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# LIGHT HORSE MANUAL.

(AUSTRALIA)

# LIGHT HORSE MANUAL

FOR THE

# DRILL TRAINING AND EXERCISE

OF THE

# LIGHT HORSE REGIMENTS

OF

## AUSTRALIA.

1st JANUARY, 1910.

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This Manual is issued by direction of the Military Board for the guidance of all concerned.

## T. GRIFFITHS,

Secretary Military Board.

Melbourne, 1st January, 1910.

## KEY TO PLATES.

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BRIGADIER.	6	REGT. SERGT, MAJOR.
BRIGADE MAJOR.		SQDN, SERGTMAJOR
T REGIMENTAL LEAD	DER.	SQDN. Q.M. SERGT,
2ND IN COMMAND.	♦	FARRIER SERGEANT.
ADJUTANT.	$\Delta$	TROOP SERGEANT.
** SQUADRON LEADER		TRUMPETER.
TROOP LEADER		SINGLE FILES.

#### PRINCIPLES OF TRAINING.

1. The object of all Light Horse Training is the preparation of leaders, men, and horses for war, and this must be kept in view in every detail of the instruction.

The training must be progressive, men and horses being prepared with the view of taking their places in the troop, and finally in the squadron.

The well-trained squadron is the unit on which all employment of Light Horse in larger bodies is based.

For the efficient discharge of their duties important characteristics to develop in all ranks are intelligence, energy, and individual initiative.

The spirit of enterprise and dash, the system of discipline and loyalty to both leaders and comrades, so essential to the success in war, must be fostered by every means available, until it becomes engrained in every officer and man.

- 2. Training should embrace horse management, riding, scouting, patrolling, skirmishing, musketry, judging distances, drill, dismounted action, reconnaissance, protection on the move and at rest. Field exercises should be practised on varied ground, including marching, bivouacing, attack and defence, and field firing. Combined operations with the other arms whenever possible should be carried out.
- 3. The Regimental Commander is responsible for the training and efficiency of his regiment, and for the practical and theoretical training of the officers.

- 4. The Squadron Leader is responsible to his Commanding Officer for the training and efficiency of his squadron. On the thoroughness of the squadron training the efficiency of the regiment and brigade will mainly depend. The Squadron is to be treated as a self-contained unit. The Squadron Leader is responsible for the practical and theoretical training of his Non-Commissioned Officers.
- 5. The Troop Leader is responsible to the Squadron Leader for the training and efficiency of his troop; emulation and initiative in this should be encouraged by the Squadron Leader, and the Troop Leader in turn will depute a specific permanent charge to each N.C.O. and Section Leader in his troop, for by giving each subordinate leader a definite command, however small, a development of initiative and powers of decision will result.
- 6. Non-Commissioned Officers and Section Leaders should be expert in care of horses, riding, rifle shooting, judging distance, scouting, drill, and elementary field duties. Those of, and above the rank of sergeant, should fit themselves to impart instruction in troop and squadron drill, and be able to replace the troop leaders whenever necessity arises.
- 7. The soldier must be encouraged to feel that in perfecting himself as a fighting man, he is preparing, if required, to take his proper part in the defence of his country.

#### DEFINITIONS.

Alignment.—The straight line on which the front of a body of

troops is formed, or is to form.

Base.—Two points placed a distance apart, to indicate a line by the prolongation of which the proper alignment of a line or the covering of a column is regulated.

Change of front.—A new alignment, either meeting or intersect-

ing the former alignment.

Change of position.—Moving troops off their own ground, and reforming to the front or flanks on a new alignment.

Close column.—Troops or squadrons at one horse's length from one another. (Leaders in line on the right and serrefiles on the left of their respective units.)

Column.—Troops on parallel and successive alignments, at a distance from one another equal to their own frontage.

Column of Half Squadrons.—Half squadrons on parallel and successive alignments at troop wheeling distance.

Column of masses.—Regiments formed in mass, one behind the other, at such a distance that brigade mass can be formed to a flank by each regiment wheeling.

Covering.—The act of one or more men, or bodies of men, placing

themselves correctly in rear of one another.

Deployment.—Formation of line from column.

Depth.—Space occupied by a body of troops frem front to rear.

