A commander can only exercise a direct influence on his command so long as he retains at his disposal a portion of his force

with which to meet the varying contingencies of an engagement. Without a body of troops in hand, he can neither develop nor support an attack, nor is he in a position to meet any unexpected movement on the part of the enemy, such as the sudden assumption of the offensive in force.

4. It is not here intended to imply that the force is to be at once distributed in the form in which it will actually carry through the attack to its conclusion; the distribution should on the contrary be limited to that form which lends itself most readily to the development of the plans the commander has immediately in view.

#### 112. Orders.

The orders for the distribution must be clear, concise, and complete. To secure united action it is necessary that a definite object of attack or specific duty should be allotted to each body of troops; the orders should, if practicable, be given in writing to their commanders, the choice of the manner in which the duty is to be performed being left to them. The object aimed at, the direction and compass bearing of the attack, and the extent of frontage to be occupied should be distinctly stated. If an enveloping or flank attack be intended, it should be provided for in the primary distribution.

## 113. Action of artillery.

1. The commander having given his cavalry and artillery commanders full information as to his proposed plan of attack, the mass of the artillery will be brought into action protected by the infantry of the advanced guard and cavalry.

2. As with infantry fire so with that of artillery, the guiding principle is to obtain a superiority of fire over the defence. To this end the fire of batteries and, whenever practicable, the batteries themselves will be concentrated.

3. Fire will be opened simultaneously at a range that must, to a great extent, be determined by the configuration of the ground, subject to the general rule, that artillery in its first deployment should avoid coming within long

range infantry fire.

4. Fire will be concentrated on individual hostile batteries in succession, and when they are sufficiently silenced, the greater number of guns will generally be directed on the point or points to be assaulted. When the defence is considered sufficiently crippled and demoralized by this fire, orders will be issued for the advance of the infantry of the main body. As a rule no attempt should be made to advance before the artillery of the attack has gained a superiority of fire over that of the defence.

5. It is necessary thus to dwell on the importance of the first distribution of troops, and the preparatory action of the artillery, because in peace manœuvres the distribution is much simplified through the comparative smallness of the force employed in attack, while the preparation by artillery fire is frequently so curtailed as to give a false impression of this important phase of an engagement.

## 114. Infantry advance.

1. Under cover of artillery fire, the infantry will now be ordered to advance to the attack. The action of infantry in the fight is described hereafter in the second division of this Part. As the attention and fire of the hostile infantry becomes directed on the infantry of the attack, it may be advisable to advance the artillery to closer ranges, whence it will at all hazards and regardless of losses, support the infantry advance.

2. As a rule, the attacking infantry will not open fire until it is within medium ranges (see 124 (3)). Long range rifle fire will not be employed unless in altogether exceptional conditions, as infantry should avoid assuming a part which belongs to artillery—essentially the long range arm.

3. Machine guns will not accompany the units to which they are attached for administrative purposes, but will be employed as directed by the officer in command of the

brigade, or division, to which these units belong.

S. 114.

In deciding how they shall be disposed, these officers will be guided by the nature of the ground and by the general plan for attack. The ground selected should, if practicable, admit of the machine guns bringing effective fire on the portion of the enemy's line to be assaulted. It will often be advantageous to select ground outflanking the enemy's line, so that the fire of the machine guns can enfilade it, and can also be directed, if necessary, against any counter-attack made by the defender's troops. In selecting the ground, it should be borne in mind that machine guns on their way to it, must keep out of the enemy's view, and when in position should be exposed as little as possible to hostile fire. It will not, generally, be desirable to place more than two machine guns in action together, and never when the ground is exposed to artillery fire.

4. It may be expected that the stress of battle will have brought about in certain portions of the field a mixture of companies, battalions, and even brigades, rendering the work of commanding more and more difficult. The hostile cavalry will endeavour to surprise and take advantage of this tactical disorder in the attack. Small bodies of cavalry screened from view and fire behind woods, enclosures, or folds of the ground, may render efficient service to the attack by watching for, and defeating any such enterprise on the part of the enemy's cavalry, or in their turn, by surprising his infantry. Thus the first line will fight its way forward towards the enemy's position, every fresh reinforcement giving a new impulse to the advance, until the entire front and flank of the enemy is enveloped with a heavy fire at medium and decisive ranges.

5. Such is a brief outline of an attack up to the critical moment when the final struggle has to commence. Though dismissed in a few sentences, it means in reality a long process and one of the most difficult tasks which armed men can be called on to perform. Fighting in close order is comparatively easy compared with a prolonged struggle in extended order against a determined enemy.

6. In the latter, as in the former, strict discipline is necessary, but in addition great individual intelligence and self-reliance are required, not only in the leaders, but n the rank and file. Responsibility also which formerly rested with superior officers, must now be delegated to subordinates. To use, and not to abuse this, demands habits of self-reliance, coupled with a strict sense of duty and discipline. Unless these habits are inculcated during peace, it cannot be expected that they will suddenly be developed in time of war.

#### 115. The assault.

1. At this period of the combat it must be assumed that the attack has gained a superiority of fire over the defence, and that while the firing line is keeping the enemy generally engaged along his entire front, and flank, or flanks, the preponderance of guns and rifles is directed at the point, or points, selected for assault.

2. Meanwhile the formed troops in second line, opposite to the points of assault will have been gradually diminishing the distance between themselves and the firing line, until when the order to assault is about to be delivered they are close up to it. Probably, no duty is more difficult in war, or requires a truer military instinct than to appreciate, and exactly time, the moment for delivering an assault, the more so as the initiative may come from the firing line, which feels the defence weakening in its front. Hence the vital importance of skilful leading—of having the troops for

the assault at hand at the exact moment, without previous unnecessary exposure to fire. If handled with skill, it should be possible to lead the assaulting troops through decisive ranges in an uninterrupted advance to the point When, from the configuration of the ground, the stubborness of the defence, or the distance between the point necessarily adopted for the inception of the assault and its goal, this is not possible, then the second line, carrying portions of the first line with it, must press forward, firing as they go, and throw themselves upon the enemy's position with vigour and determination. Throughout the advance advantage should be taken of every opportunity to reform or tell-off the troops engaged. This is more especially necessary immediately after the delivery of a successful assault, when the confusion, which inevitably accompanies a charge, gives to the enemy an opportunity of at all events delaying pursuit by a vigorous counter attack with his reserves, if indeed he does not succeed in driving out again the assaulting troops.

116. The Pursuit.

The actual pursuit will be carried out with all available cavalry and artillery and infantry. No time should be allowed the enemy to rally, to take up a covering position, or to form rear guards. The action of the cavalry and artillery should be characterised by great boldness; every gun will be brought into action at decisive ranges, and the cavalry, launched in vigorous pursuit, will press round the flanks, and at all hazards keep touch with the enemy.

#### THE DEFENCE.

117. Preparation of the position, and distribution of the troops.

1. Whenever time permits, field entrenchments should be constructed. They will be found specially useful on

ground where the convexity of the slopes renders it necessary to place the firing line in advance of the crest line.

2. The principles on which a force is disposed for defence are similar to those for attack, with certain modifications. As in the attack, each unit should be allotted a specific duty, that is, a certain section of the defence, or a

definite duty in the general scheme.

3. In close or broken country, cut up by woods, enclosures, and covers, the ground which can be supervised by one commander is limited in extent, and consequently the sub-divisions of the front line must be more numerous, so that each unit may itself provide its own reserves. importance of retaining these reserves in hand, and the danger of employing them too early in an engagement can hardly be overrated. When they are employed the commander of the force should be at once informed.

4. In open country, where an extended view can be obtained over a considerable portion of the front, and lateral communications are easy, units may occupy a broader front than would otherwise be the case. Where roads run through the front of the position, units should be placed astride of them, so that there may be undivided responsibility for the defence of these approaches; similarly, it is desirable that the defence of woods, and other like points, should, as far as practicable, be entrusted to

separate and distinct units.

5. The machine guns under the orders of the commander of the brigade, or division, to which they belong, should be placed so as to sweep with their fire, the roads and approaches leading into the position, or to defend an exposed flank. It is more important to shield the machine guns from hostile artillery fire, than it is to ensure a long range for them. It will, therefore, generally be found better to select ground that will give these guns a range of from 600 to 800 yards, secure from artillery fire, than to occupy ground from which a more extended field of fire can be obtained, but which will be in danger of being

brought under the fire of the enemy's artillery.

6. Since it is probable that the enemy will endeavour to deceive the defence as to the true points of attack and then throw superior forces suddenly on certain portions of the position, too early a distribution of the second line is undesirable. Besides providing for the safety of the flanks the second line will furnish reserves where required. Their position cannot always be definitely settled until the direction of the enemy's main attack has been indicated, hence the arrangements must be such as to meet all possible contingencies.

7. The third line will be kept in hand to deliver a counterattack, take up a pursuit, or cover a retreat. When it is intended to deliver a counter-attack the ground selected for the advance should be favourable for such a movement.

8. As, both in attack and defence, an exposed flank is the vulnerable point, an offensive movement should usually be directed against the flank of the enemy's advance, for in preparing to attack the enemy's flank the best possible

arrangements are made for defending one's own.

9. Advanced posts should only be occupied exceptionally; if their occupation be unavoidable they ought to be flanked from the main position, and capable of easy support. As a rule it is not advisable to detach a considerable force to hold an advanced post; but to retain command over cover, behind which the enemy could mass, it may be necessary. In this case arrangements should be made for supporting the post, and precise orders should be issued to the officer in command to hold it to the last.

10. The cavalry, supported by artillery and mounted infantry, will be posted in as forward a position as possible, to press the hostile cavalry, and to make every

endeavour to ascertain the direction of the assailant's main attack. Above all it is important that it should give timely notice of any turning or enveloping movement.

11. Positions for the artillery, which may or may not be occupied at first, will be selected commanding the probable lines of advance, and the probable positions of the enemy's

artillery.

12. The position should also be carefully considered from the enemy's point of view, as the situation of the best positions for his artillery, the nature of the approaches, the conformation of the ground, or the direction in which he, if successful, may wish to drive the defenders, will all affect his movements, and should materially assist the defence in determining the point or flank upon which the main attack will probably be made.

#### 118. General course of the defence.

1. A skilfully handled force of cavalry, supported by horse artillery and mounted infantry, pushed to the front will frequently deceive the enemy as to the position actually occupied by the main body, and thus lead him to an unnecessary and premature deployment of his force involving much loss of time and delay in his advance. Artillery should guard against opening fire at extreme ranges from the main position, which cannot be very effective, and only serves to assist the enemy by marking the position held by the defence.

2. As pointed out in the remarks on the attack the assailants will probably push forward from the first as powerful a force of artillery as possible. The infantry at hand for the protection of the latter will frequently be that only of the advance guard. This will probably afford the defender's cavalry an opportunity of making a successful

attack or the enemy's guns.

3. As the defence will have the advantage of better natural (I.D.) M 2

and artificial cover and an accurate knowledge of the ranges of all positions likely to be occupied by the assailant's artillery, it should be possible if the hostile artillery come into action in small bodies, to crush it in detail.

4. In the attack, every gun is brought into action from the first, but in the defence, as the enemy's object is to draw the defender's fire and thus cause him to disclose his position, it may be advisable not to unmask some of the batteries until the enemy's attack is indicated. If the artillery of the attack is too strong it may be necessary to cease fire, refit, and await the attack of the enemy's infantry; but as soon as the main infantry attack is developed, the defending artillery will fire exclusively on it, without allowing itself to be drawn into replying to the

enemy's guns.

5. To infantry in defence, ammunition should be freely issued, and reserve ammunition posted near at hand under cover. As economy of ammunition is comparatively unimportant, and the ranges will have been accurately determined beforehand, rifle fire may sometimes, with advantage, be opened at long ranges, especially on the attacking artillery and bodies of troops in column, or other close formation. The tendency of troops to direct their fire almost exclusively on those who are firing at them, points to the advisability of detailing special bodies of infantry to fire on the second and third lines, and on artillery trying to come into action at medium ranges. These men may, if the ground favours such an arrangement, be placed in tiers.

#### 119. Counter-attack.

1. Except when it is intended merely to deny a passage to the enemy, every defensive position should be taken up with a view to counter-attack.

2. The difficulty of maintaining the correct direction in

an advance, and the gaps formed by the consequent opening out of the line afford favourable opportunities to assail portions of the enemy's advance in flank. As these opportunities are fleeting, small bodies of cavalry are specially suitable for attacks of this nature.

3. If infantry is employed for these counter-attacks, it should be specially detailed for the purpose; for the troops occupying the firing line of the defence, should on no account be permitted to advance, except when, on the repulse of the attack, a general advance is ordered by the officer commanding. The commanders of local counter-attacks should guard against being carried too far to the front.

- 4. A counter-attack may be made either against the flank or centre of the assaulting force. In the first case, it will be an advantage to previously move the troops entrusted with the counter-attack to a position beyond the flank of the line of defence, so that they may operate obliquely on the enemy's flank and envelop it. In the second case, it may be made from some salient feature in the general line of defence, upon the flank of the assailants who have ventured to pass without taking it. In this manner a very effective counterstroke can be delivered.
- 5. These attacks must be covered by the convergent fire of all the batteries that can be brought to bear upon the point assailed.

# 120. Enemy's assault.

1. As the enemy approaches decisive ranges, bayonets should be fixed, and all possible infantry and artillery fire

concentrated on the assaulting lines.

2. When the assault is about to be delivered, the attacker is at a disadvantage; his artillery fire is masked by his infantry, and of the infantry only the front line can fire and this must slacken as the men prepare to charge.

This moment should be seized by infantry and artillery of the defence to pour a rapid fire into the front and flanks of the advancing enemy. Should he still continue to advance, the reserves with fixed bayonets will be led forward, prepared to charge the moment the firing line shows any indication of being unable to hold its own. In charging, the men will cheer, and drums and bugles will sound.

#### 121. Retreat.

1. There is no more difficult operation in war than a retirement in the face of a victorious enemy. Success depends on the completeness of the arrangements which have been made beforehand. Every detail should have been considered, so that, when the necessity arises, little

remains but to issue the necessary orders

2. If a retreat be not to degenerate into a flight, the reserve or freshest available troops must take up a position to cover it; if such a position can be found towards a flank, it will relieve the retiring troops by drawing the enemy off the real line of retreat. The retirement should, if practicable, be effected by alternate parts of the line, the artillery taking up positions on commanding ground to cover the retreat of the infantry. Such an occasion demands both devotion and self-sacrifice from the artillery. A loss of guns may be expected, but their loss will be well compensated for if the infantry are thereby secured an orderly and leisurely retreat. Every obstacle should, as the troops retreat, be thrown in the way of the enemy's advance, by destroying bridges, setting fire to villages, &c. The action of the defender's cavalry plays also a very important part in a retreat-if the main body is to gain time to organize its rear-guards, the cavalry must be handled with vigour. Its object is not so much to damage the pursuing cavalry, as to ensure the safe withdrawal of

the main body. A series of bold attacks on favourable ground, avoiding pursuit after success, will be likely to attain the desired object; but if the enemy is numerically superior, and cannot be coped with in the open, a judicious employment of dismounted men, if favoured by the ground, may, sometimes enable a small force to seriously impede the advance of a much larger body of cavalry.

#### 122. Two Armies meeting on the March.

- 1. In an encounter, when both forces are advancing at the time they come in contact, the commander of the advanced guard at once seeks by his dispositions to delay, for a time, the advance of the enemy; and reports to the commander of the main body. The course ultimately taken by the advanced guard depends on the decision of this officer.
- 2. It rests with the commander of the main body to determine whether the force will proceed to the attack, or whether, under cover of the advanced guard, the main body is to take up a defensive position in rear. In the former case since little time is available for reconnaissance, superior officers must at first be at the head of their columns, so that there may be no delay in receiving reports, communicating orders, and giving the correct impulse as regards direction to the troops as they arrive on the field. In the latter case the advanced guard will act as a rear guard, and at all hazards delay the enemy long enough to enable the necessary dispositions to be completed.

3. Early and accurate information concerning the enemy is, in any case, of the first importance, and this it is the duty of the cavalry to obtain at all hazards.

#### 123. SAVAGE WARFARE.

1. Troops on the field of battle must always be disposed in such formation as will ensure the most efficient

fire being brought to bear on the enemy. The nature of that enemy, and the manner in which he is armed, being considered with reference to the formation to be adopted.

Against untrained and indifferently armed races closer formations are not only practicable but often essential, and should be used to the fullest extent possible, but care must be taken to develop to the utmost the power of each arm.

Infantry will be formed in square or in echelon, as the requirements of the material they have to protect or the tactics of the enemy, or both may suggest. The main object is the adoption of a formation, which will compel the enemy to attack upon as small and as deep a front as possible, and by this means to give the greatest effect to the close and intense fire which can be delivered by modern arms in the hands of disciplined troops.

2. Cavalry are best used as scouts to protect the infantry from surprise, and when the attack develops retire until an opportunity for pursuit offers, after the

conclusion of the infantry action.

3. Guns employed singly or in pairs, at the angles of an infantry square, cannot produce their full effect, and have at times offered a weak point for the enemy to attack. It is better probably to allow the guns to come into action as a mass, and in their normal line formation, outside the square, in prolongation of one or other of the faces, permitting the gunners and teams, if the enemy succeed in charging home, to take refuge in rear of or within the square. On the retirement of the enemy, the gunners will again issue from the square and resume the service of their guns.

# II.—INFANTRY IN ATTACK AND DEFENCE.

#### 124. GENERAL PRINCIPLES.

1. Standard form of attack forbidden.—Fixed rules cannot be laid down beforehand for movements in presence of, and action against, an enemy, as these movements must vary according to the circumstances of each situation which may arise. The movements must, however, be conducted in accordance with certain general principles and general rules which are explained in this chapter.

Commanders of all ranks, from generals to section commanders, must carefully bear in mind the fact that in war it is impossible for them to exercise over their commands the same personal control that finds place at drill exercises.

Local circumstances unforeseen by the commanders may render the precise execution of the orders or directions they may have given to their subordinates not only unsuitable to the case, but absolutely impracticable. Delegation of command is a necessity, and commanders must, therefore, take every opportunity of training their subordinates in accepting responsibility for departures from, or variations in the mode of carrying out orders or directions originally given, impressing on them at the same time that such departures or variations must always be justified by the circumstances of the case. Independent action, merely for the purpose of escaping from higher control, is to be firmly repressed.

It is for these reasons that it is not considered desirable to formulate any normal system of attack. It would be impossible to provide for all contingencies, and there is the danger of a standard form of attack being applied

to cases for which it is unsuitable.

The conditions of modern warfare render it imperative that all ranks shall be taught to think, and, subject to general instructions and accepted principles, to act for themselves. Every skirmish, every fight, influenced by many different considerations, offers a problem which can only be grappled with at the time, and cannot be treated under set conditions.

2. In presence of the enemy. (a) Large bodies.—All movements, when there is any possibility of contact with the enemy, will be covered by a screen of troops in extended order on the front and flanks, in order to obtain information and prevent surprise.

This extended line should be supported by about an

equal number of men moving in closer formation.

These supports should be in the most convenient position to assist the extended line without being unnecessarily exposed to fire.

If the line and its supports are at any great distance

from the main body, a reserve will be necessary.

Its distance will depend on the strength of the force employed and the nature of the country; but should be such as to prevent the main body being surprised by artillery fire.

At any moment the extended line may be developed

into a formation for attack.

(b) Small bodies.—All small bodies of troops, when there is any possibility of contact with the enemy, should be protected by scouts, moving parallel to their advance, and in position to prevent surprise from a neighbouring valley, a wood, or any feature that might harbour an enemy within short distance of the line of march.

3. Limit of ranges.—For about 3,000 yards from the enemy's position, the ground over which the troops, destined to attack, have to move, is subjected, in different places, to different kinds of fire, which affect materially

the conduct of the advance. It is convenient for descriptive purposes to divide this space into ranges, but the limits here given must only be considered approximate.

Limits.	Description of fire.
About 3,000 to 1,500 vards.	Artillery.
1,500 to 800 800 to 500 500 to position	Long range rifle. Collective rifle. Collective and individual
	About 3,000 to 1,500 yards.  1,500 to 800 800 to 500

(a) Artillery.—The extreme range of useful field artillery fire may be said to be 3,000 yards. Artillery officers claim effective action for their guns at much greater ranges, but it is not necessary for infantry to practice formations intended to lessen the effect of artillery fire at longer ranges than those at which objects can be clearly seen, for the distance at which the effect of fire can be observed practically fixes the extreme range of useful artillery fire. Good infantry should make artillery pay heavily for coming into action within rifle fire, at or under 1,200 yards.

As the range increases, infantry fire, compared with that of artillery, decreases very rapidly in accuracy, and becomes so uncertain as seldom to be worth the expendi-

ture of ammunition.

(b) Infantry.—The effect of rifle fire depends on knowledge of the range, and the features of the ground. In the field the quantity of ammunition at the disposal of the troops must also be taken into consideration. The result of numerous experiments enables certain general rules to be established. On troops in close order, volley firing by sections will be found effective, if it be well regulated and directed—

At 800 yards, on a small section. At 1,000 yards, on a large section.

At 1,200 yards, on a half-company, and on a section of artillery, i.e., two guns.

From 1,400 to 1,700 yards, on a battalion in column,

and on compact bodies of artillery or cavalry.

It follows from the above that formations in column on a fairly broad front, such as a strong company in column of sections, are very vulnerable objects. A company in column of sections will probably suffer, at long ranges, twice the losses of a company in line. The vulnerability of formations in column does not diminish with increased ranges as rapidly as that of those in line; at medium ranges it depends on the number of their subdivisions and their consequently increased depth; at long ranges it remains practically about the same whatever the position of the men, whether standing, kneeling, or lying down.

The effects of distant fire may be mitigated by observing where it falls, and avoiding or passing rapidly

over those places.

The fire which causes the heaviest losses and most checks advance is well directed infantry fire at medium and decisive ranges. Victory is effectively prepared at medium, but is gained at decisive ranges.

4. Distribution and duties of the three lines.—Troops allotted for the attack will, when of sufficient strength, be

divided into first, second, and third lines.

The first line, subdivided into firing line, supports, and reserves, is intended to prepare the way for the assault of the position, by engaging the enemy and thus causing him to disclose his dispositions, and so enable the general in command to decide against which part of it he will press home his main attack.

The duties of the firing line are to push forward, as near the enemy's position as possible, and to keep up a well directed fire on it from the moment such fire becomes effective.

This line will have to halt often, and occasionally for some time under chance cover. Then the units will reorganize, and issue for a new effort, as from a new

starting point.

The supports and reserves keep the firing line at its most efficient strength, by filling the gaps caused by casualties; protect its flanks by the fire they can bring to bear upon any troops which threaten them, and give confidence to those engaged in front by the feeling that there is a body of comrades following to assist them. Thus supported the firing line tries to envelop the front of the enemy's position, and between the ranges of from 800 to 500 yards keeps up on it the most effective possible fire. When about 500 yards from the position, more or less according to the nature of the ground, the firing line endeavours to establish itself in good defensive positions all along the front, whence, as from a first parallel in a siege, both false and real attacks can be made on the position in front.

The officer commanding will now have selected the portion of the enemy's position upon which he intends to direct his main attack. Opposite this portion, the supports and reserves of the first line may already have been absorbed into the firing line, and it may even have been necessary to reinforce it by men diverted from other and less important parts of the field to enable it to push forward at all hazards to well within decisive range of that portion of the enemy's position which it is intended to assault. Such reinforcements can only advance direct

to the front when within the fire-swept zone.

During this period the second line has been assembling

in several lines deep, opposite that portion of the enemy's position which has been selected for assault, and which

is to be taken, cost what it may.

The critical moment has now come. Orders are given for the final assault. The second line advances, and as it strikes the first line, carries the assaulting portions of it forward. As this movement is repeated, by the constant accessions of fresh troops pressing into the firing line, the whole continuously advance, and, when near enough, rush on the position.

The third line should take up a good defensive position where, in the event of reverse, the enemy can be effectively checked, and behind the flanks of which the remains of the first and second lines can be safe, at least

for a time, from anything like an effective pursuit.

In the event of success, it marches to the front, and takes up the pursuit of the enemy.

5. Formations.—These should—

(1.) Admit of the most effective fire.

(2.) Offer the smallest target.

(3.) Allow of the use of such cover as may be consistent with a direct advance.

Close formations are very vulnerable when used against

troops provided with modern arms.

When an advance in close formation is no longer practicable, the space must be passed over in greater or less extension, according to circumstances; but troops should be kept well in hand and not be further extended than is necessary, having regard to the fire of the enemy and the nature of the ground. In misty weather, or under cover of darkness, troops may be able to approach within striking distance without departing from their original formation.

If the ground be undulating, or the advance be through a wooded country, rendering extension in the earlier stages

unnecessary, the companies to form the firing line and supports should be detached to the front, moving in any convenient formation, with such scouts as may be necessary.

It will occasionally be possible to get within 800 yards of the enemy's position without extension, but advances in extended order should frequently be practised from

long ranges.

As the supports and reserves cannot usually fire without danger to the firing line, they will adopt that formation which is suitable to the ground and which will enable their leaders to hold the men in hand, while allowing them to advance without confusion, and reinforce quickly if required. Supports will usually move in line, and in single rank if necessary. Reserves will generally be in line or shallow columns.

The second line will, throughout, adopt those formations that are most suitable to the ground, and to the requirements of the moment. Columns facilitate movement, and small columns can utilise cover; but shallow formations

must be adopted before coming under effective fire.

The formations to be adopted by the third line will

depend upon the course of the fight.

6. Intervals.—Unless orders have been given to the contrary, the following intervals will be preserved:—Sixty paces between divisions; thirty paces between brigades and battalions; and two paces between companies, sections, and sub-sections.

7. Strength.—At points where it is intended to drive the attack home, as many men should be placed in the firing line as will be consistent with the efficient use of their rifles.

The gaps caused by casualties in the firing line must be filled up from the supports, and when they are expended from the reserves.

The strength of the supports and firing line should, at

the outset, be about the same, and that of the reserves about equal to the firing line and supports together.

The troops destined for the second line will ordinarily be about equal to, or slightly greater than those in the first line, and the third line will vary from one-fifth of the whole force employed to, in a large force, one-third, or even one-half if the enemy be out-numbered.

8. Frontage.—The frontage allotted to an attacking force should not exceed that which the troops composing its first line would cover were they deployed two deep.

9. Distances.—The distances between the three bodies composing the first line depend upon the ground and the weapons of the enemy; they will vary as the attackers become exposed to the different kinds of fire, and must be fixed by the officers in immediate command.

In broken or close ground, and in wood fighting, the distances between the firing line, supports, and reserves, may with advantage be decreased, but in these cases special precautions are necessary to guard against a flank attack. In open ground greater distances are necessary, and subject to support being forthcoming when required, successive lines, if under artillery fire, should avoid formations in which any two offer a target to the same projectile.

Distances should rarely, during any stage of the advance, exceed about 400 yards between the several

portions of the first line.

The proximity of supports and reserves to the firing line is necessary for the efficient execution of the attack, but in open ground the nearer they are the greater will be their loss; nevertheless, these distances must be greatly diminished at any risk, as soon as the firing line begins to suffer serious loss.

During the earlier stages of the attack, the second line

may be about half a mile from the first, but at any critical moment it must be at hand.

The third line should in open ground be about half a

mile from the second.

10. Pace.—Undue rapidity exhausts troops, and impairs therefore the accuracy of their fire. During the early stages of an attack, when the troops are not exposed to effective fire, the quick step should generally be maintained, and the advance be made in a general line. When the defenders' fire begins to tell seriously, the advance must be continued by alternate portions of the line, taking advantage of dead ground, if available, and thus making progress by a system of mutual assistance, as described in the drill of a section (see 53).

11. Outflanking a position.—Having regard to the increased accuracy of modern weapons, it will generally happen that a frontal attack will be unnecessarily costly unless combined with a flank or enveloping attack. The arrangements for this movement must be prepared in the first distribution of the troops; echelons to a flank and in rear of the first line are well adapted to movements of this

nature.

12. Flanking movements.—The incidents of a battle constantly offer opportunities for these either in large or small degree, and commanders of fire units must always be looking out for opportunities to help their comrades advance by the direction of their fire or the adoption of

small flanking movements.

13. Fire Discipline.—Fire discipline means strict attention to all orders from the commander, control of the amount and direction of fire, ensures careful adjustment of the sight, teaches the power of remaining under fire without replying to it, and in the din of battle, when casualties amongst officers and non-commissioned officers remove all superior control, enables the soldier to continue

(1.b.)

to deliver his fire in the best direction with coolness and deliberation.