Directing unit.—The body on which the direction, pace, and alignment of a line, or relative positions of the several parts of a column depend.

Distance:—Space between men or bodies of troops from front

to rear.

Dressing.—Taking up an alignment correctly.

Echelon.—A succession of parallel units facing the same direction, each on a flank and to the rear of the unit in front of it.

Flank.—Either lateral extremity of a rank, line, or column; also the direction to either hand of a body, at right angles to its front.

Flank, directing.—That by which units march or dress.

Flank, inner.—That nearer to the point of formation or direction; also that which serves as a pivot when a body is changing its direction.

Flank, outer.—That opposite to the inner or directing flank.

Front.—In a general sense, the direction towards which a body of troops, or a single man is facing.

Frontage.—The extent of ground covered laterally by troops.

Horse's length and width.—Length 8 feet, width 3 feet, which includes 3 inches on either side of rider's knee.

Interval.—The lateral space between men or units from flank to flank.

Line.—Troops formed on the same alignment.

Line of Masses.—A line of two or more regiments each formed in mass with deploying interval plus 16 yards between them.

Mass (Regiment).—Line of squadron columns, closed to two horses' lengths interval between squadrons.

Mass (Brigade).—A line of regimental masses closed to 16 yards interval between regiments.

Pivot fixed.—The term applied to the pivot, when during the wheel the pivot man turns on his own ground.

Pivot moving.—The term applied to the pivot, when during the wheel the pivot man moves on the arc of a circle.

Rank.—A line of men side by side.

Regiment.—Two, three, or four squadrons (normally four), with regimental head-quarters.

Section.—Four men, the No. 1 being the leader.

Serrefiles.—Those riding in rear of a troop or squadron.

Squadron.—Two, three, or four troops (normally four).

Squadron column.—A squadron with its troops in column.

Troop.—One of the subdivisions of a squadron.

Wheeling.—A movement by which a body brings forward a flank on a fixed or moving pivot.

#### SILENT DRILL.

All movements, except ceremonial, will be practised both by word of command and by signal, a whistle being used to attract attention.

When manœuvres are carried out by signal all ranks will, on the whistle sounding, look towards their leaders until the executive signal is given. In giving signals, face the same way as those to whom the signals are given. Signals should, as far as possible, be seen by all.

Great care is to be exercised to insure ample time being allowed between the sounding of whistle and the making of signal. The larger the unit, the more is the necessity for this emphasized.

Silent drill may be carried out by detailing a unit of direction, to which other units will conform.

#### WHISTLE SOUNDS.

One short blast.—To draw attention to a signal about to be made. One long drawn-out blast.—To "cease fire."

A succession of short blasts.—To "rally.".

Two short blasts in quick succession.—Attention or Sit (or stand) at Ease.

A succession of alternate long and short blasts.—To denote "alarm."

#### SIGNALS.

Action.—Arm raised as for "Halt," lowered and hand pointed to ground, bending body well over.

- Advance or Forward.—Arm, swung from rear to front below the shoulder, finishing with the hand pointing to the front.
- Annul.—Hand quickly moved across and in front of face, palm to the front.
- \*Close.—Hand placed on top of head, elbow square to the right or left.
- Note.—In Regimental and Brigade drill in close order, this will mean "Regimental or Brigade mass," respectively.
- Decrease to next less frontage from Troop Frontage down to Single File.—Closed hand extended horizontally in line with shoulder to full extent of arm, then doubled back to shoulder by bending but without lowering elbow; movement to be repeated smartly a few times without pause; to indicate from which flank troop frontage is to be decreased, finish by pointing to such flank.
- Dismount or lie down.—Open hand (palm down) moved up and down below the knee, downward movement to be emphasized.
- Double or trot.—Clenched hand moved up and down between thigh and shoulder.
- Enemy in sight in small numbers.—Weapon held horizontally over head.
- Enemy in sight in large numbers.—Weapon raised and lowered horizontally over head.
- \*\*Extend.—Arm at full extent over head and waved a few times slowly from side to side, hand open, bringing the hand down at each wave on a level with the shoulder.

<sup>\*</sup> This denotes "close on the centre," if required to close on the right or left finish pointing in that direction.