The physical strength and endurance of the attacking force are highly tried by the fatigue inseparable from a long advance under fire, and the assault is consequently delivered under difficult conditions. These can only be counterbalanced by absolute obedience to orders and strict fire discipline.

14. Remarks on Firing.—As infantry fire within decisive ranges is all-important, the attacking force before opening fire should always try to get as close to the enemy as possible, consistent with its not suffering undue losses.

Volley firing will be maintained during the development of an attack, until the captain orders independent firing. The number of rounds to be fired every time the extended line makes a halt will depend very much upon the ground and actual conditions. The advance must not be delayed by halting oftener or for longer than is absolutely necessary to rest the men, for it must ever be borne in mind that the actual occupation of

the enemy's position is the object of the fight.

Independent firing is, as a rule, only advisable at decisive ranges, but when a favourable target offers, such as gun teams, or infantry in close order coming within medium or even long ranges, independent fire may be usefully employed. Magazine fire will, as a rule, be only employed when sudden or close contact with the enemy takes place, such as immediately before an assault is delivered, or when repelling an enemy's assault, or a cavalry charge; it may, however, be used at medium and in rare cases at long ranges where a body of troops is exposed to view for a short time. Commanders should endeavour to concentrate fire on certain portions of the hostile position, for by this means alone can a superiority of rifle fire be obtained. They should cause their men

not only to aim at such of the enemy's troops as may be facing them, but also at times on those to the right or left, for oblique fire is very effective. When there is a choice of targets, preference should be given to that which from its size is likely to suffer most from rifle fire, or to that which at the moment is of tactical importance.

It follows from the above rules, that all the firing line will not necessarily employ the same description of fire at the same time, volleys, independent or magazine fire being

used, as may at the moment be most suitable.

15. Direction.—A certain part of the hostile line or position will be apportioned to each body of troops in the firing line. It will be the duty of their respective commanders to see that true direction is maintained, and that the attack is delivered within the assigned limits.

But in stress of battle direction may be lost and gaps caused in the line; the advance, therefore, must be watched so that fresh troops may be, if necessary, at once

passed from the rear lines to the front to fill them.

16. Movements to be explained.—Before assuming formations for attack, an officer commanding any body of troops will explain to those under his command the points in the enemys position he proposes to assault, and the manner in which he purposes to carry out the attack. He will draw attention to any peculiarities of ground he wishes turned to account during the advance, and prescribe which part of the force is to direct.

He should also point out any ground that might favour the enemy in threatening the flanks of the attacking force, and explain the dispositions necessary to guard against a flank attack, should it be made.

17. Range taking.—In addition to the use of instruments for range-finding at long ranges, ranges during the advance will be estimated by selected non-commissioned

(I.D.)

officers or men. Good maps, if available, will be found useful in determining the range of prominent objects.

in receiving cavalry.—Troops will be practised in receiving cavalry. The extended line will act as described in 54, the supports as in 73. The reserve or troops in closed order will act on the principle that the most suitable formation is that which brings the greatest number of rifles to bear on the approaching cavalry.

19. Ammunition supply.—All troops detailed to attack must be supplied with extra ammunition in accordance

with the instructions in 132.

20. Mounted officers to dismount.—Mounted officers will dismount when they come under effective fire, except where it is absolutely necessary that orders should be conveyed with rapidity.

# THE COMPANY IN ATTACK.

#### 125. GENERAL RULES.

1. The Captain should thoroughly understand the object which the battalion commander has in view, he will explain and impress the same on all ranks of his company. He must, while retaining his connection with the battalion, act in concert with the companies on his flanks, and see that the correct direction is maintained. During the advance the captain should be where he can best watch the action of his firing line and issue orders to his supports. It is also important that he should keep his commanding officer acquainted with any change in the dispositions of the enemy. He will be responsible that his company is supplied with extra ammunition before going into action, and will make the necessary arrangements for the supply of reserve ammunition during the combat (132 (7)). He will, subject to orders from his commanding officer, generally control

fire, decide when it should be opened, and the nature of fire to be employed, giving the range when possible. He must bear in mind that the object of the firing line is to get as near the enemy's position as possible, and as quickly as the condition of the men will admit (see 124 (10.)) He has to decide how and when to reinforce the firing line, always remembering the principle that he should hold part of his company as long as possible in support to meet the various contingencies of the fight. Should his company take part in the assault he will lead it. He must lose no opportunity of reforming it both during the fight and after the assault.

2. Subalterns.—Half-company commanders will be in rear of their respective commands when extended in the firing line, in such a position as will best enable them to superintend their men; when in support they will lead their commands in front. They must be constantly on the look out for, and comply at once with the signals

or orders of the captain.

When two or more officers are present with a company, one will always be with the firing line. In the firing line half-company commanders will, if not stated by the captain, give the range, and nature of fire, and will watch its effect with field glasses. All firing will be controlled with the whistle. They will endeavour if opportunity offers to support the troops on adjoining flanks by seizing favourable ground, or by bringing oblique fire to bear on the defenders. On them will depend to a considerable extent the concentration of fire on decisive points. The officers will select the ground to which the next advance is to be made, and lead their half companies. They will keep the captain informed of any important change in the dispositions of the enemy, especially if any intention to take the offensive is shewn. No duty is more important for officers in the firing line, than that of seeing that the men under their command maintain the

correct direction; the cohesion, and even the success of an attack depends almost entirely on the manner in which this duty is performed. Half-company commanders will

lead their commands in the charge.

3. Section and sub-section commanders give the executive words of command for firing, &c., they will see that sights are carefully adjusted, watch over the expenditure of ammunition, the refilling of magazines, and do all in their power to check wild or unsteady firing. Acting under the general direction of the captain and half-company commanders, they will exercise a strict control over their sections and lead them from one firing position to another. If unavoidably separated from their company, they will act on their own discretion, but rejoin on the first opportunity. They will attach to their commands any stragglers they find.

4. Extensions.—Extensions may be made by one or more sections, not in excess of half the number in the

company; the remainder being kept in support.

5. Remarks on the Attack.—The frontage to be occupied by a company in the attack cannot be laid down precisely. The commanding officer, on receiving instructions from the brigadier as to the frontage his battalion is to occupy, will detail the companies for the firing line and instruct the captains as to the frontage of their companies.

The prescribed intervals between companies and sections will always be preserved and will be allowed for in calculating and allotting the front to be covered by

a company.

From a range of 3,000 to about 1,500 yards from the position to be attacked, in open country the company would probably find it most convenient to move with a fourth of its strength in an extended line, with the remainder in support 200 to 300 yards in rear. At closer ranges the firing line will require reinforcement, and an advance by alternate portions will become necessary.

6. Cover.—The men of the firing line must be instructed to avail themselves of any cover that may offer in their direct line of advance, but they are not to be permitted to move to a flank in order to obtain it beyond the limits of the front of the fire unit, except by command of an officer. They must never forget that the utilization of cover in attack is subordinate to order and cohesion, and to the necessity of pressing forward unremittingly; officers must, therefore, not allow themselves or their men to lose their direction by seeking a more protected line of advance.

Supports should make every use of cover consistent with their not losing touch of the firing line, and where the ground is favourable should be pushed close up to it. Men should be taught to close whenever temporary cover offers.

7. Assembling when dispersed, and rallying.—Troops will be practised in rapid assembly when dispersed, as described in 74.

It cannot be too strongly impressed on all concerned, that to rally, close in, and reform whenever and wherever it can be done without risk during the course of an action, is the first duty of all units from the sub-section to the battalion. The several parts of the company will, during an attack, often have to halt, and occasionally for some time, under chance cover, when they should reorganise and issue from it for a fresh effort as from a new starting point.

8. Words of command, bugle sounds, signals, and whistle sounds.—The company will be exercised by each of these methods for purposes of instruction, but when thoroughly trained, or when working with other companies, words of command should be as few as possible, and no bugle sound be permitted. Signals must be freely

ased, and the whistle sounded to attract attention to any new command or signal. The whistle should not be used to attract attention when the company is actually firing. The passing of information by non-commissioned officers and men will be practised.

#### THE BATTALION IN ATTACK.

#### 126. GENERAL RULES.

1. Distribution of command.—Extended formations deprive the commander of the direct control of his firing line, and command must be delegated to those who, over a limited extent of ground, can still exercise it. To secure the advantage of combination, it is imperative that the company commanders should thoroughly understand the object which the battalion commander has in view, do their utmost to execute it, and impress the same views upon their subordinates.

2. Commanding officer.—The commanding officer will, in the early stages of the fight, generally be some distance in rear of the firing line. As the attack develops, he will do his best to appreciate its accidents, and to assist his firing line, taking up a position near the reserve, so as

to employ it to the best possible advantage.

3. Mounted officers.—The major will lead the reserves. The adjutant will assist the commanding officer generally, and see that the mules and ammunition carts are kept

close at hand, and as well covered as possible.

4. In presence of an enemy.—A battalion will protect its front, and, when moving alone, its flanks with an extended screen or with scouts on the principles already taid down.

5. Extensions.—Extensions may be made from any formation and from any company or companies, in accordance with the requirements of the moment.

6. Frontage.—The frontage of a battalion depends on

the disposition of the brigade to which it belongs. The commanding officer will be informed by the brigadier as

to the extent of frontage the battalion is to occupy.

7. Reinforcements.—All reinforcements should be made from the same unit as long as possible; a primary extension should therefore consist of a few scouts, or one or both sections of a half company in an extended line, supported by the remainder of the company, instead of an extended company supported by another company.

Should there be any admixture of fire units after reinforcement, the men will be under the command of the

nearest officer.

8. Reserves.—The companies in the firing line and supports should have a reserve from their own battalion.

After the absorption of the supports, gaps in the firing line will be filled by bringing up sections or sub-sections from the reserve.

9. The assault.—During the delivery of the assault on the enemy's position, the men will cheer, drums be

beaten, bugles sounded, and pipes played.

In the event of the assault being successful, the troops should be reformed as soon as possible, but the attack should be continued against any portion of the position still held by the enemy. It is at this critical juncture that the enemy may be expected to throw fresh troops into the fight, either with the hope of regaining the position, or in order to cover his retreat, every endeavour should therefore be made to reform the several companies, and replace expended ammunition, so as to be prepared, if necessary, to resume the fight. A pursuit, if expedient, will be entrusted to the freshest troops.

10. Colours.—The colours, if present, will move with the

rearmost portion of the battalion.

11. Serjeant-major.—The serjeant-major will accompany the mules and ammunition carts, see that they

keep close up, and assist in the distribution of ammunition.

12. Drummers and buglers.—The drummers, pipers, and buglers, except the buglers with captains of companies, will be with the reserve.

13. Instruction of battalion.—A battalion will be exercised in moving to the attack from all formations.

It will be practised as if acting alone, and also as forming part of a larger force, both as a central battalion, that is with both flanks protected, and as a flank

battalion with one flank exposed.

A battalion will also be exercised as a battalion of the second line; in this case a skeleton firing line of a few men will sufficiently represent the advance and action of a checked first line. This is an important exercise, and should be frequently practised, if possible, on broken ground, care being taken during the advance to adopt suitable formations.

# THE BRIGADE, DIVISION, OR ARMY CORPS IN ATTACK.

#### 127. GENERAL RULES.

1. Officer commanding.—The officer commanding an attacking force should be where he can best watch the troops engaged, issue his orders, and receive reports, and should arrange for instant communication with those troops which he keeps in hand at his own disposal. He will notify to those under his command where he is to be found. If he quits his position he will leave a staff officer to state where he is to be found. It is equally the duty of officers commanding battalions, brigades, and divisions, to keep themselves at all times acquainted with the position of their immediate commanders.

2. Tactical formation.—Troops will usually reach the field of battle in column of route or in battalion quarter columns. If in close formation, it may be necessary to open them out for the purpose of affording passage to the other arms, and facilitating further formation for attack, retaining the formations most suitable to the ground and least fatiguing to the men.

3. Distribution of the attacking force and frontage.—
The details of this can only be settled on the ground, but the force should be distributed in accordance with

the principles set forth in 111 (2).

If a brigade be ordered to assault and carry a particular point in the enemy's position, its frontage should not exceed about a third of a mile, and may be required to be less. In the same conditions a division with two brigades side by side, would cover a frontage of about half-a-mile.

Where the attack is not to be pushed home, a brigade will occupy a frontage of about half-a-mile, and a division

about double that distance.

Thus in an army corps, with two divisions side by side, with one of which it is intended to assault, the frontage would be about one-and-half miles, thus leaving the third division available as a general reserve for a flank or other movement.

- 4. Meeting flank attacks.—Flank attacks will be met by the troops upon whom the attack falls, but, as a general principle, these attacks should be taken in flank by a counter-attack from the troops in rear of the second line, so as to enable that line to fulfil its duty of continuing its support to the first line.
- 5. Attacking force assuming the defensive.—An attacking force may have at any period of its advance to assume the defensive. Commanders must, therefore, during the

advance, be on the look out for positions suitable for defence.

6. Retirement.—Should a retirement become necessary, in order to ensure a continual and steady resistance to the enemy, it must be conducted by the successive retirement of alternate portions of the force, those in rear occupying the strongest positions offered by the ground (entrenching themselves if time permits), and covering by their fire the retirement of those in their front.

#### INFANTRY IN DEFENCE.

128. GENERAL PRINCIPLES FOR THE OCCUPATION OF A DEFENSIVE POSITION.

1. Selection of a position.—The manner in which a defensive position is occupied depends upon its nature, extent, the character of the ground, and the strength and composition of the forces available, so that it is impossible to lay down precise rules on the subject.

The officer commanding the force, before taking up a defensive position, will cause all the ground in its vicinity to be carefully reconnoitred. As a rule, the front and

flanks should be without pronounced salients.

When circumstances compel troops to assume an almost purely defensive attitude, a river, marsh, or other impediment to the enemy's advance will, especially if under effective fire from the position, materially assist the defenders, but, if, as should generally be the case, the defending force intends to take the offensive after having repulsed the enemy's attacks, the ground in front of the position should admit of an advance.

2. Requirements of a defensive position.—The chief points to be considered in selecting a position may be taken in

the following order :-

a. The extent of the position should be suitable to the strength and composition of the defending force. As a rough estimate, it may be assumed that a fairly strong position, partly entrenched, would require, including all arms and troops in reserve, about five men per pace.

In the event of it being necessary to occupy a position too extended for the numbers available to defend it, it will usually be preferable to occupy the front thinly, keeping a strong reserve to reinforce at any threatened point, rather than to distribute the force generally throughout the front.

b. There should be a clear field for fire over the country in front, and on the flanks, and there should be no ground in the immediate front unseen from the position.

c. The flanks should rest on ground strong for defence, either by nature, or from the existence of suitable cover.

d. There should be good cover, especially for the supports and the reserves.

Cover for the first line, if none exists, can be obtained speedily by shelter trenches, but as regards the remainder of the force, it must generally be sought for in the folds of ground behind the position.

e. Good artillery positions, so placed as to take the enemy's main advance in flank.

f. There should be sufficient depth behind the position, with good lateral communications, to admit of the free passage of troops to any desired point.

g. To ensure good means of retreat, there should be several roads or tracks leading from the front of the position to the rear.

h. There should be no good positions for the enemy's artillery.

- 3. Advanced posts.—During the reconnaissance prior to the occupation of the position, advanced posts, which it is necessary to hold, should be noted.
- 4. Communication.—Signallers will be attached to the advanced posts in order to report the movements of the enemy from time to time, and thus enable the commander of the defending force to issue his instructions.
- 5. Ranges to be noted.—When time permits, the distances of all prominent objects and exposed points on the probable lines of attack should be carefully ascertained and noted.
- 6. Distribution.—Large bodies of troops acting on the defensive should be distributed in three lines.

The firing line of the first line should be as thick as is

compatible with the free use of the rifle.

The position should be divided into sections for the purpose of command, each section having its separate reserve.

The supports and reserves should be placed well under cover, but near at hand ready to replace casualties in the firing line. The first line provides for the occupation, both of the front line, and of the advanced posts.

The second line will provide for the defence of the flanks, the troops detailed for this duty being placed according to the ground and other conditions, but, as far as practicable, under cover.

Troops not required for the flank should be assembled at one or more points from which prompt aid can be sent to support the more exposed positions of the first line, or from which counter-attacks may be readily undertaken.

The third line should be so placed as to be able to assume the offensive with the greatest possible effect after the attack has been fully developed.

# 129. Notes on Artillery and Infantry Fire. Infantry versus artillery.

1. A good effect can be obtained by infantry fire on batteries of artillery up to 1,500, and in some cases even up to 1,700 yards. Infantry, exposed to artillery fire, at a range a little beyond that of rifle fire, should be advanced to within effective rifle range; when both arms are equally well trained—even when the intervening ground is open—it should be difficult for artillery, unaided, to prevent infantry in extended order from advancing to within long ranges, but with infantry in masses it can cope single-handed.

2. When engaged with infantry, artillery will, if it has the choice, at first take up a range exceeding 1,700 yards; but, in the course of the action, it may, for some special reason, push on here and there to within that range. Unless supported by infantry, artillery can, however, rarely, and never without extreme risk, advance nearer than this to unbroken infantry; but on the defensive, or against troops disorganised or engaged with the other arms,

artillery may fight at the very shortest ranges.

3. When it is necessary to employ infantry alone against artillery, it must be borne in mind that if the latter is free to devote the whole of its attention to the former, a larger force will be necessary than if the artillery is

also under artillery fire.

4. When artillery is in motion, is unlimbering or limbering up, the teams form the best target; at other times the gunners. Should guns attempt to advance into position within range of infantry the latter, if still intact and not engaged with infantry, should be able to throw the artillery into disorder before it can unlimber. Artillery, on the move, is much more vulnerable than when in action, as it then offers a large target.

5. If it is necessary to employ a small force of infantry (say 50 men) against artillery in action against other troops, the infantry fire should be concentrated on one gun at a time. The windward gun should be attacked first, as it is the most free from smoke, and from that flank the observation of fire is conducted. When individual gunners can be noticed, those bringing up ammunition should be fired at first, as on their movements the rapidity of the fire depends.

130. The employment and fire of artillery.

1. Artillery, when covering the advance from long ranges, is, as a rule, sufficiently protected and require no escort. If an escort is considered necessary, it will be specially detailed, and posted on the exposed flank in such a position as the ground renders most suitable.

2. The escort must post scouts so as to prevent the

possibility of surprise.

3. Artillery, however, should generally be self-dependent; one or two men, intelligently posted, should afford ample notice of the enemy's approach from any direction.

4. Infantry who are 600 yards in front of guns are sufficientlysafe from premature shell, and, when \(\frac{1}{4}\) mile from

the target, from effects of short bursts of shrapnel.

5. A cessation of fire at any time will probably mean that the battery is about to move. Fire should be directed

on the teams as they come up.

6. The trajectory of modern high velocity guns is low; all cover, therefore, becomes more valuable to infantry as they approach the guns, for their accuracy is practically

as great at 1,500 as at 500 yards.

7. When posting infantry with a view to firing on guns as they come into action, it should be remembered that artillery as a rule, prefers high ground, and will not, if possible, come into action within range of visible infantry not engaged with other troops.

8. The appearance of individual officers on a probable artillery position is a sign that guns are coming; the neighbouring infantry should then remain concealed, if possible, and in readiness to overwhelm the guns with a destructive rifle fire.

9. Infantry should avoid the neighbourhood of conspicuous objects (trees, houses, stone walls, &c.), as these assist artillery in finding the range. A small hollow, or soft ground, immediately in front of infantry is very baffling to the enemy's artillery, as is also a position some distance in rear of the crest of a plateau.

10. A battery will open fire with common shell and percussion fuze to find the range and then change to shrapnel

shell and time fuze.

11. Should a pause occur when changing from common to shrapnel, it will give an excellent opportunity for

infantry to push in.

Common shell with percussion fuzes burst on impact. Shrapnel shell with time and percussion fuzes are set to burst in the air in front of the object, but will also burst on striking the ground.

12. Infantry, under artillery fire, often incur greater

loss by retiring than by advancing.

13. If the enemy fires a salvo, it often indicates that the infantry is so well placed that it is difficult for him to

observe the effect of his fire.

14. One or two shrapnel which burst well in front of advancing infantry often mark the spot on which the enemy intends to open a rapid fire of shrapnel when he considers that the infantry are within reach of the bullets. This space should be crossed as quickly as possible.

# To disable guns.

1. Breech-loaders.

Open the breech, and, if possible, remove some (I.D.)

portion of the breech mechanism, or bend or burr it with the handspike. N.B.—Many modern guns have removable vents; it is of no use to spike these.

2. Muzzle-loaders.
Spike the guns.

3. All guns.

Carry away linch-pins and tangent scales, break elevating wheels and trunnion-sights.

# 132. SUPPLY OF AMMUNITION TO TROOPS ENGAGED.

1. Rounds per Rifle.—The amount of small-arm ammunition taken into the field for infantry is as follows:—
100 carried by the soldier.

85 { in four small-arm ammunition carts and on two mules accompanying } Battalion Reserve.

185

77 in the divisional ammunition column. 80 in the ammunition park.

322 Total rounds, per rifle, on first taking the field.

- 2. Responsibility of officers.—Commanding officers of battalions are responsible for the 185 rounds per man in battalion charge. Officers commanding Royal Artillery are responsible to general officers commanding for the 137 rounds per rifle in the ammunition columns and parks under their respective commands.
  - 3. Position of reserve of ammunition.—The position of the divisional ammunition columns and ammunition parks on the line of march is settled by general officers commanding divisions and army corps.

4. Infantry brigade reserve.—Each brigadier will detail a selected officer, for whom a horse is supplied with the brigade staff, to command the brigade ammunition reserve, formed from his battalions' S.A.A. carts.

On the march two small-arm ammunition carts and two mules will follow immediately in rear of each battalion; the remainder of the small-arm ammunition carts, two per battalion (total eight in a four-battalion brigade), will be brigaded, and will follow in rear of the brigade, under command of the officer mentioned above.

In action one small-arm ammunition cart and one mule will follow each half-battalion, the mule in rear of the supports, the cart in rear of the reserve, the brigade ammunition reserve will follow in rear of the centre of

the brigade.

In difficult ground officers commanding battalions and brigades will give special directions as to their ammunition carts.

Brigadiers, officers commanding battalions, and the officer commanding the brigade ammunition reserve must keep themselves mutually informed of each others'

position.

When a cart with the battalion is emptied it will be sent back to the brigade ammunition reserve, and will be replaced by a full cart by order of the officer in charge; as soon as there are four (three in a three-battalion brigade) empty S.A.A. carts with the brigade ammunition reserve the officer in charge will either dispatch a message, or signal as follows, to the officer commanding the divisional ammunition column: "Send up four (or three) S.A.A. carts to the — brigade."

On the arrival of the carts from the divisional ammunition column, horses will be unhooked and changed. The empty carts will then return to the ammunition

column, at a trot.

5. In the event of a brigade in action being ordered to advance through woods or broken ground where lateral communication cannot be kept up, the S.A.A. carts of the brigade reserve should be distributed under the orders of the general officer commanding and follow battalions.

In the case of a battalion being detached to any distance the same course should be pursued, a brigade

reserve being re-formed as soon as practicable.

6. Instructions for the officer in charge of a brigade ammunition reserve of infantry:—

(i.) He will as soon as possible open up communication by signallers with the ammunition column.

(ii.) A mounted orderly will be sent to him from the column to be used only for the purpose of communication with the column when signalling is difficult.

(iii.) The earliest opportunity is to be taken (when four or three S.A.A. carts are empty) to get full carts from the column to replace empty ones, and the officer commanding the column should be kept informed by signal of the number of empty carts waiting to be exchanged for full ones. The brigade ammunition reserve should not be regarded as belonging to any particular corps, but be available for the brigade generally.

(iv.) No men or horses belonging to the infantry brigade are to be sent to the ammunition column.

No men or horses belonging to the ammunition column are to be sent further to the front than the brigade ammunition reserve (except in a case of very great emergency).

(v.) Empty S.A.A. carts are to keep with the brigade ammunition reserve as they advance until they are replaced by full ones.

(vi.) Receipts prepared by the officers from the divisional column will be signed by the officer in charge of the brigade ammunition reserve for the

full num er of carts received by him.

7. Carriers.—The Captain of every company will detail one non-commissioned officer and two privates to act when required as ammunition carriers (if the company is strong, three privates should be detailed). Only men of strength and activity should be selected for this duty, the importance of which cannot be overrated.

8. Battalion arrangements for issuing extra ammunition.—Whenever a general action is anticipated commanding officers will issue to the men 50 rounds from the S.A.A. carts, so that, if possible, every man shall carry

150 rounds on his person.

If for any reason these carts are not at hand, the companies of the first line will be furnished with two extra packets per man from the other companies. This will be

replaced as soon as possible from the battalion carts.

During an action every opportunity will be taken for keeping up the supply of ammunition of the firing line by sending some up by carriers or with reinforcements. These carriers bring the ammunition from the mules (or from the carts) in bags, and distribute it to the men in the ranks. The bags, which are specially made for the purpose, form part of the equipment of the ammunition cart. The loads are not to exceed 600 rounds to each carrier, and, when advisable, the carriers will be led up to the troops in action by a selected non-commissioned officer.

When more ammunition is required by the firing line it will be taken forward by any men at hand from the

main body, acting as carriers.

The carriers will move direct to the companies for which they are destined, and will remain in their ranks until the action is over.

It is the duty of supernumeraries to make sure that all ammunition from the killed and wounded is collected and distributed to the firing line, its supports and reserves.

The system of carrying ammunition by hand, here provided for, is not to prevent every endeavour being made to push the ammunition carts as far forward as practicable. They ought, in ordinary circumstances, to get within 1,000 yards of the firing line, and in broken and undulating ground considerably nearer. With pack animals, it should be practicable to get within 500 yards of the firing line.

The immense importance of having a supply of ammunition out of sight of the enemy, and yet within easy reach of the firing line, will justify great risks being

incurred in getting it to such a position.

# PART VI.

# ROUTE MARCHING, AND ADVANCED AND REAR GUARDS.

#### I.—ROUTE MARCHING.

133. The order of march.

The success of military operations depends in a great measure upon the compact and well regulated order of

march observed by an army.

The watchful care of the officers can alone ensure that marches are conducted with the least possible strain on the men. A small check at the front of a long column is a serious delay to the men in the rear of it, and continued stepping out, or rapid closing, tends to exhaust troops. Company officers must continually watch to see that their companies maintain their proper positions in the column of route.

Columns should always move with as broad a front as the road or track will permit, consistent with the passage of staff officers, or orderlies, for whom space must be left on the right flank. On home service, space for traffic must be maintained on the right flank.

Brigades will usually be ordered to march at a specified distance from each other, and will not close up unless

specially ordered to do so.

Distinct orders should be issued as to the exact position to be maintained by all transport proceeding with or

following any body of troops.

When it is necessary for baggage to march with the striking portion of the column, it may be placed between brigades but not between battalions.

## 134. Places and duties of officers.

All officers are to remain in their places during the march, except that one officer of every company will march in rear of it, and will be responsible that no man quits

the ranks without permission.

A ticket, in the following form, "——marched off with the battalion, but was unable to keep up with it" (captain's signature and date) will be given to every man who is so ill as to be unable to march. These tickets are to be taken back by the orderly serjeants when the men rejoin their companies.

Men falling out for a short time to ease themselves are not to receive tickets, but must leave their arms to be carried by the section to which they belong. Men will not fall out for water; when necessary, regular halts will

be made to enable the men to drink.

The mounted officers will move frequently from one part of the battalion to another, to ensure preservation of order, and to judge the marching power of the men; they are responsible for keeping the commanding officer informed when any company is unable to keep up, and the commanding officers are responsible that the officer commanding the brigade is informed when a battalion cannot maintain its distance without hurrying the pace.

#### 135. Marching off.

Whenever the battalions or brigades are quartered or encamped at some distance from each other, they should never be brought together prior to marching off but should be ordered to pass, at a named hour, a specified spot, to be so selected as to obviate any battalion going out of its direct track.

136. Halting, marching at ease, and passing words of command.

The captain will call his company to attention be-

fore and after regular halts, which should usually be made half-an-hour after the force marches, and afterwards once an hour for five minutes, counting from the time at which the rear unit halts. When the company is again in motion, the words March at ease should, as a rule, be given.

The words Attention and March at ease, given by the lieutenant-colonel, are to be repeated by all the captains.

Whenever the leading company of a battalion, or the leading battalion of a brigade, is halted, all units in rear will regain distances. Unless other orders are given, 30 paces distance will be maintained between battalions and other units.

## 137. Defiling, and increasing front.

The rear companies of a column will conform to any change of direction, increase or diminution of front, which may be made in front; but in the absence of special orders, not before arriving at the point at which such change, &c., was begun.

Whenever troops come to a defile, stream, or bad place in the track, one of the mounted officers will point out to the captain of the leading company where it can

be crossed.

An officer will cross in front of the men and remain

on the spot till the rear of the command has passed.

It will generally be advisable to increase the front at any obstacle, except in a defile, and no diminution of front, beyond what is absolutely necessary, should be permitted.

138. Companies, battalions, &c., to lead in turn.

To equalise the amount of exertion called for in all marches, it is essential that companies in a battalion should lead in turn, and that battalions should similarly lead by turn in brigades. The band or drums (or buglers) should always march in the centre of the battalion column.

# 139. Bugles not to sound.

No bugle is to sound without an order from the officer in command of the brigade.

# 140. Hurry and stepping-out to be prevented.

Men must not be hurried on the march; they are to be instructed never to step out beyond the regular step, still

less to double, unless by word of command.

When the proper distance between companies, or sections, cannot be preserved without an alteration in the step, it must be effected by making the head of each battalion or company step short; this is especially necessary after passing an obstacle or ascending a hill, instead of allowing the others to step out. The word will be passed to the front by officers commanding companies, battalions or brigades—Cannot keep up.

# 141. Troops crossing temporary bridges.

In passing over a pontoon, a spar, or other temporary bridge, infantry must break step, and all music cease;

files or sections must not be closed up.

Halting on a bridge is to be avoided. If it be absolutely necessary to halt on a pontoon bridge, wheels of wagons, &c., must rest as nearly as possible midway between two boats.

If a bridge sways so as to become very unsteady, the column must be halted, and not allowed to resume its march till the swaying has ceased.

# II.-ADVANCED AND REAR GUARDS.

#### 142. INTRODUCTION.

Every body of troops moving in a hostile country, or

through a country where it is possible that an enemy may be encountered, must have an advanced guard.

The general duties of an advanced guard are-

(1) To search for the enemy and guard against surprise.

(2) When the enemy is met, to push back his advanced troops, and prevent the march of the force from being interrupted.

(3) If the enemy is met in superior force, to check his advance so as to enable the necessary dispositions

The advanced guard is subdivided into two parts, the vanguard and the main guard. The vanguard is composed of cavalry when available, with a body of infantry as a support. The main guard comprises the remaining troops of the advanced guard. It is only when the advanced guard is very large that guns are attached to the vanguard.

Advanced guards pay no compliments.

## 143. Duty of vanguard.

1. The special duty of the vanguard is looking out for the enemy. This work usually devolves on the cavalry. The infantry forming part of the vanguard is meant to be an immediate support to the cavalry in case of any sudden check or reverse.

2. The work of the cavalry will be performed by pushing out a number of small patrols sufficiently far in advance, and to the flanks, to ascertain that there is no enemy within striking distance of the line of march. The distance in advance, and the extent of front covered by these patrols, will necessarily depend on the size of the advanced guard, of the force it is covering, and the presence or absence of other columns on parallel routes.

3. The work of these patrols is quite distinct from

that of a screen of scouts. They will push out on different points along the front and to the flanks in the direction where the enemy may be expected to be found. In civilized warfare these points always suggest themselves, as both sides are tied to certain well-defined routes of movement and it is these routes and their neighbourhood that the patrols must specially explore. A screen of scouts in front of an advance guard is seldom necessary, except when in the presence of, or in the immediate vicinity of, an enemy.

4. The duty of the cavalry patrols is, in the first place, to ensure that the line of march and its vicinity are clear of the enemy. With this object no ground near the line of march, which could afford cover to an enemy, should be left unsearched. The further duty of patrols is to ascertain where the enemy is. In carrying out this work they should observe and report not only what may concern the movements of the force at the moment, but also that which may affect it later on as

it advances.

5. It is always advisable to indicate to reconnoitring parties the points on which information is specially required, in addition to reports about the presence of the enemy; such as, whether a certain position has been left unoccupied—a certain bridge left unguarded—a certain railway junction abandoned.

6. It is essential to have reports that no enemy has been seen, or that there is nothing of importance to report. But in the case of negative information of this latter kind, in order to save unnecessary fatigue, fixed times should be specified for rendering such reports.

7. Reports should accurately relate facts actually observed or ascertained. Hearsay information must be distinctly characterised as such. When the enemy's presence or movements are reported, the composition and

probable strength of his force must, when possible, be stated; also the direction in which he is moving, and

the time and place whence he was observed.

8. Post and telegraph offices often afford valuable information through the letters and despatches found there. These should be examined under such arrangements as the commander of the advanced guard may be able to make. When the force is large a special officer should generally be appointed for this duty.

9. When a patrol is detailed for any special service, such as the examination of a particular locality, position, or village, it will, when possible, be accompanied by an

officer.

10. When patrols are pushed forward several miles in advance, signalling parties should be dropped at favourable points on the line of advance to transmit information to the commander of the advanced guard.

# 144. Duty of main guard.

1. As the special work of the vanguard is reconnoitring, so the special work of the main guard is fighting. The troops forming the main guard therefore march in that order in which they are required to come into action. But guns should never move at the extreme head; they should always be preceded by some infantry.

2. When the enemy is in the neighbourhood, or within striking distance, dispositions for meeting an attack must always be made when passing through defiles, or localities

favouring an attack by the enemy.

3. Similarly, when an advanced guard requires to halt in the vicinity of an enemy, the reconnoitring parties should keep vigilantly on the alert, and the halting place should, when possible, be selected with a view to meeting an attack.

4. As long as the enemy is not met in superior force it will be the duty of the advanced guard to attack

and drive back any hostile troops it encounters, preventing any unnecessary check to the march of the main body of the force. If the enemy be found occupying a position in superior force, the commander of the advanced guard must act in accordance with the special instructions he may have received for such a case. If the enemy be met advancing in superior force, the most favourable ground at hand should be at once occupied, with a view to checking his advance. How far the defence of this position should be continued depends on whether the commander of the force intends to move up in support of the advanced guard, or decides to fight on some position in rear. In the latter case the advanced guard should fall back fighting and delaying the enemy's advance.

5. An advanced guard is closely bound to the body of troops it is covering, and its movements must be regulated by the way in which the force it is covering would be affected by its action. All independent enterprises on its own account are absolutely outside its

province.

#### 145. Strength.

1. The strength of an advanced guard will be proportionate to the strength of the force it is covering. This will be further influenced by the nearness or distance of the enemy. The larger the force, the larger in proportion may be the advanced guard. This proportion may vary from a fourth to an eighth, but its strength is mainly regulated by the work it is meant to perform.

2. When the force is large, its movements will usually be covered by a detached body of cavalry, whose special duty is to search for the enemy and report his position and

movements.

3. When the force is small, or cavalry for scouting purposes is not available, this work will be done by the

advanced guard. But in all cases the advanced guard is responsible for the security from surprise of the troops it is covering.

#### 146. Composition.

1. The organisation of an advanced guard provides for the double duty of reconnoitring and fighting, it may therefore be composed of all three arms.

2. The proportion of each arm in an advanced guard depends on the nature of the work to be done, and the character of the country to be traversed. The number of cavalry should be at least adequate for its protection. In an open country, the number of cavalry and guns may be proportionately much greater than in a close or mountainous country. The bulk of an advanced guard is usually composed of infantry.

3. Tactical units should be preserved as far as possible in forming the advanced guard, and it will, as a rule, be furnished by the battalion, brigade, or division that heads

the line of march.

- 4. Mounted infantry, if attached to an advanced guard, will be most profitably used in moving rapidly to seize or hold special points, such as bridges, defiles, etc., where it may be necessary to forestall the enemy, or by the occupation of which the further movements of the advanced guard may be facilitated. Mounted infantry may also be usefully employed in support of the reconnoitring cavalry, by holding points on which the cavalry may have to fall back, or otherwise helping to cover its retreat. Mounted infantry should never be used for reconnoitring when cavalry is available.
- 5. The special circumstances of the case must determine the amount of baggage which accompanies the advanced guard. But when it is likely that the enemy may be

encountered, the advanced guard must be as free as possible from transport of any kind.

#### 147. Dispositions on the march.

1. The main guard of the advanced guard follows the vanguard at a distance depending on the strength of the whole. When the advanced guard is small, its main guard will be proportionately nearer the vanguard. The duty of the main guard is, by timely support, to enable the vanguard to continue its work of exploration. The distance therefore between these two bodies should be

such as would meet this requirement.

2. A party of engineers will usually be attached to the advanced guard for the purpose of removing obstacles which require skilled labour. It may, under special circumstances, be attached to the vanguard, but usually moves with the main guard. All minor obstacles to the advance of the column should be removed as far as possible by the advanced guard; but the heavier work of restoring bridges, repairing roads, etc., will usually require special parties to be detached from the force in rear.

- 3. No fixed distance can be laid down between the advanced guard and the body of troops it is covering. The primary duty of the advanced guard is to protect the troops moving in rear from surprise. The main guard should therefore be sufficiently far in advance to enable the troops it is covering to form up in sufficient force to receive the enemy should he drive in the advanced guard. This distance will depend on the length of the column. It must always be sufficient to give the column time to form for battle.
- 4. Connection should be maintained between the different parts of the advanced guard. This will be done either by connecting links or by signallers, as may be most

convenient. Cyclists, on good roads, are useful for this purpose, and for keeping up communication with the

main body in rear.

5. At cross roads or points where it is possible that the column may take the wrong route, a couple of men should be dropped by the advanced guard to point out the correct route to follow.

# Commander of an advanced guard.

1. The commander of the advanced guard should receive clear instructions on the subject of engaging the enemy, But these instructions must necessarily allow considerable latitude to his own judgment and discretion. He should. however, be perfectly informed of the general intentions of his superior, so as to enable him to frame his action in accordance with these intentions. He will usually accom-

pany the vanguard.

2. The commander of an advanced guard must avoid becoming seriously engaged in any way at variance with his instructions, or in a manner that may disarrange the plans of his superior as far as he has been made acquainted with them. But as the work of the advanced guard is to prevent the force it is covering from being retarded or molested in its march, he must not hesitate to attack and drive in the enemy's advanced parties that he may come in contact with, when not in superior force.

# Advanced guard in a retreat.

It is always advisable to have a small advanced guard to a retreating force. Its special duty is to clear away obstacles that would delay the march of the force. But it should observe all precautions against surprise, and should always be provided with some cavalry for scouting. A strong party of engineers should be attached to it for the removal of obstacles, restoration of bridges, etc., for it

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is important that the force should not be compelled to halt or fight in a disadvantageous position.

#### REAR GUARDS.

Rear guards are of two kinds—to a force advancing, and to a force retiring.

# 150. Rear guard to a force advancing.

1. A rear guard to a force advancing is chiefly employed in collecting stragglers, guarding baggage, keeping off marauders, and generally covering the rear of the column. It is usually composed of infantry, with sometimes a few cavalry added for watching the flanks.

# 151. Rear guard to troops retreating.

1. A rear guard to troops retreating is essentially a fighting force. Its duty is to enable the main body to conduct its retreat in good order, and without being molested by the enemy. It should be lightly equipped

and unaccompanied by baggage.

2. The first thing a defeated force requires is to be relieved from the pressure of a too close pursuit. This is done by detaching a portion of the force to make head against the enemy's advance while the remainder continues the retreat. The remainder of the force is thus enabled to gradually recover order, and continue its movement in comparative safety, and if compelled later to fight, the delay obtained may have allowed time for re-organisation.

3. When the pursuit is not close, the disposition of a rear guard on the line of march will closely resemble that of an advanced guard reversed. Cavalry should form the extreme rear watching the country by which the enemy could advance. The remainder of the rear guard moves in the order in which it can most readily come into action.

As a rule, there should always be some infantry between

artillery and the enemy when on the march.

4. The manner in which a rear guard carries out its mission of gaining time for the remainder of the force to retreat in good order, is by compelling the enemy's troops to halt and deploy for attack as frequently as possible. This is usually effected by taking up a succession of defensive positions which the enemy is compelled to make dispositions for attacking or turning. When these dispositions are complete, the rear guard moves off and repeats this action on the next favourable ground. All this consumes time, and time is what is most needed by a retreating force.

5. In occupying positions of this kind, two important points have to be observed: one to show as strong a front as possible to the enemy, the other to make sure of good

lines of retreat.

6. The manner of occupying a rear guard position differs from that of occupying a position meant to be resolutely defended. The object of a rear guard is to compel the enemy to deploy a considerable portion of his force before venturing to attack, and then to move off before the attack is pressed home. It can therefore place the greater part of its force in the fighting line from the outset, retaining a proportionately small part in reserve.

7. Counter-attacks should seldom be resorted to unless for some urgent purpose. It cannot be hoped to inflict an appreciable defeat on the enemy who is being constantly reinforced by troops in rear, and it is of more importance to save one's own men for the arduous duty assigned than to inflict a loss on the enemy that he can quickly

make good.

8. A point of great importance to the commander of a rear guard is judging the proper time to retire. By retiring too soon he would be only partly carrying out the

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work required from the rear guard. By holding on too long he may endanger his retreat, and the rear guard

may be driven back in disorder.

9. In withdrawing from a position a part only of the force usually moves at a time, the part that moves first occupying the next favourable ground in rear to cover the retreat of the remainder.

10. When retreating, it is always advisable to send beforehand a reliable officer to the rear to note favourable positions for defence on the line of retreat of the rear

guard.

- 11. A rear guard should keep patrols as widely as possible to its flanks. Early information will thus be obtained of any attempt of the enemy to pass between the rear guard and the main body. But it is seldom advisable to detach parties of infantry and artillery to move at a distance on the flanks. If the enemy be in force, these parties could effect little. If he be not in force, his movements in that direction, once they are discovered, are of little importance. The rear guard should, as a rule, move concentrated, ready to fight with its full strength, but keeping scouting parties well out to its flanks and rear to obtain information.
- 12. Too great a distance should not be allowed to intervene between the rear guard and the force it is covering. When a rear guard halts to fight, every moment separates it further from the main body; whereas with a pursuing force every moment brings its reinforcements closer.
- 13. Clear instructions should be given to the commander of a rear guard as to the extent to which he is at liberty to break down bridges, burn villages, destroy property, &c., with a view to impeding the enemy's advance; for the retreat may be only of a temporary character, and it may be in contemplation soon to re-occupy the country passed through.

152. Flanking parties.

The flanks of the line of march will be watched to a wide extent by mounted patrols. The safety of the line of march depends on this patrolling. When properly performed, ample warning is afforded of the presence of an enemy. In a mountainous, close, or intricate country, special precautions must be taken to cover the flanks of the line of march.

153. Formation and movements of a small infantry advanced guard on a road and in open country.

1. When a company forms the advanced guard it is divided into two parts. The leading part, termed the advanced party, sends forward two or more files to the front, and, when the country is open, similar small parties to the flanks. The duties of these parties are to look out for, and give notice of, the presence of an enemy.

2. The advanced party follows the files on the road at a distance of not less, as a rule, than two hundred yards. The remainder of the company in support, will follow at a distance of from two hundred to three hundred yards. The support will have a connecting file with the advanced party, as well as with the main body in rear.

3. Buildings.—All buildings in the immdeiate neighbourhood of the line of march should be examined by the leading files to ensure that no enemy is concealed in them. Large dwellings, or important buildings at a distance from the road, should be examined by a special party detached for this purpose.

4. Villages.—Villages should not be entered by the advanced guard until it has been ascertained that they are not occupied by the enemy. The leading files at the head of the advanced guard should cautiously approach and move through the village, while the flanking files at the

same time move round the outskirts. While this is being done the remainder of the advanced guard halt at some distance from the village.

5. Defiles.—A defile enclosed by heights must not be entered until the heights have been examined by flanking parties. The leading files of the advanced guard will then traverse the whole defile, if a short one, before the support enters. If it is a long defile the remainder of the advanced guard follows at such distance and in such formation as may be considered advisable.

6. Woods, &c.—Ground, within reach of the line of march, capable of concealing an enemy, must be examined

before the advanced guard moves past it.

In case of attack the leading files, at first, hold their ground, as a rule, as an enemy on a road has to advance on a very narrow front. The advanced party then either advances to support the leading files or takes up a position on one or both sides of the road to cover the retirement of the leading files if required to fall back. If the leading files fall back at once on being attacked they mask the fire of the advanced party and endanger its being attacked before it can form up. Unless the advanced guard meets superior force, the march of the main body should not be checked.

7. Formation of a small advanced guard in an open country.—When the enemy is known to be at a distance, the formation of the advanced guard is similar to that on a road, but flanking files must be always out on a level with the leading files. If there is a possibility of the enemy being met, about half of the advanced party will be extended between the leading files and the flanking files. The remainder of the advanced party follows in support. The rest of the advanced guard forms a reserve.

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# PART VII.

#### OUTPOSTS.

# 154. Object and duties of outposts.

When an army halts, duties analogous to those performed by the advanced guard during the march devolve upon outposts.

These duties are-

(a) To secure the repose of the troops in rear;

(b) To check the enemy's advance until preparations are made to receive him;

(c) To obtain intelligence regarding the enemy;

(d) To prevent his obtaining information.

For the performance of these duties, forces are detached to the front and flanks of the main body. These forces may be formed from the advanced guard after a march, but if not so formed will be posted under its cover, and the advanced guard will not be withdrawn until the outposts are in position.

When the army advances, the outposts, if not intended to be used as an advanced guard, will not be withdrawn until the advanced guard has passed through them and

has secured the ground in their front.

When the army remains stationary, outposts will be posted daily and relieved at daybreak, so as to have a

stronger force at hand at an hour when attacks are generally made; the force, coming off duty, will not proceed beyond the rear of the supports until the ground

in front has been reconnoitred and reported clear.

If outposts are covering a position on which an army intends to give battle, they must, if attacked in force, take care not to become seriously engaged, but will fall back in good order and as slowly as possible, so as to give time to the main body to get under arms.

When they are posted on the selected battle-field, or are ordered to hold an important post, they must, if attacked,

stand their ground to the last.

During a retreat, outposts will hold their ground as long as possible in order to deceive the enemy and give time to the main body; this resistance must not be so protracted as to compromise the safety of the army by obliging it to fight in order to extricate the outposts.

When falling back they will always be covered by patrols or an extended screen, according to the nature of

the country.

# 155. Division of outposts and amount of force to be employed.

Outposts should be, when possible, divided into three bodies, and are to be composed, as far as practicable of complete units.

(a) Piquets, with sentries;

(b) Supports;(c) Reserves.

The strength of the outposts varies with the nature of the country, the character and proximity of the enemy, and the position of the camp or bivouac with regard to the fighting position; whether they are intended for purposes of observation or for resistance more or less protracted. Their strength also varies

with that of the main body, as a small force requires relatively stronger outposts than a large one, but this should seldom exceed one-sixth or one-seventh of the entire force. In small forces the main body usually takes the place of a reserve, and is in close proximity to the line selected for defence. The piquet line and supports should be furnished from the same corps.

The following approximate distances between component parts of outposts may be used as a guide in the

selection of positions for each :-

Sentries .... 100 to 400 yards in front of piquets. Piquets .... 400 ,, 800 ,, supports. Supports.... 400 ,, 800 ,, reserves. Reserves.... 1 to 2 miles in front of main body.

Subject, however, to the principle of affording protection and repose to the main body, the positions of the various portions of outposts is dependent upon ground rather

than upon any prescribed rule of distance.

No more men should be employed on the harassing duty of outposts than is absolutely necessary. With a commanding position in clear weather, it may be possible to diminish their strength very materially, especially as regards the line of observation.

Shelter, with means of easy egress, will be provided, when practicable, for piquets, their supports and reserves.

# 156. Nature of the force to be employed.

Outposts are generally composed of cavalry and infantry with artillery, and, if necessary, machine guns. It is only rarely, when the enemy is far distant, that cavalry can perform these duties alone without the cooperation of infantry, and on the other hand infantry cannot advantageously perform them without the aid of cavalry, except in a mountainous or rugged country. In an enclosed country and by night the chief work

falls upon the infantry, while in an open country, by day, most of the work can be better done by cavalry. Cavalry should never be posted in the line of sentries.

Artillery is seldom employed in the front line of outposts, except when a defile or important approach has to be defended, or when the front line of outposts is on the selected battle-field. Its place will be generally with the reserve.

157. Selection of line for outposts and method of occupation by day.

An army, large or small, always endeavours to halt in

the vicinity of water.

As this is generally below the level of the surrounding country, battle can rarely be accepted on the actual camping ground, but the best position in the vicinity is selected for the fight. Outposts therefore are generally divided into two lines.

(a) The line of observation.

(b) The line of defence, on which any hostile advance is resisted; this line may be the selected battle-field, or, when on commanding ground, be coincident wholly or partly with the line of observation.

The outpost line should prevent an enemy bringing artillery undiscovered into any position within 4,000

yards of the main body.

In order to combine defensive strength with facility of observation, the outpost line should run along well-defined features: such as a ridge of high ground, the further edge of a wood, &c. Its flanks should, if possible, rest on natural obstacles which cannot easily be passed: such as a morass or river.

When such elements of safety do not exist, the flanks should be doubled back in the case of small bodies of

troops; with large forces the exposed flank or flanks should be watched by troops of one or more arms detached for the special purpose.

In practice, all the foregoing advantages can rarely be secured and the best must be made of the ground as it

exists.

The chief object should be to select, in the shortest time, a line serving the immediate purposes, improving upon it later if time permits.

All the approaches by which an enemy can advance should be observed, and an officer posted on some

commanding spot with a powerful telescope.

Communication should be maintained between the different portions of the outposts and the main body by means of visual signalling, supplemented, if necessary, by mounted orderlies. When the country is unsuitable for signalling, cyclists or mounted orderlies should be used.

## 158. Duties by day.

The duties of outposts generally must be carried out upon accepted principles, rather than upon any precise rules.

The state of the troops, the nature of the country, the weather, the proximity and character of the enemy, cause such different conditions as render it impossible to lay down instructions suitable in every case. Such instructions only hamper an intelligent, and mislead a negligent officer.

The greatest latitude and responsibility should be allowed to officers on outpost duty, consistent with the

performance of the general object in view.

All officers on outpost duty should consider-

(a) The object to be attained by the outposts.

(b) How that object can best be attained.

When going on this duty they should carefully examine

all the country over which they pass on their way, noting the favourable positions for disputing the ground in case they are driven in.

They should be provided with field-glasses, a watch, magnetic compass, a map, memorandum-book and appli-

ances for making a rough sketch.

They should retain all written, and write down all verbal orders received, and hand them over with a note of any useful information obtained, to the officers relieving them.

They should thoroughly examine the position as soon as posted, and decide upon their arrangements in the event of attack.

All reports and information obtained are to be sent at once to the officer commanding the outposts.

A report should show :-

(a) From what piquet or post it emanated.

(b) Date and time of despatch.

- (c) Source of information, and whether apparently reliable.
- (d) If the enemy has been seen, the particulars of his force.

Points of the compass should be used in descriptions. When this is not practicable, the writer will particularise by interpolating before right, left, front, or rear, the words our or the enemy's.

Reports must be legibly written, the names of places

and persons being given in Roman letters.

Vague and indefinite terms must be avoided.

Piquets, supports, and reserves are to keep each other informed of their own movements and those of the enemy.

159. Selection of line and method of occupation by night.

Outposts at night can seldom be placed in precisely the same position as by day, but they are never to be drawn

back from the front unless for some adequate tactical reason, such as to hold the junction of roads or paths.

At night an enemy's advance, except in very open ground, must be confined to roads and tracks; these should, therefore, be occupied together with any bridges or fords near the outpost line.

Patrols must be pushed well to the front along all roads and tracks, and, laterally between the points occu-

pied by the line of observation.

The safety of the outpost line, at night, depends principally upon the manner in which the service of patrolling is carried out.

Cavalry, if available, may be employed with great advantage in pushing forward small patrols to a considerable distance, and in watching bridges and fords beyond the reach of infantry.

Alterations in the disposition of the outposts for nightwork should be arranged during daylight, and be carried

out after dusk.

# 160. Duties by night.

Outpost duty by night requires, if possible, greater

vigilance on the part of all employed than by day.

Knowledge of the ground confers great advantage upon the defenders of a position by night. A few men, well posted under cover and boldly handled, will throw into confusion and arrest the advance of a heavy column.

All sentries, piquets, &c., should maintain their posts as long as possible; if they stand firm their numbers will be largely exaggerated, and considerable delay caused to the attack.

Firing by night must be completely under control,

and delivered by word of command.

Outposts will get under arms an hour before daylight,

and resume the day positions so soon as it is light and it has been ascertained by means of patrols that all is quiet in front.

## 161.—Strengthening outposts by artificial means.

When a force halts for more than a few hours, free communication between the several portions of the outposts must invariably be secured, so as to enable them all, in case of attack, to act in concert. For this purpose, passages should be made through enclosures and walls, hedges and brushwood cut down, ditches filled up, and the nearest line from one post to another marked out by felled trees, straw placed on poles, or other means.

As nothing checks the ardour of an attack more than an unexpected obstacle within a moderate distance of the place attacked, every impediment should be placed in the way of an enemy's advance, at a short distance from the ground where it has been determined to make a stand.

In order also to enable outposts to resist the enemy's attack successfully, the front of attack should be narrowed as much as possible by blocking up roads, defiles, bridges, and all approaches which are not required by the force; and if a force encamps for any length of time in one place, the outpost line should be strengthened by abattis, redoubts, fortified farmhouses and villages. These measures, however, will only be carried out under the orders of the officer in command of the outposts. (See 164.)

The strengthening of piquet posts will be secured by the construction of slight, or utilisation of existing defences as best ensure (a) cover from view and fire of enemy; (b) clear field of fire without exposure of

piquet.

# 162. Information regarding the enemy, &c. There are three means by which this is obtained—

(a) Traces left by the enemy.

(b) Information obtained by questioning inhabitants, prisoners, deserters, &c.

(c) Personal observation on meeting the enemy.

Clouds of dust.—If the dust cloud is thick and low, it indicates infantry. A thin and high dust cloud indicates cavalry. If the cloud is broken, it indicates artillery or train. The length of the cloud enables the strength and direction of march to be roughly estimated.

In such calculations, the effect of wind should be taken

into consideration.

Bivouac fires.—The position and strength of an enemy can be estimated from the number and extent of the fires; if the flames appear and disappear, it is a sign that the ground is occupied, and that men are moving between the observer and the fire.

An unusual number of fires may indicate the enemy means to retreat, and has lit the extra fires as a ruse.

If there is much smoke at an unusual time, the enemy

may be cooking prior to moving off.

Tracks, noises, &c.—Dogs barking, horses neighing, an unusual amount of smoke from chimneys, are signs of the presence of troops in inhabited localities. Much may be gleaned from tracks on the road; if the ground is evenly beaten down, the column consists of infantry; hoof and wheel tracks indicate cavalry and artillery.

If the tracks only occupy half the road, the column was probably not a large one; if the road was trodden on both sides, the force was probably one of considerable

strength.

Deserted camping grounds.—The number of fireplaces, and the length and breadth of the ground occupied, enable the strength of the force to be estimated. Articles

of equipment, buttons, papers, dead horses, ammunition, &c., found lying about, will show the arm to which the troops belonged. During a pursuit such traces will often enable valuable inferences to be drawn as to the nature of the retreat and the enemy's condition.

163. Data for forming an estimate of the enemy's numbers when on the march.

No allowance being made for opening out, units occupy the following distances:—

A battalion in fours, 800 strong, 350 yards.

A squadron in sections, 100 strong, occupies 100 yards.

A field battery (6 guns and 6 wagons) occupies 224 yards.

A 2-horse vehicle requires 10 yards.

A 4-horse ,, ,, 15 ,, A 6-horse ,, ,, 19 ,,

Including, in each case, 4 yards distance.

A single horse, mule, or pack animal requires 4 yards.

#### RATES OF MARCHING.

Arm.	Distance traversed in one hour.	Rate per minute.	Time required to traverse 1 mile.
Infantry	Miles. 2 ³ *  8 4 5 3*	Yards. 88 235 117 146 96	Minutes 20 7½ 15 12 18

^{*} Allowing for a halt of five minutes in each heur:

A given point is passed in one minute— By about 260 infantry in fours.

,, 117 cavalry in sections, at a walk, or if in rear of infantry, about 88.

, 5 guns, if in rear of infantry.

,, 235 cavalry, in sections, at a trot.

Supposing that in all cases the troops are fully closed up. From the numbers here given about 1-5th should be deducted in the case of infantry, and about 1-10th in the case of the mounted branches when the troops are executing a march.

Opening out.—Add 20 per cent. to the road space in case of good marchers; from 25 to 40 per cent. for indifferent marchers. The full amount of opening out will be reached when troops have been marching for about an hour.

#### 164. Commander of the outposts.

The general officer commanding, having determined where the troops are to halt, himself selects (or delegates to another, usually called the commander of the outposts) the selection of the outpost line and its flanks, and states whether supports and reserves are required, or merely a piquet line.