<sup>†</sup> This denotes "extension from the centre," if required to be made to the right or it finish by pointing in that direction. The number of paces to be communicated trially unless the normal extension is required.

Gallop.—Circular movement of extended arm from the shoulder from rear to front (three or four times vertically).

Halt.—Arm perpendicular at full extent above head.

Head of Column change direction.—Arm raised as for "Halt," and without pausing brought in line with shoulder and a horizontal circular movement made, corresponding with the direction of the wheel, and at the same time circling the body or horse, and finishing by pointing hand in required direction.

Horse call.—Head dress waved above the head. This will precede all signals affecting the led horses.

Incline.—Body or horse turned, and arm extended in a line

with the shoulder in the required direction.

Increase to next greater frontage up to Troop Frontage.—Closed hand raised to full extent of arm above head and lowered to shoulder by bending elbow; this movement to be repeated a few times smartly without pause. To indicate if troop is to form on right, finish by pointing towards such flank.

Line of Squadron Columns or Squadron Column from any forma tion.—Right arm waved horizontally in line with shoulder from right to left and back again as if cutting with a sword, finishing with the delivery of a point to the right front.

Note.—If this signal is given when in Squadron column or

Line of Squadron Columns it means to form Line.

Mount or rise.—Open hand (palm up) moved up and down below the knee, upward movement to be emphasized.

No enemy in sight.—Weapon held vertically above head.

Re-inforce.—Arm swung from rear to front above the shoulder

Retire or Sections about.—Arm circled above the head.

Sections right or left.—Head dress held in hand at full extent of arm and level with the shoulder in the required direction

Troops right or left wheel.—Circular movement of extended arm horizontally in line with shoulder in the required direction, at the same time circling the body or horse on a moving pivot.

Walk or Quick time.—Open hand in line with shoulder, elbow bent, forming a V.

#### COMMANDS.

The way commands are given has a great influence on the manner in which the movement ordered will be executed

They should be given sharply or slowly, as the nature of the motion may require, and loudly enough for all to hear; the intonation of the voice, and the emphasis, being of the greatest importance.

Every command is divided into two parts, one a distinct caution, then a short pause, and the executive part consisting of one word or syllable usually given sharply.

A command consisting of one word or syllable must be preceded by a caution as "Squad—Halt!" not "Halt!"

Young officers and N.C.O.'s should be practised in giving words of command under special directions as to time and tone.

If halted, the word "Walk," or "Trot," will precede the command "March" when mounted, and it must be remembered that the abrupt, decisive ending to a command so necessary to make men move smartly on foot, is generally not suitable when mounted, the command then must be drawn out.

When in squadron, troop leaders, as a rule, give no commands; but if it is necessary, they should do so only loudly enough for their own men to hear.

When the troops of a squadron act simultaneously the troop leaders give no commands (as in inclining); but, if they are, for instance, to "Form squadron column from line," then the troop leaders give the necessary commands or signals to their troops, as the case may be, using commands if the drill is not by signal.

Regimental and squadron leaders must ride in such a position to hear the commands or see the signals, and they are responsible for passing them correctly on to those next or behind them.

Commands and signals should be given from such a position that they can be easily heard or quickly seen.

INTERVALS.			Mounted.*	On Foot.
In line	{ Between	Men Squadrons Regiments Brigades.	6 inches 8 yards 16 ,, 16 ,,	½ arm 8 yards 16 ,, 16 ,,
in time of sinuanton		Squadrons		
In mass	{ Between ,,	Squadrons Regiments	2 horses' lengths 16 yards	6 paces 16 yards
In line of masses	{ Between ,,	Squadrons Regiments	2 horses' lengths Deploying interv	6 paces al plus 16 yards
In any line of columns	{ Between ,,	Regiments Brigades	) Deploying interval plus 16 yards	
In sections				
,, ranking past	Between	Men	6 inches 1 horse's length	1 pace

<sup>·</sup> Measured from knee to knee.