The commander of the outposts may be the officer who commanded the advance guard, or another specially detailed.

All troops on this duty are under his orders, and he is responsible for the security and repose of the main body.

He will, according to the size of his command, establish his position with the reserve or support; or in a central position where a piquet line only is formed.

When the outpost line is considerable, it should be divided into sections; about three miles may be con(I.D.)

sidered a suitable section for cavalry on open ground, and

from one to one-and-a-half miles for infantry.

He receives from the officer commanding the advanced guard, or from the staff, instruction as to what is known of the enemy; as to the general line to be taken up by the outposts; as to how long he is to resist the advance of the enemy; and in what direction he is, if necessary, to fall back.

In default of information or specific instruction, he decides on the disposition of the troops entrusted to his

command.

When, by personal reconnaissance or by the aid of maps, he has decided on the general line, he issues orders on the following points:—

1. Information as to the enemy and country in front.

2. The approximate line to be taken up, and the allotment to regiments, squadrons, battalions or companies, as the case may be, of the limits of their frontage. In allotting the frontage, whenever roads, ravines, or villages form a line of demarkation between sections of front, it must be distinctly stated by which portion of troops the point itself is to be occupied or watched, or the mistake may occur of its being left unguarded.

3. Dispositions in case of attack, and, when necessary,

with regard to advance or retreat.

4. Reports, when to be furnished, and where sent.

5. Any special orders regarding patrols, and the distance they are to go, bearing in mind that security can never be obtained by passive measures alone, but must be sought by a bold system of patrolling.

6. Measures for securing the flanks. Roads and localities that are to be prepared for defence; bridges for mining; additional tools, if any,

when and where to be procured; lateral communications.

7. Whether the piquets may light fires. (This should always be allowed when it can be done out of sight of the enemy.)

8. Arrangements regarding cooking and supplies of all sorts.

9. Special patrols, if any, to be sent from the supports and reserve. Nature and number of the patrols to be sent out by day and night. The time the outposts will be relieved. As to guides from the piquet line to meet relieving outposts.

10. Arrangements as to signalling; to which piquets, &c., signallers, or cavalry orderlies are to be attached.

11. Orders respecting inhabitants; as to their crossing the line of outposts; as to reception of deserters and flags of truce, and the positions of examining posts.

12. From what flank the line of piquets should be numbered. (It is generally convenient that they be numbered from the flank which is taken up first, or which rests on some natural obstacle.)

13. Where he is to be found.

14. The countersign.

It is desirable that all the above orders, when feasible, should be made known to the outposts before they march off. When this cannot be done, the more important points should be communicated, leaving the others until the commander of the outposts inspects the position selected for the piquets and their sentries. When these have been taken up he will inspect them and modify them as may seem desirable.

He will, at the same time, decide on the dispositions for night duty, and communicate his orders to all con-

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cerned, so that the stations may be examined by daylight, although the troops should not occupy them till after

nightfall.

When large bodies of troops are employed in outpost duties, it will be neither desirable nor indeed possible that he should select the positions of piquets, which duty is left to regimental officers.

The field officers of the regiments, squadrons, or parts of a battalion, having been informed of the extent of frontage that they must occupy, and the approximate line

will move forward with their commands.

#### 165. Commander of a section of the piquet line.

When moving forward with the companies selected for the piquet line, he will determine in his mind on the approximate number to be employed. They may consist of companies, half companies or sections, but should always, as far as possible, be composed of complete units. It is desirable to avoid breaking up companies, yet by strictly adhering to this rule it may frequently happen that one piquet is required to extend its sentries over an excessive space, entailing delay and fatigue in relieving them.

As a rule, small piquets are less fatiguing than large piquets; but this division must depend on the number of officers available; for these important commands should

always, when it is possible, be under officers.

The extent of frontage assigned to the sentries of one company on piquet, where observation only is required, will generally, in ordinary country, vary from 500 to 1,000 ands.

The field officer will impart to the officers commanding the piquets information on the points on which he has been instructed by the commander of the outposts, and in default thereof he should tell them all he can to assist them in carrying out the duties entrusted to them—where the flanks of the line of sentries are to rest, the approximate number of sentries he thinks will be necessary, the approximate position of the piquet, and any other special orders he may think proper to give.

He will state the amount of resistance to be offered by the piquets, the line of retreat if necessary, and the posi-

tions of examining posts.

Unless he is personally acquainted with the officers commanding companies, he should, as far as possible, learn something of their characters. This will enable him to gauge their reports when received. He should leave them as much freedom as possible, consistent with obtaining the object in view with a minimum of fatigue. He decides whether piquets, sentries, and patrols may take off valises. He orders that no trumpet or bugle sounds, except the Alert, are to be sounded without his orders. He will detail the mounted troops under his orders for patrolling and orderly duties. He will state where he is to be found. In small outposts he replaces the commander of the outposts in all respects.

# 166. Commander of a piquet.

When he has received his instructions and is sure that he understands them, he will march his command, preceded by advance and flanking scouts, to about the place that has been indicated to him as the position of his piquet. On the way he must endeavour to impress the features of the ground over which he marches on his mind, so as to be prepared for any contingencies that may arise. On reaching the approximate position for the piquet, he halts and sends a reconnoitring patrol or extended line in the direction of the enemy to cover him while he posts his sentries, and he also sends a file to establish communication with the posts on either flank.

He then decides whether he will observe the ground allotted to him by means of groups or double sentries,

and posts them.

As soon as the sentries are posted, the advanced patrol or line of skirmishers is withdrawn. The position of the piquet with its sentry is definitely fixed, and reliefs, patrols, and, if required, parties for detached and examining posts are detailed.

An interval of two or three yards should be kept between each separate party which is bivouacking at the

same place.

Maxims for officers commanding piquets :-

Be prepared for attack by day or night, and make plans to meet it.

No straying from the piquet to be permitted.

No noise to be allowed.

No fires to be lighted without permission of officer commanding section of the outpost line of which the piquet forms part.

Arrange for sentries being visited every two hours

by day, and every hour by night.

Patrols to go out and return by different routes, passing the sentry line between the same sentry posts.

Make a rough sketch of post and ground in vicinity.

Strengthen post as far as practicable.

Report at once any case of desertion or of prisoners being taken.

No one to be permitted to remain in the piquet or

sentry lines unless on duty.

General compass bearing of the enemy's line of retreat. Officers commanding piquets in close proximity to those of the enemy must be careful to avoid useless collisions. Sentries should not fire at one another, and attempts to carry off detached posts, sentries, &c., unless with some special object in view, are to be avoided, as they serve no

good end, give rise to reprisals, and tend to the general

annoyance of all, even to the main body.

At the same time, all attempts of the enemy's patrols to approach the sentries must be sharply stopped. The above instructions are in no way intended to check necessary movements carried out to ascertain what is being

done in the enemy's posit on.

A piquet must not shut itself up in a house or an enclosure with the intention of defending itself to the last, unless particularly ordered to do so, or unless circumstances render such a measure necessary at the moment for the preservation of the party in expectation of support.

## 167. Duties of sentries.

A sentry should be made to understand clearly :-

1. The direction of the enemy, and the probable line of his advance.

2. The extent of front he is to watch.

3. The position of the sentries on his right and left.

4. The number and position of his piquet, and the best way to it.

5. The situation of the nearest examining post.

6. The names of villages, rivers, &c., in view; and the places to which roads and railways lead.

7. The countersign.

8. That his duty is to see and listen without being seen or heard; and that he is to report the result of his observations.

9. He is to remain motionless, unless for purposes of better observation he is obliged to move.

10. On his vigilance depend the lives of his comrades as well as his own.

11. He is to pay no compliments, nor allow anyone to distract his attention.

12. He must not allow more than one stranger at a time to approach his post. If any person, not on duty or unprovided with a pass, does approach, he will direct him to the examining post, if there is one; if there is not, he will detain him till the arrival of the visiting patrol. Any such person who disobeys is to be shot.

13. He is to warn the outposts, when satisfied the enemy is advancing in some force, but not otherwise.

14. If attacked he should defend himself by firing or using his bayonet, as circumstances may require.

## (a) By day.

Sentries are posted by pairs, the men of each pair being close to, or within speaking distance of each other, according to the ground. They are relieved from the piquet, or, if single sentries, from groups close at hand.

The former system, when the piquet has some shelter, possesses the advantage of giving the reliefs more comfort; the latter is more economical, gives the sentry greater confidence, and saves much fatigue.

When the chain system is adopted, the relief of each pair of sentries will be made independently by the shortest line.

The group system is, on the whole, preferable.

Groups may consist of three, four, or six men, exclusive of a non-commissioned officer between two or three groups.

The men of the group lie down within close reach of

the sentry, who, as a rule, is posted singly.

Under certain conditions it may be desirable to post

group sentries in pairs.

Sentries should be concealed as much as possible consistently with their having a clear view over the ground in their front; and, if possible, they should be able to see

the sentry on either flank, and the piquet or its connecting sentry. In any case they should be instructed as to their exact position.

They will not take off their valises, or kneel or lie

down, without orders, except under fire.

A single sentry will be posted in front of the arms of

any piquet or separate post.

Sentries, as a rule, will be relieved every two hours. In very severe weather, or under exceptional circum-

stances, they may be relieved hourly.

As the glitter attracts attention, sentries will not fix bayonets unless posted in positions where a sudden rush might be made on them; in the daytime it can rarely be necessary to fix bayonets.

# (b) By night.

During foggy weather and at night, the position of the piquet will generally determine the position of the sentries.

They should generally be placed on roads, tracks, and at their junctions, and will depend rather upon the sense

of hearing than that of sight.

On hilly or undulating ground, sentries should be placed below the crest on the enemy's side, so far down as not to be visible against the sky line. Where possible, high ground should always be maintained for greater facility in seeing and hearing.

They will be made acquainted with the countersign, and will repeat it until it is firmly impressed on their memory.

The alarm should not be given by firing unless it is certain the enemy is advancing to attack.

On a calm night, on hard ground, the noise of-

A company marching can be heard at 600 yds.

A squadron or battery, at a walk, can be heard at 800 yds.

A single horseman , trot , , 1,200 yds. 150 yds.

No more sentries should be posted, either by day or night, than are absolutely required for the thorough watching of the country in their front.

## 168. Detached posts.

These usually consist of from six to twelve men under a non-commissioned officer or officer, and may be of greater strength when circumstances demand it; in the latter case, finding not only their own sentries, but also patrols, &c. Such posts are usually placed in echelon, in front or rear of the extreme flank of the outpost line, so as to watch some particular place or road by which the flank, from its not resting on a natural obstacle, could be turned; or to watch a village or elevated spot lying to the front of the line of sentries or position, where an enemy might collect preparatory to an attack, or which he might occupy for purposes of observation. In such cases, care must be taken to render support to the detached post if it is attacked.

These posts are sometimes also placed to maintain communication between piquets lying unusually far apart.

Special instructions must always be given to the commander of the post by the officer from whose company he is detached.

## 169. Examining posts.

In default of orders, the officer commanding the piquet will prevent any person crossing his line of observation

either from or towards the enemy.

When instructed by the field officer to place an examining post, he will detail an officer, or selected non-commissioned officer in command, if possible one speaking the language of the country. He receives special orders from the officer commanding the piquet, and, without his sanction,

no person other than those on duty is to pass anywhere, except at this post. The post is usually placed in the general line of sentries, and furnishes a sentry.

The officer or non-commissioned officer in charge examines every individual wishing to pass inwards or outwards, and gives the necessary permission, or refuses

it, according to his instructions.

Prisoners and deserters must be ordered to lay down their arms before the sentries allow them to approach; no one is to be allowed to speak to them except the officer commanding the piquet, who will send them at once, under escort, with a report to the officer commanding the outposts.

## 170. Flags of truce.

On the approach of a flag of truce, one sentry, or more if at hand, will advance and halt it at such distance as to prevent any of the party who compose it overlooking the posts; the person in command of the examining post will detain the flag of truce until instructions are received from the officer commanding the piquet.

If permission is given for it to enter the line, the individuals bearing it must be first carefully blindfolded, and then led under escort to the commander of the outposts. No conversation except by his permission is to be allowed on any subject, under any pretence, with

the persons bearing the flag of truce.

If the flag of truce is merely the bearer of a letter or parcel, the piquet officer must receive it, and instantly forward it to headquarters. The flag of truce having taken a receipt, will be required forthwith to depart, and no man of the piquet must be suffered to hold any conversation with the party.

Spies should be sent in under escort to the commander

of the outposts at once, without being questioned.

#### 171. Patrols.

The number of these must depend on the nature of the country. Many will be required where roads and tracks are numerous, and the converse where these are few. Whatever may be the number, some of the piquet must be retained for this duty, even if the sentry line is thereby weakened.

If the officer commanding the piquet finds he has not sufficient strength to fulfil the duties assigned to him, he must send a written report of the fact to the field officer.

The hour for each patrol to go out should be determined beforehand, and, to avoid disturbing those who are sleeping, the different parties should be separated by a few yards.

Without patrolling, however active and alert the sentries, the service of the outposts can never be properly

performed.

The action of patrols, their strength, and the distance to which they may be sent, are necessarily dependent on the ever varying local circumstances under which the operations are conducted. Vigilance, silence, and circumspection must be strictly enjoined on all patrols; no noise must on any account be made; patrols must be especially careful to prevent their arms and accountrements rattling, or allowing anything about them to glitter.

When an officer commanding a piquet accompanies a patrol he should inform the next in command of his intended absence, and the probable time of his return.

A patrol not accompanied by the officer commanding the piquet will receive instructions from him, and will

report on its return.

Cases may occur when the front of an outpost can be better watched by patrols than it can be by sentries; but in such cases they must be constantly on the move and

well advanced, and should communicate with the adjoin-

ing outposts.

All woods, ravines or broken ground in the immediate neighbourhood of the sentries, where troops could collect without being observed, should occasionally be visited by patrols.

(a) Reconnoitring patrols.

Patrols must be sent along the roads in the direction of the enemy, to such distance as may be expedient: as a general rule, infantry should go from three-quarters to one mile. They should seldom return by the road on which they go out, and should never be sent out in such regular sequence as will enable the enemy to foresee their movements. It is impossible to determine the exact strength of these patrols, but not more men should be employed than are absolutely required to perform the requisite duty; their number will usually be from two to five. It must be always remembered that patrols are not intended to fight, but to discover and reconnoitre the positions of the enemy.

Larger patrols must be preceded by scouts, quick, intelligent men selected for that duty, whom no sound will escape, and whose experienced eyes and ears will

detect the approach of danger.

Cavalry, when attached to infantry, should always go four miles to the front once or twice each day, and at daylight they should make sure there is no body of the

enemy within ten miles of the position.

The officer commanding the piquet must not forget that while the mission of the mounted troops under his orders is to reduce to a minimum the patrolling and consequent fatigue of the infantry, yet there are limits to the endurance of horses, which must not be so hardly worked as to impair their strength.

Officers commanding piquets must bear in mind that although patrolling, and thereby ascertaining the enemy's

movements, is one of their most important duties, yet they must abstain from initiating aggressive movements, unless such have been ordered by superior authority.

(b) Rounds, or visiting patrols.

A non-commissioned officer and private will be sent round at the discretion of the officer commanding the piquet to ascertain if the sentries are on the alert, whether they have anything to report or suggest, and to keep communication between the piquets. If, from the sentry line not being continuous, or from other causes, it is possible for small parties of the enemy to have crept in, any hollows or places capable of affording concealment should be examined closely.

The rounds should never go in front of the line of sentries, nor pass in view of the enemy. It is desirable they should go sometimes from right to left, and sometimes from left to right. The sentries should not

challenge them by day.

(c) Strong patrols.

The object of strong patrols is to ward off the enemy's reconnoitring patrols, or to dislodge him from his post and ascertain, if possible, what is behind; they should, therefore, when stratagem fails, act on the offensive; in doing so, they should not trifle with their foe, but act vigorously and with determination, and then, having carried out the object, retire without delay; they are usually furnished by the supports or reserve.

They should rarely be pushed forward more than a mile, and in most cases should be accompanied by a mounted orderly, who could quickly convey the informa-

tion acquired to the rear.

Strong patrols are also sent out before daybreak; these patrols must always proceed with caution, as they may fall in with the enemy's columns waiting for daylight to

make an attack. In such a case a bold charge will generally prove successful.

## 172. Supports.

Supports should consist of one or more companies of the same battalion that furnishes the piquets. It is not necessary to have a separate support to each piquet. On the contrary, there should be only one support to each group of two or three piquets; but the supports should be about equal in strength to the aggregate of the piquets to which it is linked.

Supports must be placed wherever the ground affords the most advantageous general line for mutual defence; a protracted resistance by a portion of the supports, while another portion is forced to retire, would probably result in the capture of the force which held its ground. It is desirable that these companies utilize any shelter

available within a convenient distance.

Positions which present moderately good opportunities of defence throughout are much to be preferred to the line which possesses some strong features, but is untenable elsewhere.

If properly posted, supports should be able to check the advance of a considerable body of cavalry, and thus prevent any reconnaissance being made by even a strong force of the enemy.

It may occasionally be advisable to place the supports and piquets close together when the best ground for

defence is near the best line of observation.

Supports should keep up communication with their piquets, with the supports on their right and left, and with the reserve; they should, if possible, be so placed as to afford support to the parties on each flank.

Two or more troopers should be with each support, to carry intelligence, unless visual signalling has been established.

It must depend on circumstances whether, in the event of an attack, the support moves forward to aid its piquets; holds its ground in common with the other supports until the reserve comes up; or waits for the piquets, and then retires with them and the other supports upon the reserve.

#### 173. Reserves.

The reserve is the main body of the troops detailed for outpost duty, and may be considered as a general support

to the lines of piquets and supports.

It should be placed in the most advantageous position for defence, if the piquets and supports have been instructed to fall back and rally upon the reserve, and there to make a stand.

If the supports are on the battle ground, the reserve should be so placed as to be readily removed to any

quarter threatened.

It must be thrown sufficiently forward to prevent the

camp being shelled by the enemy.

It may occasionally be advisable to divide the reserve into two parts—when, for instance, there are two bridges, or two defiles or roads, by which the piquets and supports would have to fall back if driven in, but the reserve should not be divided more than is absolutely necessary.

The strength of and the necessity for detailing a reserve must, however, so much depend on circumstances, such as the distance of the outposts from the main body and the nature of the ground, that it is impossible to lay down any precise rules, but, if detailed, it will vary from one-third to one-half of the force detailed for outpost duty.

The reserves should always, by means of patrols or

sentries, keep up communication with the supports.

When the main body of the army bivouacs in a defensive position, and could within a very short time be

formed to resist an attack, reserves may occasionally be dispensed with: for it must be always remembered that so long as the alarm can be given in time to ensure safety against surprise, the fewer men employed on outpost duty the less fatigued and consequently the more efficient the force will be.

## 174. Action if attacked.

When the line of piquets is attacked, it will usually be found advisable to allow the detached posts and sentries to fall back gradually till they come to the main bodies of the piquets, where a stand may be made.

Any portion of the line may then be reinforced by the supports, or, if deemed advisable, the piquets may be ordered to fall back on the supports, who, in their turn,

may if necessary retire on the reserve.

Should the attack be merely a reconnaissance, it will seldom be necessary to fall back beyond the line of piquets, but if the enemy is advancing in force, it will rarely be possible to arrest his progress with outposts.

## 175. Precautions when fires are allowed.

When a piquet or support is permitted to have a fire, it should always be as much as possible concealed from observation; the alarm post, in the event of an attack at night, should invariably be fixed at a short distance in the rear of the fire, so as to prevent the piquet or support from being seen when drawn up, and to compel the enemy to expose himself while passing the fire, should he advance.

# 176. No compliments to be paid.

No compliments are paid by any troops on outpost duty. If a superior officer visits the reserves, supports, or piquets, the men take no notice of him unless he addresses them, and piquets will not fall in unless specially ordered to do so.

# PART VIII.

#### OPERATIONS BY NIGHT.

#### 177. Instruction and Practice.

In night exercises, the advance to the ground chosen will always be carried out as if marching for a contemplated

attack on a selected point, at a fixed hour.

Sufficient practice can generally be obtained in four hours' work, which permits the troops, when parading at dusk in winter and early spring, to be back in barracks at tattoo.

When all the companies have been exercised, larger units will be practised by officers commanding battalions and

brigades.

A good magnetic compass is an indispensable part of every officer's equipment. For night operations compasses should be prepared with luminous paint; these with a movable bar, which can be set to the required bearing, are the best. The magnetic bearing of the enemy's position from the place of rendezvous should be known to every officer and non-commissioned officer of the attacking force. An officer able to ascertain his bearings by a knowledge of the stars has a great advantage over others. A repeating watch is invaluable, but a watch with a white dial plate and thick black hands can be read on any but a very dark night.

#### 178. Marches.

1. Night marches are usually undertaken to forestall the enemy, to gain time either in an advance or a retreat, or to move troops into position for an attack under cover of darkness. 2. Before undertaking a night march the roads or route should be reconnoitred, and any points noted where checks are likely to occur.

If the march is to take place on roads or tracks, the general compass direction should be known. All turnings that are not to be used should be blocked, or, if this is not possible, men must be posted at these points. The services of guides should be obtained. A rough tracing from the map placed over a piece of cardboard prepared with luminous paint is a great assistance When no tracks exist, the route must be fixed by compass bearings, the points where any change of direction is necessary to be carefully noted, and the distances between clearly defined and easily recognisable points measured and timed. When selecting features of the ground to serve as landmarks for a night march, the officers chosen to lead the columns should, if possible, visit just before dark at any rate a portion of the ground to be passed over, returning after dark. They will then be able to recognise by night useful features that would escape their notice if only seen by daylight.

The officer leading the advance must be sufficiently far to the front to prevent the needle being affected by the rifles. Connection should be kept by means of men, extended at several paces distance. This plan has the further advantage of giving time for verifying the direction without checking the troops; the connecting files merely closing up. An officer should invariably be detailed to check the distance marched.

Features of the ground that show against the sky-line, and that have been previously observed and fixed, or the moon or stars if in the required direction, may be used as temporary aids, the bearing being verified from time to time.

(I.D.)

3. To secure secrecy, orders for a night march should

be given out as late as possible.

4. Cavalry patrols should precede the column: the remainder of the cavalry and the artillery should march at its least exposed end. The covering troops should not be far from the main body, and constant communication must be kept up between all portions of the column. Absolute silence must be maintained, and no smoking or lights allowed. Rifles should be carried at the slope and are on no account to be loaded.

An orderly officer should be detailed for the brigadier from each unit in the brigade; the brigadier should have a fixed position in the column, and should stay there.

Halts should be at stated hours and for a definite time: during halts mounted troops should stand to their horses, the remainder should lie down, but not leave the road.

5. It is not safe to calculate on a force of 1,000 men marching more than two miles an hour on roads, or one mile an hour over open country.

#### 179. Attacks.

1. Night marches should as a rule be so timed that attacks may take place at daybreak; it may, however, be necessary to attack at night. Much damage may be done at night by small bodies if boldly handled; firing during such attacks is desirable, the object being to cause annoyance and to create panic.

2. Nothing but extreme necessity can justify a night attack without a previous and thorough reconnaissance made by the one or more officers who are to be entrusted with the difficult duty of guiding the column or columns.

No reconnaissance from a distance is sufficient. Those who are to guide the attacking columns should, even if

well acquainted with the ground, traverse the route to be followed as far as they possibly can.

Dark, windy, rainy, or foggy nights are most suitable for small affairs; clear starlight nights for the movement of large bodies.

3. In order to ensure simplicity, the attacking columns should be as few and as little subdivided as practicable.

Cavalry, artillery, and mounted infantry will be kept entirely separate from the attacking columns; they cannot operate in the dark, and should not be allowed to come into contact with the enemy until daybreak. Then, if the attack has succeeded, they will push forward with all speed, endeavouring to get round the flank of the retreating enemy. If the attack has failed, they will do their utmost to protect the retreating infantry by falling on the flank of the pursuing enemy. If the enemy's outposts are improperly placed or withdrawn, the general advance will, when it is possible to do so without giving an alarm, be continued to within a mile, or perhaps half-a-mile of his position. The troops should then be halted for the shortest possible time to enable formations to be corrected prior to the order or signal for the assault being given.

When outposts are met, every endeavour should be made to capture and destroy them without noise. They must be rushed in silence with the bayonet without cheering or a moment's hesitation.

It can seldom be right to dispense with a support and a strong reserve, but they should be kept at a sufficient distance from the attacking troops so as not to be carried away by the confusion which any panic might inflict upon those in front.

4. The point selected for attack will naturally be that most favourable for effecting the object, but it by no means

follows that it should be the weakest, either by nature

or for want of artificial defence.

The routes for the columns towards the enemy's position will be marked as clearly as possible without attracting the attention of the enemy. From the extreme points thus defined, accurate bearings of the direction to be followed should be taken and recorded.

5. Rockets with fireballs of different colours are best for signalling during night attacks. These signals must be arranged beforehand, and all staff officers made acquainted with them. No rockets should be discharged

before that one used as a signal for the assault.

6. The materials necessary for surmounting obstacles, and for entrenching the position when captured, must be prepared. They may be scaling ladders, light bridging, hay bags, fascines, gabions, &c., according to the nature of the obstacles to be encountered. They will be carried by parties specially detailed, and who should have a lighter personal load than the other troops, but should

generally be fully armed.

7. Every effort must be made to ensure the maintenance of unbroken lateral communication between the attacking columns, and also between the several units of which each column is composed. In an open country a thin rope or strong cord passed from front to rear, and held up in the distances between units will facilitate the units in rear following those in front. Lateral communication between the columns, and between them and the reserve in rear, can only be secured by the care and vigilance of mounted officers.

8. A distinguishing mark should be ordered for troops

engaged and a watchword given out.

9. Orders will be communicated beforehand to those officers only from whom action is necessary, in order that the necessary arrangements may be made. Until the

troops arrive at the point of assembly, prior to the marchoff, no more will be made known than is absolutely
necessary, in order to maintain secrecy. Before they move
off, however, all orders should be so clearly explained
that everyone may know the object in view, the compass
direction of the attack, and what part he has to play in

the operation.

It must be impressed on the rank and file that no man is to fire, or even to load, without a distinct order from his own officer; and that, until it is daylight, the bayonet alone is to be used. The officers must enforce perfect silence, and prevent anyone speaking above a whisper. There is to be no cheering except by men charging, or until the enemy has left the position; and every man must understand that, with this exception, whilst it is dark he is to continue to advance in profound silence until the enemy is defeated.

If an entrance cannot be effected on account of obstacles all except those at the head of the column will be ordered to lie down while the obstacles are removed by those at the head of the column, or by the detailed working party when necessary. As it will not be possible to keep units intact, each company, half company, or section should look to its leader, who cannot do wrong in striving to be

first into the strongest part of the enemy's work.

These particular instructions for the rank and file should be read two or three times to the men by their company officers.

10. Just before the order is given for the assault, the company officers will repeat to their men, in a low tone, the gist of the previous instructions for rank and file, "No firing, bayonet only. Keep close to one another and to your officers.—Follow me."

While the final dispositions are being made for the assault, the support will take up a position within 300

or 400 yards of the assaulting column, ready to move forward in case of success, or to stand fast and cover the retreat of the attacking column if it be driven back. Troops repulsed in the attack should endeavour to fall back towards the flanks of the support so as to leave its front clear.

11. The following instructions for the formation of a column and for the conduct of the advance are given as a

general guide :-

a. Each attacking column will be preceded by a "point." This "point" should consist of two or three men and a serjeant under an officer, all carefully selected for coolness, intelligence, good sight, and good hearing. The officer will be responsible for not losing touch of the column. The "point" will move slowly, and will precede the advanced guard at a distance of from 100 to 200 yards.

b. The advanced guard will be provided with pioneers

and materials for clearing obstacles.

c. The assaulting column at from 50 to 100 yards distance from the advanced guard will be in column of companies, half companies, or sections (or in fours,) with the ranks at 3 paces distance, and the files at 1 side pace interval, according to the nature of the route followed.

d. The support at from 200 to 400 yards in rear of

assaulting column.

e. Gun detachments should accompany the support ready to serve the enemy's guns when captured or to spike them if necessary. A detachment of engineers should as

a rule also accompany the support.