DISTANCES.	Mounted.	On Foot	
Line Troop leaders in front and serre- files in rear of troops	1 horse's length	8 paces	
Open column One body to another  Brigade column of troops { One regiment to another another }	Such that a wheel to either hand would bring the bodies into line with the proper intervals		
Column of masses One regiment to another	Frontage of regiment plus 16 yards		
Close column One squadron or troop to another	1 horse's length	3 pages	
Column of sections , half sections $\{ , , , single files \}$ One to another $\{ \}$	4 feet 4 ,, 4 ,,	4 paces 2 ,, 1 pace	
,, ,, sections One sydn, to another Ranking past by sections One to another	4 feet plus 8 yds. 1 horse's length	4 paces plus 3 yds. 4 paces	

#### SQUAD DRILL.

#### S. 1. Method of Instruction of the Recruit.

When once the various motions have been learnt, it will be the exception and not the rule, especially with auxiliary forces, to instruct recruits by numbers.

Recruits will, in the first instance, be placed by the instructor without any dressing; when they have learned to dress, as directed in S. 4, 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 S. 18, they may fall in as directed in S. 19.

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 be instructed singly as well as together in all exercises as far as S. 18.

Men should be allowed to "stand easy" while details and explanations are being given, and at all times should not be kept at "Attention" longer than is necessary.

#### S. 2. Position of Attention.

Heels together and in line. Feet turned out at an angle of about 45 degrees. Knees straight. Body erect, and carried evenly over the thighs with the shoulders (which should be level, and square to the front) down and moderately back—this should bring the chest into its natural forward position, without any straining or stiffening. Arms hanging easily from the shoulders as straight as the natural bend of the arm when the muscles are relaxed will allow, but with the hands level with the centre of the thighs. Wrists straight. Palms of the hands turned towards the thighs, and the heel of the hand and the inside of the finger tips lightly touching them, fingers hanging naturally together and slightly bent. Neck erect. Head balanced evenly on the neck, and not poked forward, eyes looking their own height and straight to the front.

The weight of the body should be balanced on both feet, and evenly distributed between the fore part of the feet and the heels.

The breathing must not in any way be restricted, and no part of the body should be either drawn in or pushed out.

The position is one of readiness, but there should be no stiffness or forced unnatural straining to maintain it.

## S. 3. Standing at Ease.

Stand at— Ease. Keeping the legs straight, carry the left foot about one foot-length to the left so that the weight of the body rests equally on both feet, at the same time carry the hands behind the back and place the back of one hand in the palm of the other, grasping it lightly with the fingers and thumb, and allowing the arms to hang easily at their full extent. (It is immaterial which hand grasps the other).

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

Squad, On the command Attention, spring up to the Atten—tion. position described in S. 2.

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 there will be no loss of dressing. Although when standing easy the freedom of movement of the limbs should not be restricted, the men should never be allowed to adopt slouching attitudes which would tend to counteract the value of the exercises employed in their training.

When there is no special reason for ordering Stand at Ease before Stand—easy, the order to Stand—easy will be given with out it. On the caution Squad being given to men standing easy, every soldier will at once assume the position of standing at ease.

#### S. 4. Dressing a squad with intervals.

Eyes

Dress.

Right-

On the word Dress, each recruit, except the righthand man, will turn his head and eyes to the right and will then extend his right arm, back of the hand upwards, finger tips 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 will be turned Front.  $\langle$  smartly to the front, the arm dropped, and the position

of Attention, as described in S. 2, resumed.

A line will similarly be dressed by the left.

#### S. 5. Turnings.

to the Right-

One.

Keeping both knees straight and the body erect, Turning | turn to the right on the right heel and left toe, raising the left heel and right toe in doing so.

On the completion of this preliminary movement, the right foot must be flat on the ground and the left heel raised, both knees straight and the weight of the body, which must be erect, on the right foot.

Two.

Bring the left heel smartly up to the right without stamping the foot on the ground.

Turn smartly as above, observing the two distinct Right movements. Turn.

Turn to the left, as above, on the left heel and Turning to ( the Left | right toe, the weight of the body being on the left foot on the completion of the movement.

Two. String the right heel smartly up to the left with-out stamping the foot on the ground.

Left— Turn smartly to the left, as above, observing the two distinct movements.

Turning
About—One.
Two.
1bout—Turn.

Turn fully about to the right, as described for the Right Turn, by numbers or judging the time as required.

Half Right As above described, but turning half right or Left)—Turn. \left.

## S. 6. Saluting.

## (a) Saluting to the front.

Caution.—Salute, by numbers.

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

Two.  $\begin{cases} On the word Two, cut away the arm smartly to the side. \end{cases}$ 

## Caution.—Salute, judging the time.

Salute. On the command Salute, go through the motions as in One, and after a pause, equal to two paces in quick time, cut away the arm as in Two.

#### (b) Saluting to the Side.

#### Caution.—Right (or Left) hand salute.

The procedure will be as described in (a), except that as the hand is brought to the salute, the head will be turned towards the person saluted.

The salute by N.C.O.'s and men will always be with the hand further from the person saluted, except when swords are worn on such occasions the salute will be made with the right hand.

The right hand is always used by officers in saluting.

Recruits 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 the 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; if carrying a cane he will place it smartly under the disengaged arm, cutting away the hand before saluting.

A soldier, if sitting when an officer approaches, will rise, stand at attention, and salute; if two or more men are sitting or standing about, the senior non-commissioned officer or oldest soldier will call the whole to *Attention* and alone will salute.

When a soldier addresses an officer, he will halt two paces from him, and salute as in (a). He will also salute before withdrawing.

When appearing before an officer in a room, he will salute without removing his head dress.

A soldier, without his cap, or when carrying anything that revents him from saluting, will, if standing still, come to ttention as an officer passes; if walking, he will turn his head martly towards the officer in passing him.

A soldier, when riding a bicycle, will turn his head smartly owards an officer in passing him.

#### MARCHING.

#### S. 7. Length of pace, and time.

- 1. Length of pace.—In slow and quick time the length of a pace is 30 inches. In stepping out, it is 33 inches, in double ime, 40, in stepping short, 21, and in the side step, 15.
- 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 20 yards in an hour. In double time, 180 paces, equal to 200 yards a minute. The time of the side step is the same as for the quick step.

Distances of 100 and 200 yards will be marked on the drill ground, and non-commissioned officers and men practised in keeping correct time, and length of pace.

Marching in *slow time* will be practised only when required for ceremonial purposes.

#### S. 8. Position in marching.

In marching, the soldier must maintain the position of the head and body at Attention. He must be well balanced on his limbs. In slow time the toes must be pointed downwards and

the arms and hands must be kept steady by the side, car being taken that the hand does not partake of the movement of the leg. In quick time the arms must not be stiffened but should swing naturally from the shoulder, the right arm swing ing forward with the left leg, and the left arm with the right leg. The movement of the leg must spring from the haunch, and be free and natural.

The legs should be swung forward alternately, freely and naturally from the hip joints, each leg as it swings forward being bent sufficiently at the knee to enable the foot to clear the ground. The foot should be carried straight to the front and, without being drawn back, placed firmly upon the ground with the knee straight, but so as not to jerk the body.

Although several recruits may be drilled together in a squad with intervals, they must act independently, precisely as if they were being instructed singly. They will thus learn 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 recruit must be taught to take a point straight to his front, by fixing his eyes upon some distant object, and then observing some nearer point in the same straight line, such as a stone, tuft of grass, or other object.

#### S. 9. The Quick March.

Quick-{ On the word March the squad will step off to-March. gether with the left foot, in quick time, observing the rules in S. 8. S. 10. Stepping out.

When marching, on the word Out, the moving foot will complete its pace, and the soldier will lengthen the pace by 3 inches, leaning forward a little, but without altering the cadence.

This step is used when a slight increase of speed, without an teration of cadence, is required; on the command Quick—

Tarch the usual pace will be resumed.

S. 11. Stepping short.

On the word Short, the foot advancing will complete tep— its pace, after which each soldier will shorten the pace by 9 inches until the command Quick—March is given, when the quick step will be resumed.

S. 12. The Halt.

The command Halt will be given as one or other foot comes to the ground, the moving foot will complete its pace, and the other will be brought smartly up in line with it, without stamping.

S. 13. Marking time.

On the word Time the advancing foot will finish its pace, the time will then be continued without advancing, by raising each foot alternately about 6 inches from and keeping them almost parallel to the ground, knees raised to the front, arms and body steady.