The reserve will be about half-a-mile in rear, and behind it will be the artillery, the reserve ammunition, a supply of entrenching tools, and the cavalry. When the enemy's position is approached, the distances between the "point" and the advanced guard and between it and the assaulting column should be diminished by one-half. 12.—The following orders are specially applicable to

night operations :-

a. The compass direction of the route to be followed, with exact description of the limits within which the attacking columns may advance previous to the final advance to assault.

b. Distinctive marks and watchword.

c. Explanation of the necessity of preventing lights being struck, or any one smoking, or speaking loudly, and prohibition of any bugle sounds.

d. Hour for assembly at and departure from point or

points of concentration.

e. Order of march, distances between units, and how communication is to be maintained.

f. Halts, when to be made, and for how long.

g. Attitude to be assumed in case of sudden attack by the enemy, either in front or on the flanks.

h. Time and place for the final halt, preparatory to the

attack. The final halt should be as short as possible.

i. Instructions for the assault, especially for the rank and file; and the signal for its being delivered.

j. Subsequent measures.

k. The position of the commander of the column, both during the march and at the final halt prior to the assault.

#### 180. The Defence.

1. The outpost line. — The duties of outposts are treated in Part VII., but here it may be stated that when a night attack is expected, greater risks may properly be incurred by the outpost line than is desirable upon ordinary occasions, in order to obtain the earliest possible information of an impending attack.

The senses of sight and hearing vary so much in individuals, that company officers should bear this in

mind when detailing their men for duty. Men expecting to be attacked have often their ears and nerves so strained that they imagine they hear noises, troops

marching, &c.

2. Defence of the position.—The general system on which this should be based follows that in force in defending a position by day. Infantry will deliver carefully controlled volleys, the men being cautioned, when they cannot see the enemy, to bring the rifle to the horizon and then let it sink a little. Independent firing is in no case to be permitted.

It is of the utmost importance in defence to keep the troops in formed bodies, and not to allow their energy to be expended in desultory fights. When the enemy approaches the position the defenders should be led forward in rapid, vigorous attacks, and reformed as quickly as possible, whether successful or unsuccessful, in the most sheltered spot. As offensive tactics are at such moments most suitable, no firing should be allowed and strict silence should be maintained.

# PART IX.

## CEREMONIAL.

#### 181. GENERAL RULES.

1. Difference between parades for ceremonial and for manœuvre.—A marked difference should be made between parades for ceremonial and those for manœuvre: in the

former the greatest accuracy must be enforced.

2. Formation of companies.—Companies will be equalized and sized from flanks to centre (see 222), numbered from right to left, and told off into half companies and sections; in other respects the instructions in Parts I. and II. are applicable for the formation of companies, and for the position of guides and supernumeraries. When a non-commissioned officer is in command of a company, he will, in taking open order, and in marching past in column, or column of double companies, take post three paces in rear of the centre of the company.

3. Position of officers.—The position of officers is as detailed in Parts II. and III., except that in marching past in quarter column, in line of quarter columns, or in mass, the captains will, when on the saluting base, take post on the directing flank of their companies,

covered by the guide (aligned with the rear rank).

182. A Company in line taking open order.

On the word MARCH, the rea

FIX—
BAYONETS.

OPEN
ORDER—
MARCH.

On the word MARCH, the rear and supernumerary ranks and the subalterns will step back two paces. The right marker will give the word Right—Dress to the rear rank, dress it, give the word Eyes—Front, and resume his place in the supernumerary rank. Subalterns and supernumerary rank will dress by the right.

SHOULDER-ARMS.

Arms will then be shouldered.

GENERAL SALUTE.
PRESENT—ARMS.

On the word ARMS, the captain will recover his sword with the first motion of the rifles, and at the third motion his sword will be smartly lowered to the salute, point to be 12 inches from the ground and directed to the front, edge to the left; the arm to be straight, hand just behind the thigh, the thumb flat on the handle of the sword. The supernumerary rank and guides will remain at the Shoulder.

SHOULDER—ARMS.

On the word ARMS the captain will recover his sword with the first, and carry with the second motion of the rifles.

CLOSE
ORDER—
MARCH.

On the word MARCH, the rear and supernumerary ranks, and the subalterns will take two paces to their front.

Arms will then be ordered and bayonets unfixed.

## 183. A company marching past.

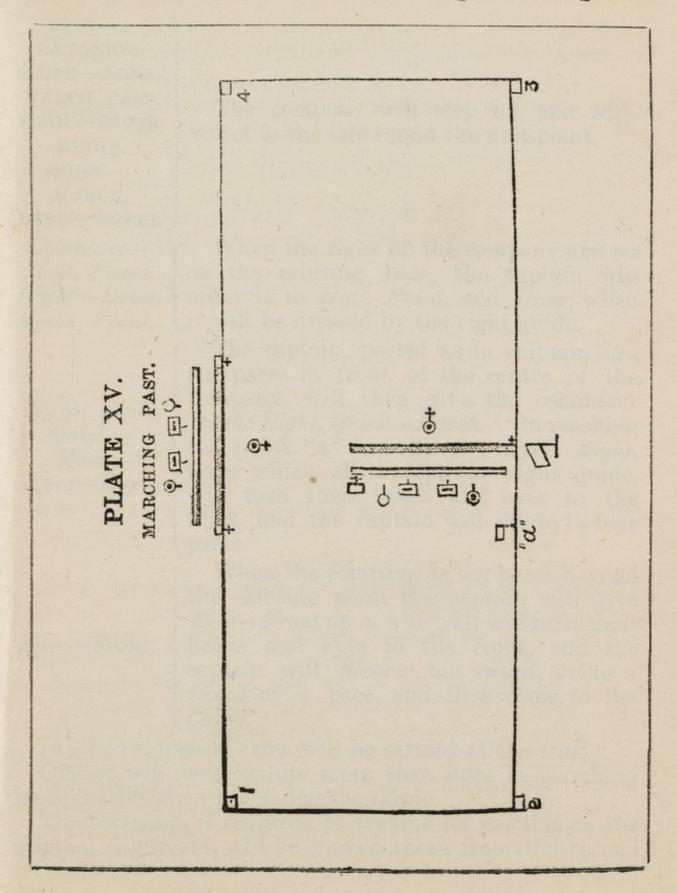
For this practice the company will be formed as a

company in line; arms will be at the Order.

Four points, numbered 1, 2, 3, and 4, Plate XV., will be placed marking the angles of an oblong, of which the long sides will be one hundred paces in length, and the short sides forty.

The company will be in the centre of one of the long sides; the opposite side will be called the saluting base.

A point, called the saluting point, will be placed ten paces outside the centre of the saluting base, turned towards the company, and a point, lettered "a," turned in like manner, on the saluting base, at ten paces to the left of the saluting point. As a rule all these points should be marked by camp colours.



FIX-BAYONETS. SLOPE—ARMS. MARCH PAST. FORM-FOURS, RIGHT.

QUICK-MARCH, LEFT-WHEEL

The company will step off, and will wheel to the left round the first point.

Company-Halt, Front. Right-Dress. Eyes—Front.

When the right of the company arrives on the saluting base, the captain will order it to Halt, Front, and Dress, when Lit will be dressed by the right guide.

By the Right, Quick-March. Eyes—Right.

The captain, posted as in column, i.e., six paces in front of the centre of the company, will then give the command By the Right, Quick-March. On reaching the point "a" he will give Eyes-Right, upon which all, except the right guide, will turn their heads and eyes to the right, and the captain will salute in four paces.

When the company is ten paces beyond the saluting point the captain will give Eyes-Front upon which all will turn their Eyes-Front. \{\text{heads} and eyes to the front, and the captain will Recover his sword, make a pause of a pace, and then come to the Carry.

In rifle regiments arms will be carried at the trail. Officers will never salute more than once in marching past, except when practising the salute.

The company, if required to resume its position on the original alignment, will be moved there from the second or third point in any convenient formation. If a change of ranks is necessary it will be carried out on the march.

184. A battalion on parade.

The battalion, whether in line, column, or quarter column, will be drawn up as detailed in 76 (3, 4).

185. A line taking open order.

BAYONETS. On the word MARCH, each company will proceed as directed in 182.

MARCH.

The commanding officer will place himself twenty paces

in front of the centre of the line.

The major will move up to the right, and the adjutant to the left of the line of captains.

Steady. { The major will dress the line of captains and give the word Steady.

ORDER— ORDER— Will proceed as directed in 182. The will proceed as directed in 182. The commanding officer, major, and adjutant, will resume their posts in rear of the line.

186. Colours.

Colours will be carried at the Slope, and furled, with the following exceptions:—

(a.) When the men are at the Shoulder.

On these occasions the colour staff will be carried perpendicularly in the belt, which will be worn over the left shoulder; the corner of the colour will be held in the right hand, which will also grasp the staff level with the forehead.

(b.) When the men are at the Order, or are performing the manual, firing, or bayonet exercise. The colours will then be placed perpendicularly

on the ground at the right side.

Colours will be let fly :---

As the caution is given for a Royal or general salute. Colours will be lowered:—

To those entitled to the compliment, as the men

present arms.

Mounted officers, with swords drawn, in passing uncased colours, will remain at the Carry, turning the head, and glancing towards the colours until they have passed them. If at the Slope they will Carry while passing the colours, returning afterwards to the Slope; officers whose swords are not drawn will salute with the hand. Cased colours will not be saluted.

## Inspections or Reviews.

187. Inspection of a battalion.

Formation.—The battalion will be drawn up in line as in Plate VIII. The ranks will then be opened and arms shouldered.

When the colonel of the regiment is present he will be ten paces in front of the officer commanding the battalion. Should the colonel-in-chief be also present, he will be tenpaces in front of the former.

Receiving an inspecting officer.

distance of about sixty paces, he will be received with a salute, the men presenting arms, the band playing the first part of a slow march, and the drums beating. The captains will salute as described in 182. Mounted officers will salute in the samemanner and time as those on foot, except that at the Salute the blade of the sword

When the inspecting officer arrives in front of the centre of the battalion, at a

will be kept in line with the knee, hand directly under the shoulder.

GENERAL SALUTE.
PRESENT—ARMS.

Receiving the Sovereign, or a Royal Personage.

ROYAL SALUTE. As in preceding paragraph. (See also ARMS.)

SHOULDER-ARMS. As in 182.

Inspection in line.—The inspecting officer, accompanied by the commanding officer of the battalion, who will ride on the side further from the troops, will then pass down the front of the line from right to left, returning along the rear, the men standing with shouldered arms.

The band will play a march until he returns to the

right of the line.

The commanding officer will then take the orders of the inspecting officer as to the movements to be performed.

ORDER— As described in 185. Close order will be taken as the inspecting officer is proceed-

MARCH. ling to the front of the line.

Inspection in column.—When companies in column are required to take open order for inspection, the commanding officer will give the words open order — MARCH, when each company will proceed as described in 182. Each captain will receive the inspecting officer with a salute, and follow him during the inspection of his company, the men standing with shouldered arms. After the inspection of the company, the captain will order arms, unfix bayonets, and stand at ease.

188. Battalion marching past, and advancing in review order.

Points will be placed on the principles described in 183; the points marking the saluting base will be covered in a line at a convenient distance from the saluting point.

In Column.—Bayonets having been fixed, and quarter column by the right having been formed on No. 1, the

battalion will move to the right in fours; on reaching the first point it will wheel a quarter circle to the left, moving on as soon as the change is completed; it will be halted and fronted on the saluting base by the commanding officer. The right guides at once take up the covering, and on the commanding officer's order, BATTALION, RIGHT—DRESS, dress their companies, and give the word Eyes—Front.

ADVANCE IN } The commanding officer will then give column. } the caution to advance in column.

No. 1. The captain of No. 1 will then march By the Right, it off, the remaining companies following Quick-March. in succession at company distance.

The procedure of each company will be as laid down in 183.

In quarter column.—If the battalion be required to march past in quarter column, the leading company will be halted when it has moved to forty-five paces beyond the third point. Quarter column will be formed by command of the major, who will superintend the covering.

Ranks will be changed, arms ordered, bayonets unfixed, and captains, covered by the guides, will take post on the directing flanks of their companies.

The battalion will then be ordered to march past in quarter column The commanding officer will give the word EYES—LEFT when at ten paces from the saluting point, and EYES—FRONT when the rear company has passed the inspecting officer. Captains will not look to the left. Rifles will be carried at the *Trail*.

If required to resume its position on the original alignment, the battalion will be moved there from the second or third point in the most convenient and quickest (I.D.)

formation; ranks if necessary being changed on the march. As the battalion moves off the saluting base, captains and guides will resume their respective posts in quarter column.

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Mounted Officers.—When marching past the inspecting officer, the commanding officer will be twenty paces in front of the centre section of the leading company nearer the saluting base, the major in front of the other centre section, in line with the commanding officer. If the colonel of the regiment be present he will be ten paces in front of the officer commanding the battalion. Should the colonel-inchief be also present, he will be ten paces in front of the The adjutant will follow in rear of the centre of the column at ten paces distance. All mounted officers will commence their salute when they arrive at point "a." The commanding officer, after he has saluted, will move out and place himself on the right of the inspecting officer, and remain there till the battalion has passed; the major preceeding in command.

Mounted officers salute in marching past.—The salute will

be performed in four slow motions as follows:-

First: Carry the sword direct to the right to the full extent of the arm, hand as high as the shoulder, back of the hand to the rear, blade perpendicular.

Second: Bring the sword by a circular motion to the

Recover, keeping the elbow as high as the shoulder.

Third: Still keeping the elbow the height of the shoulder, bring the hilt to the right shoulder, hand as high as the eltow; during this motion let the finger nails

come in line with the edge of the sword.

Fourth: Lower the sword to the front to the full extent of the arm, the blade in line with the knee, edge to the left, thumb extended in the direction of the point, hand directly under the shoulder.

The above four motions should be gradually and

slowly combined into one easy movement.

The head should be slightly turned towards the reviewing officer whilst passing him, and ten paces beyond that officer, the sword is *Recovered*, carrying it well to the front

in doing so, and then brought to the Carry.

When the sword is at the Carry, the position is with the hilt resting on the right thigh, the blade perpendicular, the wrist rounded so as to incline the edge slightly to the left, the grasp of the lower fingers slightly relaxed, the little finger in rear of the hilt.

Officers to salute once only.—Officers, whether mounted or dismounted, will salute only on the first occasion of marching past; dismounted officers do not salute when

marching past in quarter column.

Staff officers.—The staff officers, excepting the adjutant, do not march past, and will place themselves in rear of the saluting point; but the assistant adjutant will

march past with the company to which he belongs.

Pioneers and band.—For marching past, the band and drums (or bugles) will move up to fifty paces in advance of the leading company, both formed in two ranks; the pioneers in single rank ten paces in front of the drums, with the arm carrying the tool in the position prescribed for the Slope. The band will commence playing as soon as the leading company advances on the saluting base. When it arrives in front of the saluting point it will turn to the left, change direction to the right, and halt and front opposite to the saluting point, continuing to play until the rear of the battalion has passed. The bandmaster will face the saluting point.

Staff serjeants.—The serjeant-major will be two paces in column, and one pace in quarter column, in rear of the centre of the colour party; the staff serjeants will not be required to march past. The

bandmaster and serjeant drummer (carrying his staff at the *Trail*, as he passes the saluting point), will salute with the outer hand on the first occasion of marching past.

Signallers.—When not in the ranks, they will march past in single rank two paces behind the pioneers, flags

carried at the Trail and rifles slung.

Cyclist and stretcher sections.—March past at five paces in rear of the battalion. Cyclist section nearer the saluting

base and on foot on the left of their cycles.

Machine gun and regimental transport.—Will march past twenty paces in rear of the battalion, machine gun nearest the saluting base, mules in centre, transport

wagon on the outer flank.

Advancing in review order.—If required, the battalion will be formed in line at open order, and on the command ADVANCE IN REVIEW ORDER, BY THE CENTRE, QUICK—MARCH, it will advance, the band and drums playing till within thirty or forty paces of the inspecting officer, when it will be halted and ordered to salute in the same manner as when receiving him; after which it will be directed to order arms, and will wait for orders.

## 189. Manual, firing, and bayonet exercises.

The battalion may then be put through the Manual and Firing or Bayonet Exercises, as directed in Rifle exercises.

### 190. Review of a brigade.

Points of formation.—To enable battalions, when in a column formation, to dress correctly on the same general alignment, the markers of the leading companies will give points, as directed in 58 (9), on which the flanks of their companies are to rest. The markers will be covered by the brigade major from the point of appui. If the battalions deploy into line the outer markers of the remaining companies will move as directed in 76 (6), being

covered on the base markers by a mounted officer. On a signal from the brigade major, base markers will resume their places in the supernumerary rank.

In line.—When two or more battalions are reviewed together, they may be formed in line at any ordered interval, and proceed in the same manner as a single battalion, observing the additional directions that are given with respect to battalions in brigade.

In line of quarter columns.—The troops may be formed in line of quarter columns, with bayonets fixed, at any ordered interval.

OFFICERS AND
COLOURS WILL
TAKE POST
IN REVIEW
ORDER.
Officers and
Colours to
the Front.—
Quick-March.

On the word March from their commanders, the officers of each battalion will place themselves six paces in front of it, sized from flanks to centre, at equal distances from each other, colours in the centre. The major will be on their right, and the adjutant on their left. The line of officers will be dressed by the major of the right battalion of the brigade. The commanding officer will be twenty paces in front of the leading company.

The brigadier will place himself forty paces in front of the centre of his brigade; the brigade staff will be tenpaces in rear of the brigadier, the brigade major on the right, the A.D.C. on the left.

As the inspecting officer approaches, arms will be shouldered and he will be saluted without opening ranks, the men presenting arms, the officers saluting, colours flying, and the bands playing. After the salute the troops will be ordered to shoulder arms, and the inspecting officer will go down the line, accompanied by the brigadier on his outer hand.

When troops are drawn up in line for review, after the salute has been given, the brigadier and officers commanding battalions will post themselves on that flank of their respective commands to which the inspecting officer repairs, when they will receive him and accompany him to the limits of their commands. after which they will resume their original posts.

When drums and bands are massed they will each be in four ranks; when pioneers and signallers are massed they will be in two ranks. The massed pioneers will be 20 paces in rear of the centre of the line. Massed signallers, drums and bands, in their rear, at the distances

shown on Plate IX.

OFFICERS

AND COLOURS

WILL TAKE

POST.

Officers and

Colours take

Post. Quick

—March.

On the word *Post*, the officers of each battalion, except the captains of the leading companies, will turn outwards from the centre, the officers carrying the colours turning to the directing flank, and on the word *March*, the whole will move to their places.

191. Brigade marching past, and advancing in review order

1. Points will be placed on the principles prescribed for a battalion.

MARCH PAST. { In column, from line of quarter column.—
On the caution from the brigadier, commanding officers will order their battalions to form fours to the right, and will move off on his signal.

Each battalion in succession, when it reaches the first point, will wheel to the left at the double by order of its commander, moving forward and changing the time when it has advanced sufficiently so as not to check the battalion in rear; as the leading battalion

approaches the saluting base, it will be halted, fronted, and dressed by the right. The remaining battalions will form mass in rear of the leading battalion, moving by the shortest lines.

The march past will be performed on the principles

described in 188.

2. In double companies.—When a brigade drawn up in line of quarter columns is to march past in double companies, the following method will be adopted:-The battalions will move to the right in fours, and wheel to the left at the double, in succession, as they reach the 1st point, receiving the word FORWARD followed by QUICK when that pace will not check the battalion in rear. When about half way to the 2nd point, the first battalion will form double companies, thus:-The commanding officer having given the command QUARTER COLUMN OF DOUBLE COMPANIES, LEFT (i.e., the even numbered) COM-PANIES, MARK TIME, HALF LEFT-TURN, the left companies will mark time, and the right companies will close when clear to quarter column on No. 1, the left companies receiving the word Forward from their captains so as to join the right; the guides of the left companies will move into the supernumerary rank; the colour party will be in rear of the centre of the centre double company, in a six company battalion, of the leading centre double company in an eight company battalion. The remaining battalions having formed double companies will move into mass.

Each battalion will march past as directed for a battalion in column in 188, the word of command to each double company being given by the captain on the right. The double companies will march off at company distance.

When the rear double company is 25 paces beyond the saluting point the major will give the words Left Companies, Mark—Time, Half Right—Turn, Double the captains of those companies giving Front—Turn,

Quick, By the Right, when in column. The column will then be closed on the march to quarter column; and the brigade will be closed to mass on the leading battalion, that battalion halting, changing ranks, ordering arms, and unfixing bayonets; each of the remaining battalions will halt and act in like manner. If the brigade is to return in mass, sufficient distance will be allowed for the rear company of the rear battalion to reach the third point.

3. In mass of quarter columns.—If required, the brigade may then return in mass. Arms will be carried at the

Trail.

When marching past in column, or in column of double companies, or in mass, thirty paces distance will be preserved between battalions, such distance to be reckoned from the last item of a preceding battalion to the head of

the commanding officer's horse of a following one.

4. In line of quarter columns.—The brigade may be formed from mass into line of quarter columns, with intervals of eight paces between battalions, as follows: The leading battalion will advance till its rear company reaches the required point on the saluting base, it will then be ordered to halt and change ranks, the base markers giving points. As the rear of each succeeding battalion arrives at twenty paces beyond the saluting point, it will be moved by the diagonal march to its position on the outer flank of the leading battalion in the new alignment. The brigade will march past at the Trail.

Great care must be taken that the line of quarter columns is dressed exactly at right angles to the saluting base before moving off; the captains of companies of the outer battalions looking inwards and dressing on the corresponding companies of the battalion nearest the

saluting base.

In a brigade composed of battalions with an unequal number of companies, the rear companies and colour parties of the weaker battalions are to be aligned with the rear

companies and colour parties of the stronger.

Commanding officers will be twenty paces in front of the centre of their leading companies, all other mounted officers ten paces in rear of their respective battalions, the whole dressing by the directing flank.

In this march past the brigadier will give the executive word to move off, i.e., BRIGADE, BY THE-, QUICK-

MARCH.

Brigadiers, staff, &c.—When a brigade marches past, except in line of quarter columns, officers commanding battalions will, after saluting, place themselves by the inspecting officer, rejoining their battalions as soon as they have passed. When the general officer commanding the division is present, the brigadier and his aide-de-camp will alone fall out.

The brigadier will be twenty paces in front of the mounted officers of the leading battalion, or in line of quarter columns in front of the centre of the brigade, preceded at a distance of ten paces by his staff, who will be in line, dividing the space equally, the brigade major next the

saluting base.

After marching past, the brigade major will not follow the brigadier when the latter joins the inspecting general,

but will move on with the brigade.

Pioneers, signallers, drums, and bands.—Before marching past, the massed pioneers, signallers (if not in the ranks) drums, and bands, will move to the head of the

brigade.

In marching past, the massed drums and bands must be moved off at such a distance in front of the brigade staff as will allow of their being moved to the left and clearing the front when opposite the saluting point, without checking the mounted officers following them.

When marching past in column, or in column of double companies, the massed drums and bands preceding the brigade staff will, on arriving in front of the saluting point, form opposite to it, and play till the rear of the

brigade has passed.

The massed pioneers (followed at five paces distance, by the massed signallers, if not in the ranks), will march past ten paces in front of the centre of the massed drums; at twenty paces past the saluting point they will mark time till the brigade staff are ten paces from them,

when they will move on.

When marching past in mass, the massed drums and bands will advance on the outer flank of the mass parallel with the leading company, halting opposite the saluting point; they will play the mass past, and move on again opposite the centre of the rear battalion. The wagons and machine guns will be massed 20 paces in rear of the rear battalion, machine guns nearer the saluting base. Mules, cyclist and stretcher sections will not be massed.

The massed pioneers (followed at five paces by the signallers, if not in the ranks) will march past in front of the centre of the leading battalion of the brigade, at

ten paces in front of the brigade staff.

When marching past in line of quarter columns, the massed drums and bands will be in front of the centre of the brigade, preceding the brigade staff by ten paces. The massed pioneers, (followed at five paces by the signallers, if not in the ranks), will be ten paces in front of the centre of the massed drums. In marching past in this formation, the pioneers, drums and bands will move straight on, the bands ceasing to play when the rear of the brigade has passed the saluting point.

The machine guns will be massed 20 paces in rear of the battalions nearest the saluting base. Wagons, mules,

cyclist and stretcher sections will not be massed.

## Advancing in review order.

If required to advance in review order by the inspecting officer, battalions may be formed in line of quarter columns at any interval, the officers and colours in front, as described in 190.

The line of quarter columns will then advance, the bands and drums playing, and when at a convenient distance from the inspecting officer it will be halted and ordered to salute, after which it will be directed to order arms, and will wait for orders.

## 192. Review of a division.

Formation.—A division may be formed up for review in line or line of quarter columns, and proceed as described in 190.

Position of general staff, &c.—The general will be in front of the centre of his division, sixty paces from the brigadiers; the brigadiers being posted as in 190; the divisional staff will be drawn up in three lines, a distance of ten paces being preserved between each line, with equalized intervals, thus:—

G.O.C.

C.R.E. A.A.G. A.A.G. C.R.A. S.O.R.E. D.A.A.G. D.A.A.G. B.M.R.A.

A.D.C. A.D.C. A.D.C.

When the inspecting officer moves to the right of the line, brigadiers and officers commanding battalions will act as directed in 190.

The commanding officers of artillery and engineers are, as a rule, to receive the reviewing general at the head of their respective commands; but immediately afterwards will join the general staff.

When the bands of the division have been massed in rear of its centre to play a Royal or other salute, they will resume their position in rear of their respective brigades as soon as the Royal Personage or inspecting

officer moves to the right of the line.

The order of march of the staff when passing down the line will be as follows, the distances being as above:—

	D.A.A.G.	
A.D.C.	A.D.C.	A.D.C.
D.A.A.G.	S.O.R.E.	B.M.R.A.
C.R.E.		C.R.A.
A.A.G.		A.A.G.

G.O.C.

# Marching Past.

A division will march past on the principles laid down for a brigade.*

Generals, Brigadiers, &c.—When a division marches past, the general of the division only will move to the saluting point, accompanied by his adjutant-general and one aide-de-camp.

Position of Staff.—The divisional staff will march past in the following order, distances between the lines as above:—

	D.A.	A.G.	
A.D.C.	A.D.C.		A.D.C.
S.O.R.E.	B.M.R.A.		D.A.A.G.
A.A.G.	C.R.E.	C.R.A.	A.A.G.

G.O.C.

No officers other than the above will join the divisional staff.

Gallopers will not march past, but remain on the left of the band, opposite the saluting point, until field movements commence.

^{*} When a division or large body of troops is reviewed, it will not march past in mass unless specially ordered to do so.

Distances.—When marching past in column, column of double companies, or mass sixty paces will be preserved between brigades. When in line of quarter columns, there will be one hundred and fifty paces between brigades.

The bands of the leading brigade will commence playing as the brigade moves off, those of succeeding brigades as soon as the band of the brigade in front of them ceases to play.

# 193. Review of large bodies.

Specified distances have been prescribed for the position of generals and brigadiers in front of their commands, but these distances may be altered to meet requirements of ground, or when the colonel, or colonel-in-chief, of a regiment is present on parade.

A distance of one hundred paces will be preserved between divisions when marching past in column, column of double companies, or mass, and two hundred paces when in line of quarter columns.

When more than a division marches past, the officers commanding divisions will alone fall out, unless otherwise specially ordered.

Field states.—On occasions of review and inspection at which the Commander-in-Chief is present, the officer in the immediate command of the troops assembled will deliver his field state to the Commander-in-Chief, to the adjutant-general, and to the quartermaster-general (or, in their absence, to their respective deputies) after the salute, when he receives instructions as to the order of the parade. When the troops assembled are to be inspected or reviewed by the Sovereign or by any other Royal Personage, the Commander-in-Chief (if present)

will himself deliver a state of the troops to that Royal

Personage.

Position of artillery.—The usual position of artillery on parade is on the flank of the line, with an interval of twenty-eight or thirty-five paces, according to the number of horses in the guns whether six (or fewer) or eight.

194. Royal Review.

#### Order of March.

1. Detachment of Household or other cavalry, preceded by a staff officer.

2. The Sovereign's led horses.

3. Equerries in waiting to Princes of the Blood.
4. Aides-de-camp to the Commander-in-Chief.

5. Aides-de-camp to the Sovereign.

6. Deputy adjutants-general at Head-quarters.

7. Equerries in waiting to the Sovereign.

8. Deputy adjutant-general to the Forces, Director of military intelligence, Director of artillery, Inspector-general of fortifications, and Inspector-general of cavalry.

9. Adjutant-general, Military Secretary to the Com-

mander-in-Chief, Quartermaster-general.

10. The Commander-in-Chief (when not on the right of the Sovereign).

11. Princes of the Blood.

12. The Sovereign.

13. Gold Stick in waiting, Master of the Horse (if present).

14. Foreign general officers and Military Attachés of

Foreign Powers.