On the command For—ward the former pace will be resumed.

t the halt the command is Quick Mark—Time.

S. 14. Stepping back.

Not more than four paces are to be taken at a time.

Paces On the word March a pace (or paces) of 30 inches the Back will be taken straight to the rear with the left foot, March. keeping the shoulders square and body erect.

In halting, the foot in front is brought back in line with the

ther.

#### S. 15. Changing Step.

On the word Step the advancing foot will finis Change— its pace and the ball of the rear foot will then t {brought up to the heel of the advanced one which will make another step forward, thus taking tw successive steps with the same foot.

To change step in Marking Time two beats are taken wit

the same foot.

#### S. 16. The Double March.

Step off with the left foot and double on the toe with easy swinging strides, inclining the bod slightly forward but maintaining its correct carriage The feet must be picked up cleanly from the ground at each pace and the thigh, knee, and ankle joint must all work freely and without stiffness. whole body should be carried forward by a thrus from the rear foot without unnecessary effort, and the heels must not be raised towards the seat but the foot carried straight to the front and the toe placed lightly on the ground. The arms should swing easily from the shoulders and should be bent at the elbow, the forearm forming an angle of about 135 degrees with the upper arm (i.e., midway between a straight arm and a right angle at the elbow), fists clenched, backs of the hands outward and the arms swung sufficiently clear of the body to allow of full freedom for the chest. The shoulders should be kept steady and square to the front and the head erect.

Double— March.

Squad—Halt. As in S. 12, at the same time dropping and partly opening the hands.

The recruit will be taught to mark time in double time, the rms and hands being carried as when marching in double time, ut with the swing of the arms reduced. From the halt, the ord of command will be Double, Mark-Time.

#### S. 17. The Side Step.

.Close -March; or ... Paces, Right (or -March.

light (or Left); On the word March, each man will carry his right foot 15 inches direct to the right, and instantly close his left foot to it, thus completing the pace; he will proceed to take the next pace in the same manner. Shoulders to be kept Left) Close, square, knees straight, unless on rough or broken ground. The direction must be kept in a straight line to the flank.

On the command Halt, which will be given when the squadHalt. I 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 ep more than twelve paces.

## S. 18. Turning when on the march.

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

- 2. 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 give as the proper foot is coming to the ground, the soldier will mov on one pace and then turn.
- 3. Making a half turn to the right, or left.—Recruits will also be practised in making a half turn to the right or left on the command Right or Left—Incline, and then moving on (without checking their pace) in a diagonal direction, taking up fresh points at once, to march on, and turning in the original direction on the command Left or Right—Incline.
- 4. Turning about.—On the command About turn, recruits wil also be taught to turn about, which must be done by each man on his own ground, in three paces, without losing the time Having completed the turn about, the soldier will at once move forward, the fourth pace being a full one of 30 inches.

## SQUAD DRILL, IN SINGLE RANK.

S. 19. Formation of the squad in single rank.

At this stage the squad will be formed in single rank, each man being allowed a space of 30 inches.

Squad— The right hand man calls out "one" the next "two," and so on, in a loud, even tone, each man (except the left hand man) turning his head in succession as he calls and passes the number to the man on his left, and at once turning it again to the front.

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

March.

Note.—All instruction by numbers is done in a squad with intervals, and when the squad is in single rank the movements are performed judging the time.

 $egin{array}{ll} e form & Single \ Rank--- \ March. \end{array} 
ightarrows {f th}$ 

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

S. 20.\Dressing by a Flank.

To be used only for inspection purposes, and when halted.

Eyes Right Dress. On the word "Dress," the head will be turned, and eyes directed to the right (except the right hand man). Each man will then take up his dressing in line by moving backwards or forwards at "attention," with short, quick steps, until he is able to see the lower part of the face of the second man from him, at the same time raising the right or disengaged arm and placing the open hand on the hip, fingers to the front, thumb in rear, elbow square with the body. This is termed the half-arm interval.

es— \ On this command the head and eyes will be turned to ront. \ he front and arm dropped to the side.

S. 21. Turnings.

The recruit will next practice in single rank, judging the me, without any pause between the motions, the turnings he is been taught by numbers.

S. 22. Marching in Squad.

Before a squad is ordered to march, the directing flank or an must be indicated by the caution, By the right, By the left, By No. —. During the march, the shoulders must be kept refectly square to the front, the body steady, eyes off the ound. Each man will preserve his position in the general ignment by an occasional glance towards the directing man. The squad will first be taught to march straight to the front, the right, by the left, or by any man. It will then be practed in all the varieties of step in quick time, and in marking me, after which it will be exercised in double time.

The recruit will be practised in changing the pace, withou halting, from quick to double, on the command Double-Marc and from double to quick. In breaking from double into quic time, on the command Quick—March, the arms will be droppe to their usual position.

The instructor will insure that the recruit on the flank, of the named number, according to the caution, selects two distant points to march on, and before approaching the first take another in advance on the same line, and so on. By occasionall remaining halted in rear of the directing man, and fixing h eyes on the distant objects, the instructor can ascertain if the squad is marching in the original direction.

When a soldier finds himself a little behind, or before, th other men of his squad, he must be taught to recover his plad in the rank gradually, and not to rush to it.

#### S. 23. The Diagonal March.

Right-

When the squad is on the march in line, and is re quired to move in a diagonal direction to the righ the command Right-Incline will be given, upo which the men will turn half right, and move diagon ally in that direction, each regulating his pace so that Incline. his own shoulders are parallel with the shoulders of the man on his right. This man's head should con ceal the heads of the other men towards the right. The right-hand man will direct, and must therefore pay particular attention to the direction and pac-

When it is intended to resume the original dire tion, the command Left-Incline will be given, d Incline. which every man will move forward in the original direction without checking his pace.

The diagonal march may, if necessary, be taught from the ha

If the diagonal march has been properly performed, the squad hen halted, or after the command  $\bar{L}ejt$ —Incline, will be found be in a line parallel to its original position.

The diagonal march will also be practised in double time.

## S. 24. Wheeling in Line.

Wheels from the Halt or in Quick March are made on a fixed  $\mathbf{vot}.$ 

Changes of direction in column and wheels at the double are ade on a moving pivot.

Recruits will be first taught to wheel from the Halt, and then hile on the march, the flank brought forward is termed the iter and the other the inner, or pivot, flank.

RightWheelQuick-March.

From the Halt.—On the word March the inner flank man marks time, turns gradually with his rank, and looks outwards, the remainder feeling inwards and dressing outwards step off together, caution) the outer flank man looking inwards regulates the pace and conducts the flank so as to avoid crowding, the others step according to their position from the outer flank, resisting pressure from the outer, and giving way to pressure from the inner flank.

On this command, which may be given at any nad-1Talt. period of the wheel, the men will halt and look to the front.

If the command "Halt" or "Forward" is not given before e squad has wheeled a quarter circle, it will move forward in e new direction on completion of the quarter circle, unless then dered to halt, or to continue the wheel, or unless the command wheel has been preceded by the caution "To the halt."

wheel may be carried beyond a quarter circle by the comman "Continue the wheel," in which case the squad will receive the command "Forward" or "Halt" when the required ang has been reached.

Right - (

On the March.—On the word Wheel the men w wheel a quarter-circle to the right, and then go fo ward in the new direction.

## S. 25. Marching as in file.

1. From the halt.—Soldiers, when standing as in fil Right— must be instructed to cover each other exactly. thead of the man, immediately in front of each so dier, when he is correctly covered, will conceal th heads of all the others before him.

On the word March, the whole will step off the gether, and will continue to step a full pace, withou Quick— increasing or diminishing the distance between each March. other. No looking down, nor leaning back is to The leader is to be directed to mard straight forward on some distant object, the remaind of the men covering correctly during the march.

Squad, Halt, Left— Turn.

On the commands Halt, Left (or Right) Turn, th soldiers will halt, and turn in the required direction If the marching has been properly performed, the dressing will be found correct.

Right—

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

On the command Left (or Right) Turn, the soldies will turn in the required direction, and then moved on in line.

## S. 26. Changing direction as in file.

ight—

Wheel.

The squad, when marching as in file, will be taught to change direction. 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.