15. General officers and colonels on the staff, in successive order according to rank and seniority.

16. General officers not upon the staff.

17. Equerries and attendants up on Foreign Princes.

18. Assistants adjutant - general, Assistant quartermaster - general, and Assistant military secretary at Head-quarters.

19. Deputy assistants of the Adjutant and Quarter-

master-general's Departments.

20. Brigade majors and personal staff of general officers present.

21. Royal carriages.

22. Detachment of cavalry.

#### GUARDS.

# 195. GENERAL RULES.

1. When guards turn out they will fall in, with shouldered arms, at open order. When the guard is commanded by an officer, he will be three paces in front of the centre of guard, other officers will take post as in line; when by a non-commissioned officer, he will fall in

on the right of the guard.

A guard of honour will form up at open order, the commander three paces in front of the second file from the right, or, in a confined space, from the flank by which the personage for whom the guard is mounted will approach, the officer carrying the colour three paces in front of the centre; if there is a third officer he will be three paces in front of the second file from the other flank.

Guards will march with bayonets fixed and arms at the Slope, except when furnished by rifle battalions, when

they will march with arms at the Trail.

The officer carrying the colour will march in the centre of the guard.

In wet weather arms will be carried at the Secure.

2. Guards will not turn out after retreat or before reveille, except at tattoo and on the approach of a body of troops, in cases of alarm, or to receive grand or visiting (I.D.)

rounds, nor will they during this period pay any compliments, except to grand rounds, to whom they will

present arms.

3. Sentries will not present arms to any officer or armed party (except grand rounds) after sunset; but as long as they can discern an officer, they will come to their front on his approach, and stand steady with shouldered arms till he has passed.

4. Sentries in their sentry boxes will salute by coming

smartly to attention.

5. The honours and salutes paid by guards and sentries are detailed in the Queen's Regulations, Section III, "Guards and Sentries."

Parties marching with arms at the secure, and parties with side arms, will pay and return compliments as unarmed parties.

### 196. Trooping the Colour.

1. At the hour appointed for this ceremony, points will be placed for marching past, and the guards formed into line, with unfixed bayonets, by the adjutant of the day. The senior serjeant with each guard will take command of it, posted on the right of the front rank. will be placed at a distance of about two guards in front of the left of the line, in charge of a serjeant and a double sentry. The walk of these sentries will be at right angles to the line, with their front inwards; they will be posted at three paces right and left of the colour, and act with the men in the line. The serjeant and sentries will be taken from the right guard, and the The sentries turn outwards latter will be its right file. at three paces from the colour and inwards at 10 paces from it, working together, the time being taken from the front rank man of the file, who will be on the right. They resume their places with the right guard, while it

is forming to the left after receiving the colour, as will be hereinafter described.

The band will be formed in front of the right of the line, facing the colour; the drums will be drawn up in

front of the colour, turned towards the band.

2. Ranks will be opened by the adjutant, and the duties, with arms shouldered, handed over by him to the brigade major; the adjutant will then take post on the right of the line. The brigade major will take command, and, after inspecting the guards, will order them to Order arms and Stand at ease. will form the escare to

COMMANDING TO THE FRONT.

NON-COM- ( All the serjeants commanding guards MISSIONED | will recover arms and move out two paces OFFICERS in front of the line, the right-hand men of the rear-ranks of guards fill-GUARDS, | ing up the intervals left by their commanders.

QUICK-MARCH. INWARDS -TURN.

The drums will play a quick march. The serjeants will step off, and when near the saluting base on which the guards are to march past, they will receive the words INWARDS-TURN, on which the serjeant in the centre will halt, and turn about, bringing his rifle to the Shoulder. The remaining serjeants will turn inwards, and will halt and turn towards the line as they close on the centre serjeant, shouldering arms as they turn. The drums will cease playing before the command INWARDS TURN is given.

ORDER-ARMS. STAND AT-EASE. (I.D.)

The guards and serjeants will then be directed to order arms and stand at ease.

The drums will beat the assembly, marching across the parade; they will march through the intervals of the band, and halt and front in rear of it. As the assembly commences, the officers for duty will fall in three paces in front of the serjeants, and about three paces from each other, with carried swords; the brigade major will then deliver the parole and countersign to the commanders of guards, and point out the guards they are respectively to command. When sufficient officers are present for duty, there should be a captain and lieutenant, besides the lieutenant to carry the colour, with the right guard, which will form the escort to receive the colour; when there are not sufficient officers, the captain and lieutenant for the colour only will be with the first guard, and the lieutenant commanding the second guard will take command of the escort when it goes for the colour, moving in front of the centre of the first guard. The other officers being distributed among the remaining guards, the captain or other officer commanding a guard will be three paces in front of the second file from the right; the lieutenant to carry the colour will be three paces in front of the centre, and if another lieutenant be present, he will be in a similar position in front of the left.

3. The brigade major will then call the guards to attention, fix bayonets, shoulder arms, and hand the detail of duties to the field officer of the day, who will take the command of the parade, and proceed as follows:—

OFFICERS AND
NON-COMMISSIONED
OFFICERS OUTWARDS TURN.

The officers and serjeants will turn outwards, the former recovering swords and the latter their rifles.

TAKE POSTS
IN FRONT OF
YOUR GUARDS.

QUICK-MARCH.

The officers and serjeants will step off, halting and turning towards the line, opposite their proper posts; the former will carry swords, and the latter shoulder arms, as they halt.

TO YOUR GUARDS. SLOW—MARCH.

On the word MARCH, the officers and serjeants will step off in slow time. recovering swords and rifles as they take the first pace. The band will play a slow march as the officers and serjeants march to the line, and cease playing as the latter arrive at their places. When the officers arrive at three paces from the line they will mark time; the serjeants will mark time when on the right of their guards.

HALT, FRONT. The officers and serjeants will halt and front, the former carrying their swords, the latter shouldering their rifles.

The field officer will take post 15 paces in front of the centre of the line, give the command ORDER—ARMS, and signal to the band.

4. The band and drums will play a *Troop*, marching in time to the music from the right to the left of the line. On arriving near the colour they will change front, halt, and cease playing. They will then play a *Quick March*, and move from left to right, change front, halt, and cease playing when in front of the right of the line.

The Drummer's Call will beat. On the first tap of the call the captain and lieutenant of the right guard will recover swords and turn inwards, and will move across in quick time; the captain placing himself three paces in front of the right file of the second guard, the lieutenant three paces in front of the lieutenant for the colour who will be three paces in front of the centre of

the escort. If there are only two officers with the right guard the escort will be commanded by the subaltern from the second guard. The band will be placed in front of the first guard, and the serjeant-major will fall in four paces in rear of the centre file of the escort, and draw his sword.

The field officer will then give the command, ESCORT FOR THE COLOUR, SLOPE ARMS. REMAINDER, STAND AT—EASE; the sentries on the colour remaining with ordered arms.

Escort Close Order, March, By the Left. Quick-March. Left—Form. Forward.

The escort, preceded by the band playing the "British Grenadiers," will move out the distance of a guard and a half from the line, then form to the left, and march straight to the colour.

The escort will be halted at rather more than forming distance from the colour, ranks will then be opened and arms shouldered.

The band when near the colour will change direction to the left, cease playing, halt, and turn about.

The guards will be called to attention and ordered to

shoulder arms by the field officer.

5. The serjeant-major will advance by the left flank to the front, receive the colour, and return towards the escort; the lieutenant for the colour will at the same time move out, four paces in front of the commander of the escort, passing by his right, and, having saluted the colour as the serjeant-major brings it up to him, and then returned his sword, will receive the colour, place it in his belt, and turn about; the escort will be ordered to present arms, the serjeant-major saluting, the sentries presenting, and the serjeants on the flanks of the escort porting arms and turning outwards; the band will play "God Save the Queen" when the Queen's colour is being trooped, or the first part of a Troop if the regimental colour.

Shoulder-Arms.

The escort will shoulder arms, the lieutenant with the colour will take post three paces in rear of the commander of the escort, passing by his left, the serjeant-major will resume his post, still keeping his sword drawn, and the band will front.

On the move. Left-Form, Forward.

The escort will move off and form to the left, preceded by the band playing Slow-March. \ the "Grenadiers' March," the sentries and serjeant who had charge of the colour joining the escort.

By the Left. When the band approaches the left of the line it will cease playing, turn to the right, and make a double wheel to the left, passing between the officers and front rank and the front and rear ranks.

The drummers will move in rear of the rear rank. The band and drummers will if necessary mark time until the escort reaches them.

The lieutenant when at four paces from the line of commanders of guards will Right-Turn. ] give the words as per margin, and on the Left-Wheel. leading file of the escort arriving at the left hand man of the front rank of the line, Left - Wheel. ( will repeat the command, Left - Wheel.

ARMS.

As soon as the commander of the escort has given the second word, Wheel, the I field officer of the day will order the guards to present arms, and the band will recommence playing.

The commander of the escort will move along the front of the line of commanders of guards abreast of the second file from the right of the escort; the lieutenant carrying the colour following him, abreast of the centre.

front rank of the escort will file between the ranks of the guards, and the rear rank between the rear and super-

numerary ranks.

When the head of the escort arrives at the right of the line, the captain will take the place of the lieutenant, and move on with the guard; the lieutenant will mark time when at his original post, and the lieutenant with the colour will move on, passing him by the proper front.

When the escort has cleared the line, the lieutenant will give the words, Halt, Front, Left—Dress; as soon as the men have aligned themselves in the two ranks, and the captain will give the words Present—Arms. The band will cease playing before the escort halts, and will then form up on the right of the line.

The field officer will then order the guards to shoulder arms, and if a general officer is present the field officer

will order a general salute.

After this, the guards will take close order, the colour taking post in rear of the fourth file from the left of the right guard, the serjeant-major placing himself in rear of it, and one sergeant on each side. Subalterns not commanding guards will take post three paces in rear of

their guards.

6. The guards will then march past in quick time or, if required, in slow time with shouldered arms and quick time as a battalion in column. When the last guard has formed on to the original alignment the column will be halted. The markers of guards will then be called out by the brigade-major, and when they are covered in column by the serjeant-major, the order will be given to Form—Guards.

The guards having been formed, and the non-commissioned officers in command of guards having been given the countersign, the field officer will give the

command :-

All guards (except those of fewer than four files, which will move to their front in line or turn and move off in file) will form fours, and march off to their posts.

# 197. Relieving or posting a guard.

1. When the ground admits, a new guard will advance in line towards the front of the old guard, and will be drawn up fifteen paces in front, or six paces from the left of the old guard, and open its ranks.

2. As soon as this is completed, the old guard will present arms, and the new guard will return the salute.

3. Both guards will in like successive manner shoulder

arms again, order arms, and stand at ease.

4. The guard will then be told off and the first relief sent out. When the first relief of a new guard is sent out, a corporal belonging to the old guard will accompany it, to bring in the relieved sentries. If the relief moves in line, he will be on the left flank, if in file (or as in file) he will be at the head of the front rank of files (or rank). As soon as all the sentries are relieved, the two corporals will change places, and the corporal of the old guard will assume command. While the relief is going round, the commander will take over the property in charge of the guard according to the list in the old guard report.

5. When the reliefs have returned, and all the men of the old guard have fallen in, both guards will be called to

attention, and ordered to shoulder arms.

6. The old guard will then move off in fours or file, the

new guard presenting arms.

7. When the old guard is clear of the ground, the new guard will slope arms, and if not already there, will move on to the same alignment occupied by the old guard. Arms will then be ordered, and the commander of the guard will read the orders of the guard to his men; these

orders will also be read to the men forming the first relief on their coming off sentry. The men of the guard will then be dismissed to the guard room.

198. Relieving and posting sentries, and marching reliefs.

1. On the approach of the relief, the sentry, with shouldered arms, will place himself in front of the sentry box. The corporal of the relief will proceed as follows:—

Shoulder—Arms. At about 10 paces from the sentry.

Relief, Halt.

At about 10 paces from the sentry. At about 6 paces from the sentry.

Sentries, Port—Arms. The old sentry, and the man who is to relieve him, will port arms, the latter moving out from the relief and placing himself at one pace from the former, turning towards him; the old sentry will then give over his orders, the corporal referring to the board of orders to see if they are correctly given.

On this word, the old sentry will take one pace to his left, and then move to his place in the relief, turning to the rear, and the new sentry will take one pace to

his front.

Pass.

Shoulder-Arms. { The sentries will then be ordered to Front. { shoulder arms and front.

Relief, Quick—March. The relief will be marched on, and when it has proceeded about 10 paces

Slope—Arms. [ will be ordered to slope arms.

2. When a sentry is to be posted on a new post, the procedure will be as above described, except that on the command Sentry, Port—Arms, the sentry will port arms, move to the post assigned to him, and be ordered to front. The corporal will read the orders to him, and then direct him to shoulder.

3. The object for which he is posted, the front of his post, and the extent of his beat, will be clearly pointed out to a sentry when first posted.

Sentries must not quit their arms, lounge or converse with anyone on any pretence, nor may they stand in their

sentry box in good or even in moderate weather.

Double sentries moving about on their post will always

turn outwards when turning about.

4. Marching Reliefs.—Reliefs of fewer than four men will be formed in single rank, when of four men, or upwards, they will be formed into two ranks. (In streets, or narrow places, reliefs should always be marched in single rank.) When marching in line, the corporal will be on the right; when in file, (or as in file) he will be on the proper front of the rear file (or man).

# 199. Sentries challenging.

1. When it gets dark the sentries will challenge in the following manner: On the approach of any person the sentry will shoulder and call out in a sharp tone, Halt. Who comes there? when on a post where a sudden rush could be made upon him, he will at once come to the charge; if the person approaching gives a satisfactory reply, the sentry will say Pass friend; All's well, remaining at the shoulder or charge, till he has passed. If the person approaching answers GRAND (or VISITING) ROUNDS, when there is no countersign, the sentry will say Pass grand (or visiting) rounds: All's well, presenting as they pass if they are grand rounds; but when there is a countersign he will say Stand grand (or visiting) rounds: Advance one and give the countersign, at the same time coming down to the charge; in this position he will receive the countersign, and if it is correct will say Pass grand (or visiting) rounds, and proceed as above described.

2. If the sentry is on or near the guard-room door, he will proceed as described below.

#### 200. Guards turning out.

1. The following form will be observed when a guard is visited by the field officer or captain of the day, called

grand or visiting rounds :-

On their approach the sentry at or near the guard-room door will challenge: Halt; who comes there? The officer will reply, GRAND (or VISITING) ROUNDS; the sentry will then call: Guard — turn out. The guard will fall in, and, if there is no countersign, the commander will call out: Advance, grand (or visiting) rounds. All's well; to grand rounds he will present, to visiting rounds he will remain at the Shoulder.

If there is a countersign to be given, a corporal or serjeant with a flank file of the guard will double out, and when about ten paces from the rounds will order the file to halt, and will then repeat the challenge: Who comes there? The reply will again be, GRAND (or VISITING) ROUNDS; the non-commissioned officer calling: Stand, grand (or visiting) rounds. Advance one and give the countersign. Rounds will then in a low voice give the countersign, which the non-commissioned officer alone will carry, in double time, for verification to the commander of the guard. If correct, the commander of the guard will call out, Advance, grand (or visiting) rounds. All's well. The file will then double back to the guard, and rounds will advance to the guard, which will present arms to grand rounds.

#### 201. PRESENTATION OF COLOURS.

1. The battalion will be drawn up in line in open order, except the colour party, band, and drums.

The place for the colour party will be preserved by three

non-commissioned officers. The old colours, with the three serjeants of the colour party and double sentries, will be in front of the left of the line, at right angles to it and the band and drums placed as for trooping.

The lieutenants of the colour party will be with the escort (the right company), which in this case will be

commanded by a captain.

The new colours, cased, will be in rear of the centre, in

charge of two senior colour serjeants.

2. The old colours will be trooped. On reaching the right of the line, the old colours will take post in front of the escort, which will then advance about ten paces, form to the left, and in that order proceed to the left of the line, the band will follow, playing "Auld Lang Syne." The escort will return to its place by the rear; the old colours, cased, being left in rear of the battalion in charge of two colour serjeants.

The battalion will then form three sides of a square.

The drums will be piled in the centre; the new colours will be brought up from the rear by the colour serjeants in charge, and placed against the pile of drums, one on each side, the Queen's colour on the right. The major and senior lieutenant will then take charge of the Queen's colour; the next senior officer and next senior lieutenant of the regimental colour. These officers will uncase the colours and replace them against the drums.

3. The consecration will then proceed.

After the consecration, the major will hand the Queen's colour to the person presenting the colours, from whom the senior lieutenant will receive it, going down on the right knee; the regimental colour will in like manner be handed by the next senior officer, and received back by the second senior lieutenant; both lieutenants will then rise.

- 4. Any address intended to be made will now follow. Line will then be re-formed, and ranks opened, the colours, unfurled and turned towards the centre of the line, will be given a general salute. The colour party will then march in slow time to its place in line, the band playing "God save the Queen."
- 5. The battalion will march past, the old colours following in rear of the column.

# FIRING A FEU-DE-JOIE.

The troops will be drawn up in line, at the shoulder; bayonets will not be fixed. On the caution FEU-DE-JOIE, OPEN-ORDER. MARCH, the rear rank, supernumeraries, and subalterns will step back four paces, the mounted officers will remain in the rear of the line.

Ready. { Muzzles of rifles to slant upwards when loading, and to remain so.

Fresent. { Rifles to be elevated at an angle of 45 degrees.

The right-hand man of the front rank will commence the fire, which will run down the front and up the rear as quickly as Commence. { possible. When the right hand man of the rear rank has fired, the whole will glance their eyes to the right to bring the rifle to the first position of The Ready.

Two more rounds will be similarly fired. When the third round is fired, the commanding officer will give the order Cease Fire. O. der-Arms.

The mounted officers will then move to the front and the commanding officer will give the following commands:-

Fix Bayonets.
Shoulder—Arms.
Royal Salute.
Present—Arms.
Shoulder—Arms.

Order—Arms.
Head dresses are removed.
Three Cheers.
Unfix Bayonets.

When artillery are present and are ordered to fire 21 guns, seven will be fired before each round.

#### 203. FUNERALS.

- 1. The troops detailed for the escort, according to the rank of the deceased, will be drawn up two deep in open order with unfixed bayonets (small escorts with files at one pace interval), facing the building where the corpse is placed.
- 2. The escort will be ordered to present arms as the corpse is brought out, and when the procession is ready to move off, the escort will be ordered to reverse arms: the ranks will then be closed. The officers' swords are reversed under the right arm, the point downwards, the hilt being grasped with the right hand, blade uppermost.
- 3. Small escorts will march in file at the head of the procession.
- 4. Large escorts will march by companies, in fours, at the head of the procession. The band will follow the escort, drums will be muffled.
- 5. Unless specially ordered by the officer commanding the garrison, the band will not play the funeral march until within about 300 yards of the burial ground, when the men will step in time with the music.

6. The remainder of the procession will be formed thus:—

#### THE CORPSE.

Pall bearers, of equal rank with the deceased, on each side of the corpse; if a sufficient number of that rank cannot be obtained, officers next in seniority are to supply their places.

#### Chief Mourners.

Officers or non-commissioned officers, two and two, or in fours, according to rank, the juniors in front.

7. When the head of the procession arrives near the spot where it is met by the clergyman, the escort will form two deep, and gradually open out, halt and turn inwards, so as to form a lane for the pression to pass through. The escort will be ordered to rest on its arms reversed, and stand at ease; the heads of the men so turned as to look towards the corpse.

8. After the procession has passed through, the escort will be called to Attention, ordered to reverse arms, turned towards the grave, and follow the procession in slow time.

9. At the grave the troops will be formed up in such a manner as circumstances require, the escort near the grave, resting on its arms reversed, with six paces between ranks.

10. The funeral service will then be performed.

11. At its conclusion the escort will be called to attention, present and shoulder arms; three volleys will be fired over the grave, and the troops will then be marched back to quarters.

12. In marching back the band is not to play, nor the drums to beat, until the party is entirely clear of the

burial ground.

13. In the funerals of senior officers the arrangements will be made under the supervision of the officer commanding.

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# PART X.

# I.—RULES FOR THE CONDUCT OF FIELD MANŒUVRES.

Those paras. marked by an asterisk are to be read to the troops at least once a month between April and September.

#### 204. General Rules.

1. General idea.—A general idea will be issued beforehand for the information of all concerned. It is to be re-issued in brigade, regimental, squadron, battery, and

company orders.

2. Special ideas.—In framing special ideas, care is to be taken that the scheme is in each case suitable to the force to be employed and the ground available. Special ideas will be communicated confidentially to the commanders of forces shortly before the exercise, but in sufficient time for them to be communicated to all units whose officers will be responsible that they are read and explained to each squadron, battery, and company, at the place of assembly, or elsewhere, on the day of execution.

(I.D.)

When the ground available for manœuvre is limited, or forbidden ground intervenes within the area selected, if the opposing forces are placed sufficiently far apart before the commencement of operations, this separation will allow of initiative on the part of the commanders

and also of preparatory artillery fire.

3. Orders framed on special ideas.—In detailing a force for an operation its strength and composition should be proportionate to the ground available. The orders issued by commanders of forces should be short, clear, and free from ambiguity. These orders and the general instructions based on them are to be communicated by officers commanding units to the whole of their officers, who will follow them on their maps, and explain them afterwards to the other ranks.

4. Reports.—All reports, whatever their nature, are, if practicable, to be in writing, with the signature of sender,

the place, hour, and date.

It is usually desirable that an orderly should have a message he is going to take fully explained to him before he starts.

Staff and orderly officers are to take down in writing verbal orders given them to carry, unless these be of minor importance, when they may be conveyed verbally. In such case the officer is to repeat the order before riding away.

Written reports and orders, as well as all signal or telegraph messages, are to be carefully preserved, and handed to the senior umpire at the conclusion of the manœuvre.

5. Units as basis of calculation.—The strength of opposing forces is to be estimated by squadrons, battalions, or batteries, or in the case of smaller bodies (when detached as such under their proper commanders), by troops, sections or guns, half battalions, companies, half companies, or sections, and not by their actual effectives.

6. Bugle calls.—No bugles or trumpets are to be sounded, except by order of the umpire-in-chief.

On the undermentioned calls sounding, the troops will

act as follows :-

(a) Halt.—Cease fire; infantry lie down, or, if the weather be wet, stand at ease with ordered arms; mounted troops dismount.

(b) Advance.—The engagement is resumed.

(c) Cease fire.—Conclusion of operations. Units form

up ready to march home.

(d) Cease fire, followed by Retire.—The troops will march home after arms have been examined; and, if cordite has been used, after the barrels have been wiped out.

(e) Officers' Call.—Officers commanding regiments, battalions, batteries, and squadrons, and the umpire staff, repair to the umpire-in-chief.

# 205. Rules for Troops.

1. Dress.—The opposing forces will either be in different

orders of dress or wear some distinguishing mark.

2. Ball ammunition.—Before troops leave barracks to manœuvre, the following certificate is to be furnished by commanding officers of battalions:—"I certify that the magazines and the pouches of the men of my battalion were examined on parade, and that an officer felt at the bottom of every pouch and found no ball ammunition in any of them."

*3. Bayonets not fixed, swords not drawn.—Bayonets are never to be fixed by infantry, nor swords drawn by

mounted troops, when there are opposing bodies.

*4. Action in villages, enclosures, &c.—Villages and enclosures with troops formed in front are to be considered as occupied if the troops have been there sufficiently long to admit of such occupation being carried out. Troops

(I.D.)

are not to enter private grounds, coverts, or gardens. Banks or fences are not to be injured, nor game pursued.

Railways are only to be crossed by the regular bridges

and crossings.

Firing near buildings or ricks should be avoided as much as possible, and every precaution taken to guard against fire. If a fire breaks out the nearest officer will temporarily suspend the movements of his command and extinguish it.

*5. Action on roads.—Cavalry operating on a public road will not move faster than the trot, and must be halted or turned about at 50 yards distance from any of the

opposing force it meets.

As a rule, artillery on a public road will not fire. When space permits, a single gun may be unlimbered and placed in position, but without firing. Only when unoccupied by the public, with no horses or carriages near, may a single shot be fired to mark the position. Under the same restrictions, at a bridge or defile a few rifle or carbine shots may be fired.

6. Forced marching.—All hurry and forced rate of marching (unless under special circumstances), or a more rapid advance under fire than would be possible in actual

warfare, is to be avoided.

*7. Patrols, scouts, &c.—When patrols or scouts of opposing forces meet, those that are supported by superior formed bodies within reasonable distance will be allowed to proceed; those belonging to the opposing force will be sent back to their nearest support.

Individual officers or scouts are not to approach, mounted, within 600 yards of a firing line unless under cover. If they approach nearer they will be ruled out of

action by umpires; they are not to be captured.

Signalling parties are liable to be ruled out of action if beyond the limits of protection by their own troops.

*8. Distance to be preserved between opposing bodies of troops.—When cavalry is attacking cavalry, artillery, or infantry, it will not actually charge, but will decrease the pace when 200 yards distant, and halt at 100 yards. Cavalry is not to ride through batteries of artillery. Infantry is not to approach an opposing body of any arm nearer than 100 yards in the open, and 50 yards in enclosed country. Firing at less than 100 yards range, by any arm, is not permitted.

When the limit of 100 yards is attained, the opposing bodies are to halt, cease firing, and wait until it is decided

which is to retire.

9. Skeleton enemy.—When a skeleton enemy is employed, it should occupy the correct front and depth of the force it represents, and move at such speed only as would be attainable by the full force represented when moving at the regulation paces.

10. Orders by umpire staff.—Orders given by the umpire staff are to be regarded as the orders of the umpire-in-chief, and are to be carried out without discussion. A decision

once given can only be altered by the senior umpire.

11. Cavalry.—That body of cavalry against which an umpire has decided will retire 300 yards. The victor may reform, or follow with his whole or with portions of his force; but he may not approach nearer than 100 yards. If the defeated force is not reinforced, it must, without re-forming, continue to retire, so long as the victor is in sufficient force. The umpire will see that the pursuit is not too extended, and decide, by the manner and the force of the pursuit, the length of time the defeated body is to remain out of action.

12. Losses.—The losses of cavalry, when repulsed by artillery or infantry, should not be estimated by less

than troops.

13. Cavalry will only fire at any one body of troops

advancing a sufficient number of rounds to denote its position. Credit for effect of fire will be given as if a

sustained fire were kept up.

14. Artillery.—Indication of target.—When artillery opens fire at long ranges, after the range has been determined, only occasional shots will be fired to mark the position. A screen will be exhibited to mark the target fired at, coloured as follows:—

If at cavalry-black and white diagonally.

" guns—white.

" infantry—black and white horizontally.

The screen is to be placed well forward where it can be easily seen, and have, if possible, a good background.

To further denote the target fired at, guns will be

fired as follows :-

If at cavalry—by single guns.

" artillery—by two guns in rapid succession. " infantry—by three guns in rapid succession.

Whenever guns are fired, the description of fire must

correspond with the target aimed at as above.

When guns open fire the commanding officer will enter in his note book the object of his fire, the range and how estimated, the projectile, and the exact time of commencing and discontinuing the fire.

When batteries are put out of action they will limber up to the front at cloe interval, as near as possible on the line on which they were in action; men dismounted.

#### Infantry.

15. Fire discipline and supply of ammunition.—Strict fire discipline and the economical use of ammunition are to be enforced. Only five rounds should be carried in the pouches at the commencement of the operations. The remainder is to be carried in the ammunition carts or on

mules, and issued as required on requisition. If, on open ground, the caris or pack animals are brought up nearer than 500 yards to an enemy firing, the nearest umpire will decide as to the result. Troops are not to be supposed to be in possession of any ammunition not actually carried.

Infantry will only fire at any one body of troops advancing a sufficient number of rounds to denote its position. Credit for effect of fire will be given as if a sustained fire were kept up.

16. When beaten.—Beaten infantry cannot reform for attack until it reaches supporting troops or shelter. Victorious infantry may pursue at 200 yards distance.

# 206. Rules for the Umpire Staff.

1. Organization.—The umpire staff consists of: the umpire-in chief, a senior umpire, umpires, and assistant umpires. They are to study the general principles for the working of the arms of the service other than their own, and are to be thoroughly conversant with Part V., Infantry Drill. The duty of umpires is to see that these rules are adhered to. They are not concerned with

criticising the operations.

2. Selection and distribution of umpires.—At every manœuvre the director of the whole will act as umpire-in-chief. Umpires may only consider the actual situation of the moment, and not the intentional idea of the manœuvre. The umpire-in-chief is alone empowered to interfere with the progress of events. It may be desirable at times for the umpire-in-chief to suspend the operations temporarily, and to review the situation; but he should seldom revise the senior umpire's decision on the spot. The senior umpire is responsible for the distribution of the other umpires. Umpires and their assistants are, when practicable, to meet the senior umpire

before the commencement of operations, when they will be informed of the positions occupied, as well as the orders given on both sides. A senior umpire should, if possible, be one grade higher in rank than the commanders of the opposing forces; he should be provided with one or more orderly officers and mounted orderlies. The number of umpires should be sufficient to ensure a decision being given before a situation becomes unnatural.

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Umpires before being appointed should have previously acted as assistant umpires; they should be changed as seldom as possible. Umpires will be allotted at first to bodies of troops, then, as these approach each other, to areas of ground, where they will give decisions in-

differently to either side.

There will be one senior umpire, and only one set of

umpires.

When more than one battalion is employed, umpires should not be under the rank of field officer; assistant umpires may be of lower rank.

Umpires when with troops should be careful to keep as much out of sight of the opposing force as the nature

of the ground will allow.

3. Assistant umpires.—Assistant umpires are appointed to inform umpires of the strength and position of the troops, the number of guns in position, and the objects they are firing at. The duties of these officers are to accompany officers commanding units, receive from them particulars of all orders issued, and note the progress of events and the situation of the troops. On a collision being imminent they report the situation to the senior umpire. They may give decisions in cases that are quite clear. When not clear they may direct the cessation of proceedings until the decision of an umpire can be obtained.

Special umpires, if possible, are to be detailed for the supervision of artillery combats. As their decisions may

influence the engagement of the other arms, they must make these known, not only to the artillery and to the senior umpires, but also as far as possible to the other umpires employed within the artillery sphere of action, and to the troops.

4. Dress.—In the absence of special orders umpires will be in drill order. All wear a white band on the

right arm above the elbow.

All other neutrals in uniform will wear a white band

on left arm.

5. Special ideas.—Officers in command of forces will inform the senior umpire what orders they have given,

and what they propose to do.

6. Orders for the attack.—The umpire-in-chief is to listen to the explanatory directions of the officer commanding the attack for the distribution of the force, and for the several phases of the attack, and if he is not satisfied that the orders provide for this distribution, and as far as can be foreseen at the time for the subsequent successive phases of the attack, he will require them to be rectified before any movement is made to the front (see 111 to 114).

If the scheme of attack does not permit of this division into phases, umpires will record the fact on the spot for

mention at the conference.

Umpires may, acting within these regulations, rule troops or guns out of action. To encourage independent action on the part of subordinate commanders, and avoid situations impossible in war, they should, when opportunities offer, inform commanders of the effect of their fire upon the enemy as well as of that of the enemy upon them.

It is undesirable to lose time in estimating small losses. Umpires when declaring troops incapable of advancing, or when enforcing a retirement, should briefly state to the commander the reason for such order, reserv-

ing full explanations for the conference. Umpires placing troops cut of action will give the officer in command a memorandum, showing the time that his men are to remain out of action. Troops should never be placed out of action for more than half an hour.

Troops so placed out of action must retire at once out of the fighting force, and, at the expiration of their allotted

time, join the reserve.

7. Decisions by umpires.—Umpires will decide questions for all arms, without reference to their effect on the general course of the manœuvres. When the senior umpire is at hand other umpires should obtain his approval before giving important decisions. They will report any hesitation to comply with their orders.

Umpires should at once inform the senior umpire of decisions which materially affect the day's operations.

In the same way the commanders of troops are to report the decisions of umpires to their senior officers, and communicate them to the troops on either flank.

Decisions given concerning artillery must specify whether the guns, or any of them, are unable to move

and for what time.

Umpires are not empowered to order artillery in action

to retire from their positions.

8. Action on a collision becoming imminent.—When there is a prospect of collision, umpires should draw between the forces. After discussing the tactical situation, based on the strength and situation of the two sides, they must decide which side, if either, is to retire. The decision need not necessarily be given by an umpire; if one is not present, the commanders on either side should confer together and agree which is to go back.

9. Time of prominent events to be noted by umpires.

—Before the commencement of operations, the watches of umpires should be compared, or set in agreement.

Umpires are to note down the exact time when each prominent event in the day's proceedings takes place.

10. Estimates of loss.—Losses are to be estimated by squadrons or troops, sections or guns, half battalions, companies, half companies, or sections, and not by their actual effectives. Where a case admits of any doubt it will generally be desirable for the umpire to decide in

favour of the force acting on the offensive.

11. Umpires dismounting.—To enable umpires and assistant umpires to judge of the fire discipline of infantry and artillery referred to in 207 (2) (d), (e), and (f), they should dismount and note by personal inspection the ranges, the adjustment of the sights, the aim, the steadiness of fire, and the protection given by the formation of the ground. This is especially essential when an attack by cavalry on infantry or artillery appears imminent. They may call on the officer commanding the troops to furnish men to lead their horses.

12. Summary of events at conclusion of day.—At the conclusion of each day's proceedings commanders and umpires will give the umpire-in-chief a brief verbal account

of the day's events as seen by or reported to them.

In restricted areas and in the neighbourhood of garrisons it may sometimes be undesirable to lay down authoritatively the exact solution of any tactical problem, as the decision may prevent initiative in future. At autumn manœuvres if the umpire-in-chief does not approve of the measures taken he must always give a distinct opinion as to how the operation should have been carried out.

13. Written reports.—If the operations have been extensive the senior umpire will send in to the umpire-inchief a written report within three hours after termination of the day's manœuvres.

This report will be based on his own observations

and on his umpires' notes, and should be as short and

concise as possible.

In the case of less important operations a written report will not be required, but immediately before the conference the senior umpire will collect the notes made during the day, and hand them, together with his own, to the umpire-in-chief.

The umpire-in-chief will collate the results, and will publish, as soon afterwards as practicable, a summary of events, and his criticism upon them, for the information

of all concerned.

# 207. General Principles to Guide the Umpire Staff.

1. Decisions.—The rules laid down for umpires are to be regarded only in the light of general principles for assisting them in giving decisions. Even at manœuvres circumstances will arise that cannot be met by definite rules.

In all decisions special importance must be attached to moral influences so far as they obtain in peace, as shown by the order and steadiness of the men and the efficient

exercise of command.

The power of putting troops out of action should not be exercised except where it is necessary to show the

combatants the effect of their actions.

2. Principles guiding decisions.—In forming their decisions umpires must be guided by the following considerations:—(a) the relative force engaged on each side and in immediate support or reserve; (b) in the attack—the strength of a position, the nature of the ground to be passed over, the plan of attack and its preparation by artillery fire; (c) on the defensive—the dispositions of the troops, and arrangements for counter-attack; (d) the handling and fire discipline of the troops on either side

the number of rounds that could be fired, the accuracy of the sighting, and the manner in which the fire was delivered; (e) in an attack by cavalry—the degree of surprise, the appropriateness of the moment, the steadiness of its advance, its formation, the advantage of ground, and the nature and quality of the fire to which it is exposed—and in the attack on infantry, by the length of time it was under fire, the number of rifles opposed to it, its speed, formation, and cohesion up to the moment of collision (imaginary); (f) as regards guns, the manner in which batteries are brought into action, the accuracy in finding the range, fire discipline while engaged, the arrangements for supply of ammunition and protection of teams, the nature of the projectiles, and the care in laying.

Umpires must be careful to observe whether troops under artillery fire, as indicated by the screen referred

to in 205 (14) alter their formations or seek cover.

3. When works, &c., can be carried by a rush.—Neither works (imaginary), farmsteads, villages, defensible and prepared woods, or copses, can be considered liable to be carried by a rush, unless the attacking force has an overwhelming superiority of force. Attacks of this kind have to be specially prepared, and the decision of the result will rest with the senior umpire.

# 208. Principles applicable to Cavalry.

1. Attacking cavalry.—The situation of the enemy, pace favoured by ground, and the manner of executing the attack are specially important considerations. Should cavalry succeed in attacking in flank, or while the enemy is deploying, it may be adjudged victorious, although inferior in strength. Weight must be given to fire of any sort against either side just before or during the attack.

2. Attacking artitlery.—If unprotected by other arms, artillery on the move is at the mercy of a cavalry attack.

A frontal attack on guns will entail heavy loss, but

should not be considered impracticable.

Decisive results can alone be obtained by a brigade being held together and worked as a whole. The isolated action of separate regiments can only result in partial successes; it can seldom be desirable to split up a brigade for the purpose of attacking guns while the main body of the opposing cavalry is intact.

In coming to a final decision, it should be considered whether in war the victorious cavalry would be able to carry off or render useless the guns or limbers; or to con-

firm its success in other ways.

3. Under artillery fire.—Cavalry halted or moving at a walk, when under artillery fire at and under 1,000 yards,

will be adjudged to suffer heavy loss.

4. Cavalry. Formation within 800 yards of infantry.

—If formed bodies of cavalry approach in sight, and within 800 yards of infantry, which is not otherwise engaged, they will be adjudged to suffer severe loss proportionate to the number of rifles directed on them, provided the range be accurately given.

5. Attackia shaken infantry.—It is of the greatest importance to: ake infantry in flank. Against shaken or weak infantry even small bodies of cavalry may be successful. When the ground is undulating and favourable, cavalry may often produce a greater effect and suffer less loss by surprising the flanks of the supports or reserves, than it can by attacking the firing line.

6. Unshaken.—Against unshakeninfantryadeep formation and an attack steadily conducted and carried through is required. Should the ground not admit of a screened approach or of surprise, then the cavalry must pass quickly over the fire-swept ground. Should the infantry be tempted to alter its formation or display bad fire discipline, it gives the cavalry a great advantage. Such attacks will

be productive, when successful, of heavy loss to the

infantry.

7. Dismounted cavalry.—The fire effect of cavalry fighting on foot must be considered in the same way as that of infantry.

# 209. Principles applicable to artillery.

1. Points influencing its action .- As regards artillery

action, the following points should be considered :-

(a) How far its advance is sheltered, and its opening fire takes the enemy by surprise. (b) The choice of position as regards effective fire action and cover, the facility for observing the effect of the fire and rendering it difficult for the enemy to observe the effect of his fire and to find the range. (c) The distance from the target, its extent, visibility, and mobility; the nature of fire employed, its duration and rate, and the fire discipline generally. (d) The number of batteries engaged against the same object. (e) The losses caused by hostile fire. (f) The manner in which the limbers and wagons are disposed. (g) Flanking artillers fire must have great importance attached to its effect. (h) It should be borne in mind that guns can be fought up to the moment of capture, provided there are three working numbers per gun.

2. Casualties.—Artillery advancing or retiring under fire, may be adjudged to drop guns, limbers, or horses, from casualties, or to have guns delayed (up to ten

minutes) according to the intensity of the fire.

Umpires should frequently designate part of a gun or its equipment as disabled. The horses, or parts of the gun named, will be removed, and, if possible, replaced on

the spot.

An umpire may order artillery which is engaged to cease fire, but an order to retire from its position can only be given to the artillery by the officer commanding the force or the detached portion of it.

3. Firing on cavalry and infantry.—Cavalry halted, or moving at a walk, or enfiladed infantry in any formation affording a fair mark, may be adjudged to suffer loss

from guns at ascertained ranges under 2,000 yards.

A battery having concentrated its fire on a bridge over an unfordable stream or on a defile at verified ranges under 2,000 yards, may be considered as successfully opposing the passage. If itself under effective fire the case must be decided according to the opposing conditions.

4. Against artillery.—Up to a range of 2,600 yards, artillery which has found the range can entail loss to a superior number of hostile guns while unlimbering. In an artillery combat with more than one battery on either side, the contest cannot be supposed to last for more than 20 minutes, the range not being more than 1,500 yards.

5. Effect on closed bodies.—Closed bodies, equal in strength to a squadron, can only halt in the open at ranges between 1,500 and 2,200 yards under well-sustained artillery fire, when such fire is met by opposing artillery fire. The same rule applies to infantry offering a fair target at ranges between 1,000 and 1,500 yards.

At ranges between 1,000 and 1,500 yards infantry can only move to the front or rear in line, unless the ground admits of temporary cover; cavalry moving at a walk under such fire in open ground will be adjudged to

suffer loss.

6. Against infantry in extended order.—At 1,100 yards artillery can hold out against the fire of extended troops. If strong extended lines approach to 650 yards of guns, insufficiently protected by their infantry, the artillery must retire or be liable to be adjudged to suffer heavy losses.

7. Under close infantry fire.—Guns may not be limbered up under the close fire of infantry which is not itself otherwise engaged. If gun teams have been exposed to it the guns may not be moved for twenty minutes.

# 210. Principles applicable to works, &c.

1. Shelter-trenches.—A shelter-trench can be made available for single rank in half-an-hour. The umpires must satisfy themselves that the necessary tools are on the spot. If screens are not available, the position of trenches is to be marked by picks and spades stuck in the ground.

2. Destruction and repair of bridges.—Lightly built bridges can be considered as destroyed in fifteen minutes, provided sappers, tools, and materials are actually on the spot. Cavalry pioneers with their equipment may be assumed to take twenty-five minutes.

Bridges can be repaired by sappers in half-an-hour,

provided the materials are available.

When troops retire from an imaginary barricade or other obstacle, a non-combatant should be left on the spot to mark the site until it is ruled that the obstacle is destroyed.

# 211. Principles applicable to infantry.

1. Effect of infantry fire.—The effect of infantry fire is affected by various considerations, such as the range and its correct estimation, the nature of the target, the duration of the fire, the fire discipline, and any surprise or other disturbing element. Having in view the necessity for saving ammunition it will not generally be possible in peace manœuvres to estimate the *intensity* of fire.

2. Closed bodies coming up under infantry fire at 800 yards.—When opposed to a well-conducted, severe rifle fire, closed bodies of troops without cover can only get up to 800 yards, or move to a flank when the fire of their advanced troops is about equal to that of the enemy. A halt made for any length of time within these ranges without cover, will necessitate an umpire's decision.

3. Under 700 yards.—Under 700 yards, even when (I.D.)

covered by a strong firing line, closed bodies of infantry

can only move directly to the front or rear.

When the fighting line is closely engaged, that is at a distance of 500 yards (more or less according to the nature of the ground), no umpire is to permit a superior commander in rear to send forward an order unless it is despatched to the firing line with adequate reinforcements.

4. Decision under 350 yards.—At distances under 350 yards the decision on the fire fight in the open must be

speedily given.

5. In a defensive position, frontal attack.—(a.) Infantry, if judiciously posted behind a shelter-trench or earthwork, can only be dislodged by a front attack, well commanded, and showing effective fire discipline, of:—3 to 1, with effective artillery fire for at least 15 minutes; 4 to 1, without artillery fire. The attackers lose one-third if unsuccessful, one-fourth if successful. Defenders one-fourth if dislodged.

(b.) If judiciously posted in a strong position, but not entrenched, it can only be dislodged by a front attack of:—2 to 1, with effective artillery fire for at least 15 minutes; 3 to 1, without artillery fire. The attackers lose one-fourth if unsuccessful, one sixth if successful.

Defenders one-fourth if dislodged.

When a position has been successfully assaulted, the umpires must decide how long a time is to elapse before pursuit is permitted. This time will vary in proportion with the nature of the assault, and the losses sustained by the victors.

6. Flank attack.—A flank attack may turn either a good position or earthworks, and troops outnumbered

and outflanked must usually retire.

7. Meeting in the open.—When infantry meets infantry at 100 yards, both sides advancing, and neither side takes up a defensive position, the weaker must retire.

8. Bayonet attack.—When judging the result of a bayonet attack (bayonets not to be fixed) the following points must be considered:—The previous effect produced by artillery and infantry fire; the number of fresh troops that both sides have thrown into the fight; the way in which the fighting has been carried out; if a flank has been turned; and the nature of the ground.

9. Holding a defile against mounted troops.—Twelve men on foot in position may hold a narrow defile (say 12 feet wide) against mounted troops, provided they have a good field of fire. If the latter dismount, rules for

infantry attacks will apply.

### 212. Notes on Field Firing.*

1. Umpires will furnish written reports dealing in detail with each point mentioned in the Musketry Regulations, particular attention being given to the following subjects:—

2. Explanation of plan of attack.—If the enemy's position was clearly pointed out, and the plan and direction of the attack explained to all officers and non-com-

missioned officers.

3. Range.—The extent to which range-finders were used. Were the distances given by the range-finding party adopted by the commanders. How far the sights were adjusted and used by the men. The accuracy of the ranges given, as deduced from the results of the fire both of artillery and infantry.

4. The advance.—Formations adopted at the various ranges. How far officers and men were exposed to fire. At what stage of the attack did the mounted officers

(1.D.)

^{*} This subject, though not forming part of ordinary Field Manœuvres, is included here for convenience of reference.

dismount. In the case of cavalry were the horses of the

dismounted men led as far as possible under cover.

8, 213,

5. Fire discipline.—Description of fire used. Manner of giving words of command by company and sectional commanders. How far the commanders named the particular part of the position on which each volley was to be directed. On what parts of the position was the fire of artillery and infantry respectively directed. Were the positions in which the men fired adapted to the various ranges and to the ground. Did commanders use field glasses to observe and direct the fire.

6. Machine guns.—Were they well handled by the detachments. On what objects was their fire directed.

#### II.-SHELTER-TRENCH AND PIT EXERCISE.

#### 213. GENERAL RULES.

- 1. Advantage of cover.—In many cases the features of the ground will be such as to give natural cover to the troops; but it may often be necessary to make artificial cover. It is impossible to lay down the exact circumstances in which it would be necessary to shelter troops by means of artificial cover: as heretofore, an inferior force may have to strengthen its position by intrenchments, which might even be such as would more properly come under the head of field works; but in the present day it will doubtless also be advisable to provide hasty and temporary shelter for troops, even when prepared to act on the offensive; with this view the trenches should not offer any obstacle to the advance of the troops posted in them.
- 2. Amount of cover necessary.—A very slight earthen parapet is sufficient to protect men in a great measure from the effects of shrapnel and rifle bullets, besides screening

### PLATE XVI.

SHELTER-TRENCHES.

Fig. 1.

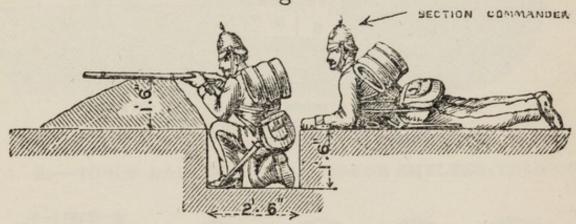


Fig. 2.

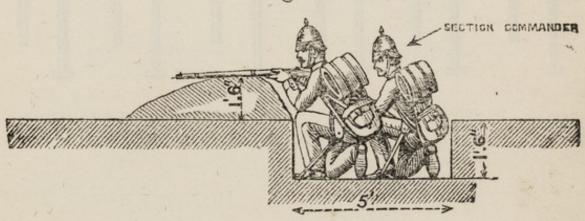
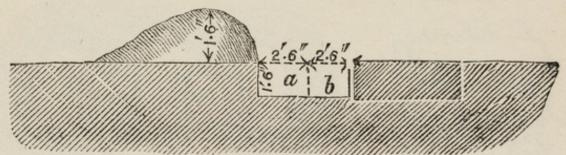


Fig. 4.

IST PORTION	
2ND	
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#### PLATE XVII.

Fig. 1.—SECTION OF SHELTER-TRENCH.



Tasks for men when two paces (5 feet) apart.

a Task for  $\frac{1}{2}$  hour  $5' \times 2'$   $6'' \times 1'$  6''a b ,, ,, 1 ,,  $5' \times 5' \times 1'$  6''

Fig. 2.—Tools laid out in pairs for shelter-trench drill.

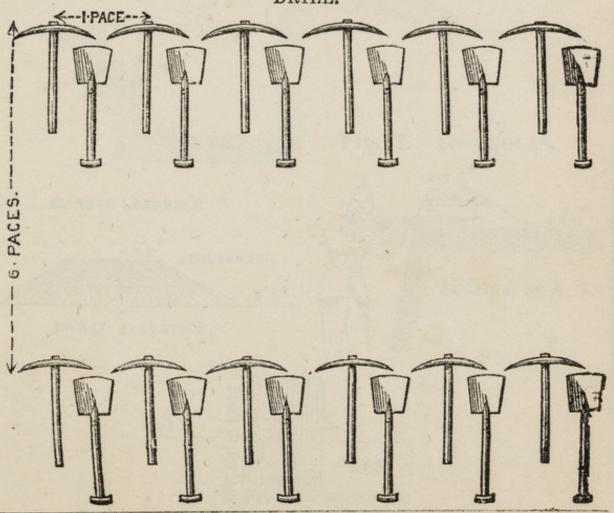
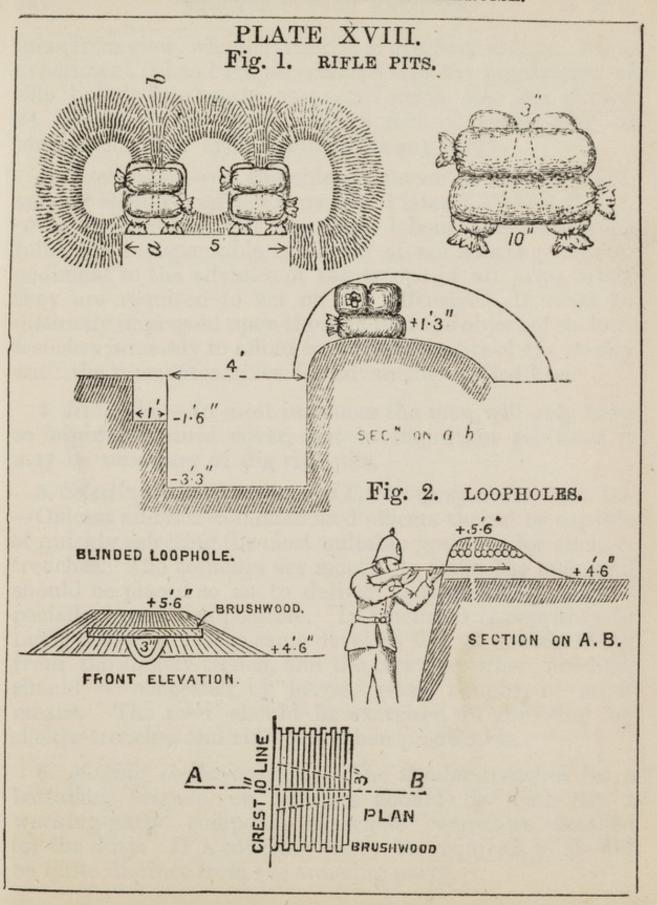


Fig. 1. surros San Statement Statement December 1



them from view, which in itself is of great advantage. From experiment it has been ascertained that the penetration of rifle bullets into newly excavated earth does not exceed 24 inches at 500 yards, and 3 feet of earth may be considered proof against bullets at any range.

- 3. Earth cover.—In the rifle-pit shown in Plate XVIII, and the shelter-trenches shown in Plates XVI and XVII, cover is obtained with very little labour, and the trench fulfils the indispensable condition of not offering any impediment to the advance of the troops of all arms, when they are required to act on the offensive. It must be distinctly impressed upon the men that the object of shelter-trenches is merely to afford cover from the fire of the enemy until the moment arrives for advancing against him.
- 4. Rifle-pits.—In most instances the men will only have to improve natural cover, but in important positions it may be necessary to dig rifle-pits.
- 5. Selecting positions for, and throwing up shelter-trenches.

  —Officers and non-commissioned officers should be capable of quickly selecting the most suitable positions for shelter-trenches. The trenches are merely to cover the men, and should be placed so as to deliver as powerful a fire (especially frontal) as possible. In tracing it is necessary to bring the eye to the same level as that of a man firing from the shelter-trench, and the trenches, when finished, should be concealed by leaves, grass, boughs, or other means. The men should be exercised in throwing up shelter-trenches and rifle-pits, when practicable.
- 6. Making shelter-trenches.— The shelter-trenches for a battalion, brigade, or division, should be made by a working-party composed of whole companies detailed for the duty. If a covering party be required, it should be quite distinct from the working party.

7. Tasks.—The extent of trench which can be excavated in a given time will vary with the nature of the soil and the facilities for turning natural cover to account, but in determining the number of men to be employed, it should be calculated that, in ordinary cases, an unskilled labourer can excavate one cubic yard (27 cubic feet) per hour, working continuously for at least four consecutive hours; also, that the distance between the diggers should not be less than two paces (5 feet).

Each man should be expected to excavate the following tasks in times not exceeding those specified:—

In half an hour Two paces (5 feet) of trench 2 ft. 6 in. wide, 1 ft. 6 in. deep, affording shelter for one rank kneeling. (See Plate XVI, Fig. 1.)

In one hour

Two paces (5 feet) of trench 5 feet wide, 1 ft. 6 in. deep, affording shelter for one rank and the supernumeraries, both kneeling. (See Plate XVI, Fig. 2.)

- 8. Tools for, and strength of working-party. Each man will ordinarily require a pick and a shovel.
- 9. Extending working-parties. It is desirable that when the troops are practised in the construction of shelter-trenches, or exercised in extending for that purpose, the following drills (which correspond with those used for columns of working-parties employed at night on sieges, &c.) should be adopted.
- 10. Formation of working-parties.—The companies told off as a working-party will be formed up in quarter column on one flank of the tools, which are to be laid out in pairs (see Plate XVII, Fig. 2), and in rows (2 per company) varying with the number of companies, and of the files in

them. The intervals between the sets of tools to be 1 pace, and the distances between the rows 6 paces.

#### DRILL.

### 214. Issuing and returning tools.

1. Slinging arms.—See Rifle Exercises.

2. Issuing and carrying tools.—The following drill is applicable for issuing tools when laid out in rows, a pick and shovel for each digger. (See Plate XVII.) Arms having been slung as in No. 1.

WORKING-PARTY, -TURN.

On the words FILE ON TOOLS, the markers on the flank towards which the LEFT (or RIGHT) > men turn, will move out and place themselves on the further flank of the FILE ON TOOLS. I row of tools for their companies.

QUICK -MARCH. Front.

On the word MARCH, the ranks will step off, file in rear of their tools, and No.-, Halt- \ be halted and fronted, and their officers will see that each man places himself in rear of the proper set.

No.-, Take up-Tools.

The captain will then give the command Take up Tools, when each man will advance the left foot a short pace, stoop down, and having taken up a shovel in his right hand, and a pick in his left, without noise, will come to attention, holding the tools at the trail, iron to the front and vertical, point of the pick downwards, hollow of the shovel towards the thigh.

In turning, to prevent noise, the handles of the tools should be brought into a vertical position by lowering the iron part of the pick, and raising the iron part of the shovel, resuming the trail when the turn is complete. When marching in file, the handles should incline outwards in order to enable the files to close up.

Right (or Left)

-Turn. QuickMarch.

Halt, Front,
Left-Dress.

The captains will then march into their positions in quarter column.

- 3. When the tools are in heaps.—If there be not time to lay out the tools in rows, they may be left in heaps, one for each company of the working-party; the ranks will turn to the left (or right) and receive their tools while filing past their heaps. After the men have passed the heap they will make a double wheel to the left (or right), and will be ordered to halt and front when in position.
- 4. Returning Tools.—When the tools have to be returned, the working-party, on arriving at the place of deposit, will be formed in quarter column.

WORKING-PARTY
RIGHT (or
LEFT)—TURN.

The working-party will turn to the right or left.

PREPARE TO GROUND TOOLS. QUICK—MARCH.

On the words PREPARE TO GROUND TOOLS, the markers will move out and indicate the place where the inner flanks of their companies are to rest, which should be four paces clear of the quarter column.

No.—, Halt,
Front.

Left—Dress.
Rear-rank—
Three paces step
back—March.
Ground Tools.
Order—Arms.
Left(or Right)—
Turn.
Quick—March.
Halt, Front,
Left—Dress.

As each company clears its marker the captain will order it to halt, front, and dress, and then order the rear rank to step back three paces and the whole to ground tools. When he has seen that the tools are correct, he will march the company back into its position in quarter column.

#### 215. Forming shelter-trenches.

1. On approaching the position of the proposed shelter-trench, if the column be advancing, the working-party will be halted 12 paces in rear of the proposed trench, the ranks of the companies forming the working-party will then be extended at such intervals as may be directed, the covering party continuing to advance until it is in a good position for covering the working rank.

If the column be retiring, the covering party will be halted and fronted with a similar object before it reaches the proposed trench, the working party continuing to retire

until it is 12 paces in rear of the proposed trench.

On the completion of the shelter-trenches the covering party will be retired, the working ranks will take up their arms, and fire will be opened as may be directed, after which the order will invariably be given to conclude with a charge.

216. Forming siege trenches or other intrenchments.

Extension of working-parties.—The following mode of

extending working-parties should be occasionally practised.

Men being in single rank are marched in column to the rear of one flank or the centre of the line on which they are

to be extended.

If the extension is to be to the left, the words of command will be by successive companies, right—turn, left—wheel, and, when the leading man is 1 pace in rear of the proposed shelter-trench, left—wheel, in extended order, at two (or more) paces intervals, right—form. The subaltern should pace along the line* and halt at every 2 paces, when the man whose portion he has paced, should with his left hand drive his pick into the ground to mark the left of his task, placing his shovel on the ground at right angles to the pick (blade to the left) and lie down until ordered to commence work.

A non-commissioned officer should follow the officer, for

the purpose of assisting to place the men.

If the party be armed, the men will, without word of command, turn about and take 4 paces to their rear and ground arms, and take off their accoutrements.

#### 217. Filling-in trenches.

It is recommended that the trenches should never be filled-in on the day on which they have been made, nor by the men as a battalion, but that a fatigue party should be sent out for the special purpose of levelling them. Defaulters might be employed on this duty. In one hour a man should be expected to fill in the following lengths:—

Eight paces of 2 feet 6 in. wide trench. Four paces of main trench 5 feet wide.

^{*} When forming trenches by night, tracing tapes are used to show the line of the proposed trench.

### III.—FIELD TRAINING.

218. Rules for company training.

The following procedure will be adopted in the instruc-

tion of companies :-

1. Method of instruction.—Considerable scope is left to commanding officers in arranging details, to which their careful attention is directed. In making their arrangements, the principle will be followed that each elementary subject must be in turn completely mastered before another is proceeded with. When mastered, it will afterwards be only incidentally reverted to in combination with more advanced subjects. During inclement weather, and where no special accommodation or drill shed is available, instruction will be given in the barrack room by

means of lectures, explanations, and questioning.

2. All ranks to be instructed .- Every available officer, non-commissioned officer, and man, with the exception of soldiers of more than seventeen years' service, who may be excused from attending, will be present with his company, and, excluding bandsmen and such as are exempted from the annual course of musketry, will be relieved of all other duties while under instruction. (See Regulations for Musketry Instruction.) No leave or furlough whatever will be granted to anyone belonging to the compary under instruction. Men in hospital, prison, &c., who are unable to attend with their companies will, as soon as they become vailable, join the next company struck off for training. The trained signallers of the battalion may all be attached to one company, or half at a time to two companies, for this instruction, so as to interfere as little as possible with their signalling duties.

3. Returns.—To ensure every man being properly accounted for, returns on Army Form B 214 will be forwarded to the general officer commanding on the completion of the training of each company. The Report, on the completion of the company's training, will be rendered on Army Form B 159: if two companies are trained at the same time, one form may be used for both.

4. General officer commanding to regulate exceptional cases.—Where battalions are broken up in consequence of companies being detached from head-quarters, or where the nature of the duties will not allow of one company per battalion being struck off for training without reducing below three the number of nights in bed for men of other companies, general officers commanding will make the best arrangements in their power for carrying out the spirit of these regulations.

5. Interruption by autumn manœuvres.—When corps take part in autumn manœuvres, this arrangement may require some modification, as, whilst so employed, no companies can be conveniently struck off duty for purposes of instruction. The difficulty may be overcome by having two companies struck off duty for either the month before

or after the autumn manœuvres.

6. Subjects to be previously prepared, and explained.—To enable officers to give instruction of real value, each day's work should be carefully prepared by company commanders, and an outline of it given to the other officers and non-commissioned officers of the company. Each practice in field training will be based on a definite supposition and object, and will be carried on, as far as possible, under the conditions of actual warfare.

Explanation will in all cases precede practice on the ground, and should form an important part of the instruction.

7. Duration of instruction.—Instruction will extend over at least four to five hours daily, and for practical work on the ground short parades should be avoided, a period of from two to three consecutive hours being generally desirable.

8. Blank ammunition.—Blank ammunition will be used

in practising the more advanced exercises.

9. Examination at end of course.—At the end of the course, the officer commanding the battalion will put the company through the most searching examination, testing the recruits' knowledge of musketry and the acquaintance of all ranks with their drill and duties, both in quarters and in the field. Whenever possible the scheme for the examination in field work will be drawn up under the direction of the general officer commanding the brigade or station, and sent to the commanding officer on the morning of the day on which the examination is to take place. An opposing company will be furnished for the examination, when practicable.

10. Report on officers.—At the annual inspection the commanding officer will furnish the inspecting general officer with his opinion in writing of each officer's zeal and ability, judging thereof very much from the manner and success with which they have imparted instruction to their men, and in the case of captains and majors, from the general

efficiency of the companies.

11. Supervision by general officer.—Whenever practicable, general officers will personally supervise the troops under training, and test the merits of the instruction imparted, by exercising the companies of different battalions against one another. They will also, when circumstances permit, be present at the final inspection of each company by the commanding officer of the battalion on the termination of the course, so that in sending forward his reports on commanders of companies, referred to in the preceding paragraph, they may be in a position to add their own opinion in regard to the efficiency of the officers concerned, and their qualifications for promotion. General officers commanding are to arrange for the instruction in field engineering being occasionally intic.

spected and reported on for their information, by the Commanding Royal Engineer or other officer detailed

for the duty.

12. Field practices. — General officers commanding will, when practicable arrange that a portion of the rounds allowed for field practices is expended during company field training. On almost any range, skirmishing, section attack, and rapid volleys (timed) can be practised.

The exercises should, if possible, conclude a march, or form part of a tactical exercise, and be carried out in

marching order.

The targets should be placed well in front of the ordinary butt, so that the actual distance may be unknown, or, when safety permits, be placed altogether off the range.

If ammunition (within the authorized amount) can be provided, and there are facilities at the station, section and group volleys may be fired at rows of heads and shoulders appearing and disappearing at different distances, or at a canvas screen representing a gun team crossing the front, or representing a section of infantry

rising to advance.

13. Equipment for instruction.—It is anticipated that the tents and tools the issue of which is already authorized (Equipment Regulations, Part I, S. VIII, "Camp Equipment and Intrenching Tools," and for bridging stores see Regulations for Engineer Services), will, in ordinary circumstances, be sufficient for the instruction laid down in the syllabus. Should any increased issue be required, a special application will be made through the general officer commanding the district.

### 219. Preparation of non-commissioned officers.

1. Preliminary instruction.—The non-commissioned officers of companies, and privates likely to become non-

commissioned officers, will be struck off all duties interfering with the course for six clear days for instruction under the officers of the company in the following

subjects.

Non-commissioned officers who have been previously instructed, and have a knowledge of the ground-work of these subjects should be trained in rather more advanced work, such as making reports on roads, working out a simple outpost scheme, &c. If they have received instructions in field-sketching a sketch should accompany any report sent in.

2. Subjects-

(a) Map reading.

(b) Duties of commanders of sections and fire units.

(c) Duties of outposts.

(a) Duties of advanced and rear guards.

(e) Reconnoitring.

(f) Duties of commanders of patrols.(g) Writing reports of information gained.

(h) Field fortification and bridging.

(i) Judging distance.

3. Method of instruction .- Non-commissioned officers should be able to read a map easily; they should, therefore, be taught the conventional signs, and the use of the compass and scales. Having received theoretical instruction in this subject, they should be taken out of doors and be shown how to fix their position on a map, how to identify places by means of it, how to use it in a strange country, and the advantage of a compass as a means of preventing a mistake in direction.

Much of the training in subjects (b) to (g) must be carried out by lectures; a great deal, however, may also be done in the field (1) by small outpost schemes, testing the non-commissioned officers' knowledge of the subjects by questions as to the positions they would suggest for the various portions of the outposts, and the duties of each; (2) by sending the non-commissioned officers out from an imaginary outpost line as commanders of patrols and making them send in short reports; (3) by showing practically how reconnoitring roads, rivers, or localities should be carried out.

Their knowledge of map reading can be practically

tested at the same time.

Judging distance should be constantly practised

throughout the course.

It is not possible to teach all these subjects in the short time allowed, but the object to be aimed at is progressive teaching, and those non-commissioned officers who have profited by previous training should go on to more advanced work.

### 220. Execution of course.

1. After the non-commissioned officers have been thus

instructed, the training will be commenced.

2. Before the course begins commanding officers must satisfy themselves that captains are thoroughly conversant with what they have to teach. Unless it is absolutely unavoidable, at least two companies of a battalion should be trained at one time, as in many of the exercises an opposing body gives not only increased interest but much more instruction to the men. When companies consist of less than forty rank and file it is better to work two companies together. If from other duties two companies cannot be detailed in addition to that of those doing musketry, it is desirable to let the companies of one battalion shoot while another battalion sends companies to military training.

3. A programme of work is given on the next page to assist all concerned, but the arrangement is permissive and not obligatory; the captain being held responsible

that all in the company are thoroughly instructed in all the duties enumerated. To ensure this he may find it necessary to vary the order of the subjects, to repeat

many, and combine some of the practices.

4. Captains are reminded it is advisable in a short lecture of about twenty minutes in the afternoon to explain next day's work and its object; and also that much instruction by questioning the men in knotting, and many other points, such as lashing, spar bridges (small spars), gabions, fascines, mats, loading pack-saddles and wagons, etc., may be imparted on wet days in barrack rooms or drill sheds.

5. On days on which night operations are to be carried out in the evening the work during the day should be of a light nature, but it is not desirable to suspend it altogether. In bad weather when out-door work is not possible, companies can be usefully employed by a system of instruction under section commanders, supervised by

company officers.

6. The occasions of marching to and fro to their ground should be utilised by companies to practice advanced and rear guard duties, and the time thus gained utilised for any other instruction which may be necessary.

7. Although 20 days' work is sketched out in the programme, more time may be demanded when such is

desired.

8. When a company is operating, whether in attack or defence or on outposts by day or by night, a general and special idea is to be drawn up (and kept for the information of the general officer commanding) by the commanding officer, or a field officer, who should act as umpire. On these occasions the opposing force is always to be represented by men not belonging to the company under instruction; if practicable by another company under instruction.

2 days.

#### 221. Programme of work.

Company in action. Formations under various conditions. Attack and defence of different positions and localities, including woods, bridges, defiles, etc. Bugle calls and signals.

Action against cavalry and artillery, and as escort to guns or convoy. Fire discipline to be explained and taught, and its importance insisted on. Supply of ammunition to be practised .... 4 days.

Advanced and rear guards. Flank guards. Flanking parties. Composition, formation, and conduct under varying circumstances. Course if attacked, and conduct of fight .... 2 days.

Working-parties. Hasty intrenchments. Construction of shelter-trenches and rifle-pits. Occupation of and attack of same, and of any available defensible hedges, banks, etc. Construction of obstacles.

Defence of hedges, banks, ditches, posts, etc., to be explained as opportunity offers at any time during the course, and also when possible in marching to and from work .... ....

Reconnoitring. Information desired. Conduct of patrols by day and night in varying country. Reconnoitring woods, villages, defiles, etc. Flanking patrols. Ambuscades and surprises .... 2 days.

Outposts, general principles. As far as applicable to a single company, the official instructions to be fully and carefully gone through and explained. Importance of accurate performance of the duty insisted on. New positions to be occupied when possible. Instruction to be given in estimating distances by eye. Change from day

to night. Outposts attacked by day and night; the latter exercise should commence at dusk and need not exceed from 2 to 3 hours' work. Opportunity should be taken at outpost duty by night for giving instruction in estimating distance by sound.

Every private to be posted at least once as one of a double sentry, or as single sentry of a group. Main body of piquet may, in order to save time and give more practice, be indicated by flag. Outposts to be practised at least twice by night. Night marching to be combined with .... 3 days. attack on night outpost line

Camping, pitching, striking, unpacking, and packing tents in the valise. Telling off camp parties. Bivouacs. Construction and arrangement of latrines, field kitchens, cooking, etc. Expedients for increasing comfort in camp. Orders concerning latrines and water supply. Loading and unloading pack and wheel transport. Knotting.

Cooking in field at least once or twice during .... 2 days. these days

Lashing. Spar bridging. (Usually a single lock bridge, or a bridge of three single trestles with ten feet legs) .... .... 2 days.

The following alternative subjects according to the facilities afforded by each station-

Field redoubt. Tracing, and extending on a traced line. Execution of a task (100 cubic feet) of ordinary earthwork. Use of cutting tools. Making of fascines and gabions. Obstacles. .... 3 days. Escalading

Examination by commanding officer and general officer commanding brigade or division ....

I day.

The value of the instruction given to non-commissioned officers, and their knowledge in map reading, will be tested. Certain non-commissioned officers of the company will be assembled at a given point on some road in the vicinity of the station. Each will be given a map, and directed to meet the inspecting officer at some other point at a given hour, each non-commissioned to move by a different road, and to march at a rate to be named by the inspecting officer.

### IV.—SIZING.

222. Sizing a company.

Size in Single
Rank,
Tallest on the
Right,
Shortest on the
Left.
Number.
Odd Numbers
One Pace
Forward,
Even Numbers
One Pace Step

A company will be sized as follows: -Having arranged the men in single rank according to their heights, tallest on the right, shortest on the left, direct the company to number, and then order the odd numbers to take a pace forward and the even numbers to step back a pace. Cautioning No. 1 to stand fast, give the command Ranks, Right and Left Turn, upon which the front rank will turn to the right, the rear rank to the left. Then, on the words Form Company, March, No 3 forms up in rear of No. 1, No 5 halts and fronts on the left of No. 1, No. 7 forms in rear of No. 5, and so on, the rear rank wheeling

by the Wheel to form half

Back—March.
Ranks Right
and Left—
Turn.
Form Company,
Quick—March.

round to the right and following the left-hand man of the front rank, the leading man (or the second man if there is an incomplete file in the right half company) halting and fronting as the right-hand man, rear rank, of the left half company, the next man forming in front of him, and so on. The blank file, if there be one, to be placed the third from the left.

#### V.-FIELD CALLS.

#### 223. Field calls.

One G sounded on the bugle will denote the right of

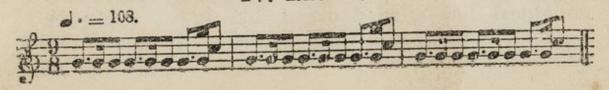
the line. Two G's the centre. Three G's the left.

The G or G's preceding any sound will denote the part of the line to which it applies. For instance: two G's before the Extend, will signify to extend from the centre. One G followed by the Close, to close to the right. One G followed by the Incline, to incline to the right. Three G's followed by the Wheel, to form half left.

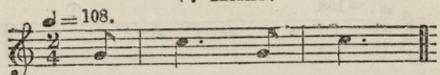
### I. EXTEND.



### IV. RETIRE.



#### V. HALT.



The Halt annuls all previous Sounds except the Fire,

#### VI. FIRE.



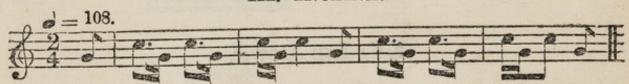
#### VII. CEASE FIRE.



#### VIII. ASSEMBLE.

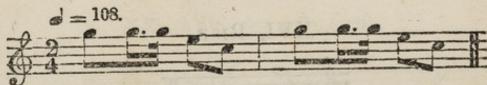


#### IX. INCLINE.



A double incline will signify a direct turn to the flank indicated.

#### X. WHEEL.



The calls IX and X must be preceded by the distinguishing G's.

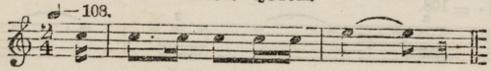
#### XI. THE ALERT.



### XII. PREPARE FOR CAVALRY.



#### X. I. QUICK.



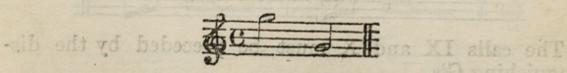
### XIV. DOUBLE.



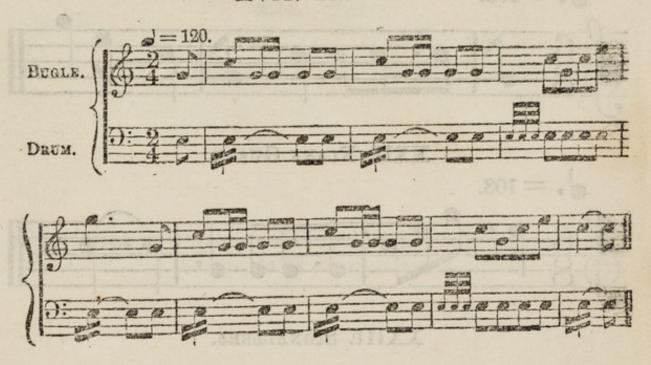
### XV. LIE DOWN.



### XVI. RISE.



#### XVII. THE UHARGE.



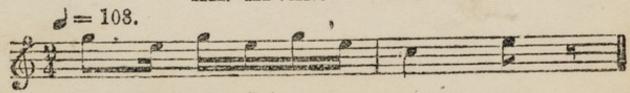
### XVIII. MARCH AT EASK.



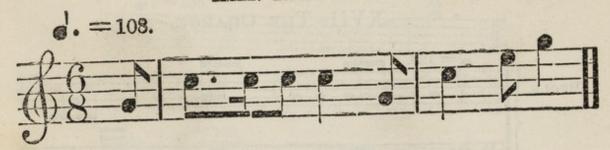
#### XIX. ATTENTION.



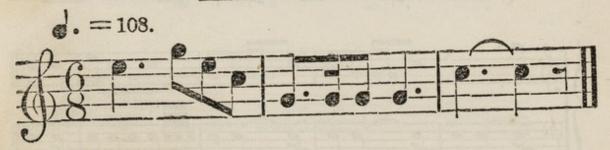
#### XX. ADVANCED GUARD.



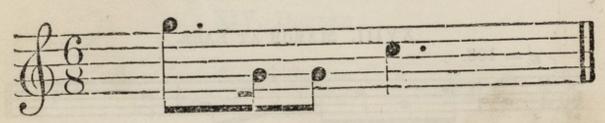
### XXI. REAR GUARD.



### XXII. FLANK GUARD.



### XXIII. SIGNALLERS.



## VI.—INFANTRY—ORDERS OF PARADE.

224. Table.

[The Orders of Parade will be published later on a separate page, to be inserted here.]

### APPENDIX A.

(See Section 46.)

### PHYSICAL TRAINING .- SYLLABUS.

(Infantry).

Instruction by Weeks of 20 hours, i.e., 5 days of 4 hours.

Employment.	Hours.	Remarks.
First Fortnight.	10	Valise equipment to be issued on joining. Horizontal bar— Pulling up, with assistance, with ordinary and reversed grasp. Raising and lowering the legs, with assistance. Travelling to the right and left, with assistance, ordinary and reversed grasp. Recruits attached to most backward squad already formed. Parallel bars— Elementary positions and movements. Clearing right and left bar to the front. Pressing up. Dumb bells— The seven exercises.

. Employment.	Hours.	Remarks.
Physical training on barrack square (including extension motions, physical exercises and physical drill with dummy rifles or sticks)	10	Leg exercises— Ordinary marching, double marching, march on toes, hopping, gymnastic march, (single file). Every day, weather permitting, if not, in covered sheds. Recruits attached to most backward squad already formed.  Jumping— High and long jump (individually). Vaulting (individually). Manual and bayonet exercises to be taught with dummy rifles for the first month. Recruits attached to most backward squad already formed.
Squad drill Lectures and catechism	16 4	Sections 1 to 22. See Appendix B.
Second Fortnigh!.	avigiti	lanistring their resigns
Gymnastics in shed Physical training on barrack square (including extension	10	Same as first fortnight.
motions, physical exercises and physical drill with dummy rifles or sticks)	10	Same as first fortnight.

Employment.	Hours.	Remarks.
Squad drill Lectures, &c Marching order	14 4 2	Up to Section 33.  See Appendix B.  Remainder of hour after inspection to lay down kits.
Third Fortnight.		Rifle to be issued.
Gymnastics in shed	10	Horizontal bar— Same as before, but without assistance. Parallel bars— Clearing right and left bar to the front and to the rear. Pressing up. Dumb bells— Same as before.
Physical training on barrack square (including extension motions, physical exercises and physical drill with dummy rifles or sticks)	8	Leg exercises— Same as before, with the addition of "rapid marching." Jumping— High and long jump by files and sections of fours. Vaulting by files.
Squad drill  Manual and bayonet exercises  Lectures  Marching order	8 6 4 4	Up to Section 41.  See Appendix B. Two hours combined with
Bratching order		marchings and turnings, two hours with kit inspection.

Employment.	Hours.	Remarks.
Fourth Fortnight.	moitoe	O used and centry duties 6
Gymnastics in shed Physical training on barrack square (including extension motions, physical exercises and physical drill with dummy rifles or sticks)  Squad drill Manual and bayonet exercises	8 8	Same as third fortnight, including two marches of two hours each, with rifles, equipment and capes, but without valises and greatcoats. Squad Drill up to Section 45.
Marching order Lectures, &c	4. 5. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	Same as third fortnight.  See Appendix B.
Fifth Fortnight.  Gymnastics in shed	10	Horizontal bar— Same as before. Parallel bars— Same as third fortnight. Dumb bells— Same as third fortnight.
Physical training on barrack square (including extension motions, physical exercises and physical drill with rifles)	12 .00	Repeat former physical training and drill exercises. First week should include a three-hour march with rifles, equipment and greatcoats, without
iquari Ma	d does	valises; and the second week, a three-hour march in full marching order, but with
Drill	10)	valises empty.

Employment.	Hours.	Remarks.
Guard and sentry duties Marching order Lectures	6 2 4	Sections 195 and 197 to 200. Followed by kit inspection. See Appendix B.
Gymnastics in shed Physical exercises on	10	Same as fifth fortnight.
barrack square (including extension motions, physical exercises and physical	8	Same as fifth fortnight.
cal drill with rifles)  Drill	16	Includes bayonet exercise by small squads with rifles, and marching as in fifth fortnight, but with valises packed. Re-
Marching order Lectures	4 2	peat previous instruction.  See Appendix B.

Note.—The apparatus alluded to is that described in I.G.F. circular, No. 645, dated War Office, 2nd May, 1892, and comprises the following:—

1 horizontal bar, 14 feet long.

1 set portable parallel bars.

1 fixed posts and rails for vaulting, 3 feet 3 inches high and 18 feet long.

.. ..

1 set standards and rope for high jump.

50 pairs dumb-bells, 4 lb. each bell.

20 wooden muskets.

### Instructions on foregoing Syllabus.

- 1. During the first fortnight recruits will do gymnastics and physical exercises, so far as they are able and their vaccination will permit, with the latest formed squad. At the end of that fortnight they will be "squadded" gymnastically by the gymnastic instructor, under the superintendence of the adjutant and serjeant-major. At the end of each subsequent fortnight they will be examined by the commanding officer (or adjutant) and a medical officer, and, if necessary, re-squadded according to their physical capabilities and progress, special squads being formed of (a) weakly or awkward men, (b) flatfooted men. The squads thus formed will also work together at drill lectures, &c.
- 2. All squads formed as above (the maximum number in each not ordinarily exceeding 20 men) will work together at squad drill and physical exercises as well as at gymnastics. Their squad instructors invariably will remain with them while at the gymnasium, and assist the gymnastic instructor as much as possible. The hour allotted daily to gymnastics should, as a rule, be divided into two half-hours with some interval between them; but at depôts, where this rule would involve undue loss of time in marching to and fro, &c., or be difficult from other causes to carry out, it may be done in one unbroken The hour, should, however, be varied in the daily routine, so that each squad may have fair turns of morning and afternoon attendances. Care must be taken that the time spent in preparing for gymnastics, changing shoes, &c., is not included in the hour, or the half-hours devoted to gymnastics.
- 3. Instruction on the barrack square, whether in drill or physical exercises, to be as varied as possible, so as to include each subject in the scale, men not to be kept long

at "attention," nor too long continuously at any one exercise. By repeating former exercises it will be easy to vary them.

4. Equipment will be issued on joining, but will not be worn on parade until the end of the first fortnight.

Rifles will be carried after the first month.

5. A march of two hours' duration will take place in the seventh week, gradually increased to three hours or more (as part of physical exercises and drill combined), but will not exceed about 10 miles. The length of the march and the equipment worn (especially in summer), is left to commanding officer's discretion, who should bear in mind that any weight which unduly presses on vital organs in marching order is detrimental to growing lads and arrests development.

6. In hot weather the march should be in the early morning, after the recruits have had a substantial break-

fast.

7. Lectures by serjeants (see Appendix B) will include practical instruction in arrangement of shelves and rooms, putting together, fitting on, and cleaning equipment, laying down kits, thorough knowledge of the rifle, its various parts and their uses, how to clean every portion of it

and keep it clean, &c.

8. At the conclusion of a gymnastic course a board consisting of the officer commanding the regimental district, the senior depôt officer, and a medical officer, will assemble and examine all men considered too weak or awkward to join battalions, take evidence from instructors and others, and will submit a detailed report to general officer commanding the district, recommending whether each man be retained at depôt for further instruction, or discharged, &c. (the medical officer's remarks at the fortnight's examination to accompany proceedings). A similar course will be pursued at battalions with all men who, after

six months' training, give no hope of becoming efficient soldiers.

9. As the whole object of the training is the gradual development of the recruit and his physical powers, officers commanding will be held responsible that exercises shall not exceed the instructions herein prescribed. Recruits are not to be prematurely trained in exercises which are deferred for a later period of instruction.

10. The following points, as to the progress of the recruit, should be noted for guidance, both by instructors

and supervising officers :-

"Doubling" should not exceed-

. Up to the end of the first month, 600 yards.

", second ", 1,200 ", third ", 1,760 ",

At the end of the First Month.

Horizontal bar.—To be able to pull to the chest twice, hands reversed, without assistance, will show fair progress.

Parallel bars.—To be able to press up six times running will show fair progress.

At the end of the Second Month.

Horizontal bar.—He should be able to pull to the chest at least six times, hands reversed.

Parallel bars.—He should be able to press up at least

ten times.

Jumping.—Correct style of "taking off" (with either foot) and "alighting" is required. This is of more importance, up to this time, than great height or width of jump.

At the end of the Third Month.

Horizontal bar.—He should be able to pull to the chest at least ten times, hands reversed.

Parallel bars.—He should be able to press up at least

fourteen times.

Jumping.—He should be able to jump a height of at least three feet.

N.B.—All exercises should now be performed with exactitude, vigour, and precision.

### APPENDIX B.

# BARRACK ROOM INSTRUCTION BY SERJEANTS. —SYLLABUS.

(INVARIABLY ATTENDED BY AN OFFICER.)

#### First Week.

Barrack room duties, orderly men, arrangement of shelves, hours and dress for drill, cleanliness in person and dress, requisite local orders.

#### Second Week.

General routine and bugle calls for daily barrack duties, e.g., reveille, rations, dress for parade, drill, 1st breakfast call, 2nd breakfast call (same for other meals); orderly room, school, retreat, tattoo, 1st post, 2nd post; lights out, depôt or battalion call. Explain different parts of equipment and how to put them together; dress for walking out; need of smartness on all points; forage caps, belts, creased trousers, canes, greatcoats; smoking in streets.

#### Third Week.

Fitting equipment and keeping all portions of it clean; laying down kits; change, marking and washing of underclothes; waistcoats or jerseys; clothing not to be altered by men; conduct in town, and, if rows occur, position of provost, and duty to obey and support them.

#### Fourth Week.

The rifle; names, objects, and uses of its different parts; method of cleaning and keeping them all clean; marching order; packing valise, cape, greatcoat, mess-tin, &c.

#### Fifth Week.

Names and positions of officers; saluting, manner of making a complaint, going sick, hospital rules, school attendance, church parade and behaviour in church, various regimental institutions explained.

#### Sixth Week.

Marching hints, boots, socks, clean feet, blisters, &c., not to drink water, only rinse the mouth, marching at ease, falling out, inclining on road, &c. Bugle calls; attention, march at ease; halt, advance, retire, advanced guard, rear guard calls, &c.

#### Seventh Week.

Same as present sixth week.

### Eighth Week.

Bugle calls and how to act on each, assembly, fire alarm, guard bugle, greatcoats, dress and halt, piquet, bugle, orders, no parade, disperse. Repeat all previous practical instruction, especially use of rifle, fitting equipment, and marching.

#### Ninth Week.

Duties on guard: as sentries, smartness, challenging mode of seeing orders rigidly carried out and determination to let nobody disobey them, duties on piquet especially in town or when piquet sentry. Catechise on various former headings.

#### Tenth Week.

Packing kit-bags, preparing to travel, points of fore-thought to look after themselves, baggage guard, &c., travelling by rail, entraining, on board ships, &c.

#### Eleventh Week.

Explain objects of extended order, bugle calls for ditto, motions of rifle at (not including firing exercises). Sighting of rifle.

Twelfth Week.

Repeat eleventh week and catechise on former lectures. Each week's time allows for catechism on preceding week's instruction. It is at best only a guide, not necessarily to be rigidly adhered to.

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