If a squad is ordered to halt, mark time, or step short, when part of the men only have wheeled into the new direction he remainder should be instructed to cover off, if required, by he diagonal march, on the command, Rear Files—Cover.

## S. 27. Forming Squad.

o the halt. Form -Squad. On the word Squad, the leading man will go forward three paces and halt; the remainder will make a left incline, form in succession on his left and halt, taking up their correct dressing and interval by the right.

If halted the command Quick-March is also given.

When done on the move the command is Form—Squad, and he leading man goes straight on; the others left incline, double p, and resume the quick march when in line, the direction eing at once named, i.e., By the right or otherwise.

If desired to form "on the right," the command to "Form quad" will be preceded by the caution "On the right."

## S. 28. Dismissing a Squad.

Dis— On this command the squad will turn to the right, miss. break off and move away quietly.

#### RIFLE EXERCISES.

#### S. 29. General Rules.

- 1. Recruits, before they commence the Rifle Exercises, are t be taught the names of the different parts of the rifle, and als the care of arms.
- 2. The rifle must be carefully handled, especially when coming to the *Order*.
- 3. The exercises must be thoroughly taught and carried ou with smartness and precision.

#### S. 30. The Order.

The rifle is held perpendicularly at the right side, butt on the ground, its toe in line with the toe of the right foot, the right arm to be slightly bent, the hand to hold the rifle at or near the band, back of hand to the right, thumb against the thigh, finger slanting towards the ground.

S. 31. The Stand at Ease from the Order (with or without Bayonets Fixed).

Stand Incline the muzzle of the rifle slightly to the from at— with the right hand, arm close to side, at the same tim Ease. carry left foot about 1 foot length to the left, keepin left arm steady and both legs straight.

S. 32. The Attention from Stand at Ease.

Attention.—Close left foot to right and bring rifle to Order.

S. 33. The Slope from the Order.

Slope—Scatching it with the left hand at the band, and the right hand at the small of the butt, thumb to the left elbow to the rear.

lwo.

Carry the rifle across the body, and place it flat on the left shoulder, magazine outwards from the body. Seize the butt with the left hand, the first two joints of the fingers grasping the outside of the butt, the thumb about one inch above the toe, the upper part of the left arm close to the side, the lower part horizontal, and the heel of the butt in line with the centre of the left thigh.

hree.

Cut away the right hand to the side.

S. 34. The Order from the Slope.

rder

Bring the rifle down to a perpendicular position at the left side to the full extent of the arm, at the -Arms same time seizing it with the right hand just above the back-sight, arm close to the body.

> Bring the rifle to the right side, seizing it at the same time with the left hand just below the fore-sight, butt just clear of the ground.

hree.

wo.

Place the butt quietly on the ground, cutting the left hand away to the side.

S. 35. The Present from the Slope.

resent-Arms. (body.

Seize the small with the right hand, arms close to

wo.

Raise the rifle with the right hand perpendicularly in front of the centre of the body, sling to the left, at the same time place the left hand smartly on the stock, wrist on the magazine, fingers pointing upwards, thumb close to forefinger, point of the thumb in line with the mouth, left elbow close to butt, right elbow and butt close to body.

Three.

Bring the rifle down perpendicularly close in from of the centre of the body, guard to the front, holding it lightly at the full extent of right arm, fingers slanging downwards, grasp and support it with the less hand immediately behind the back-sight, thum pointing to muzzle, at the same time place the hollow of the right foot against the left heel, but knees straight.

S. 36. The Slope from the Present.

Slope— Bring the right heel in line with the left, place the Arms. rifle on the left shoulder with the right hand, and grass it as in the second motion Slope from Order.

Two.—Cut the right hand to the side.

S. 37. Changing from the Slope.

Change Seize the butt of the rifle with the right hand —Arms. back of the hand up, at the same time slipping the left hand up to the small.

Two.  $\begin{cases}
\text{Carry the rifle, turning the magazine outwards, c} \\
\text{to the right shoulder, bringing it well to the from so as to clear the head.}
\end{cases}$ 

Three.—Cut the left hand to the side.

S. 38. Fixing Bayonets.

To be publis later.

#### S. 39. Unfixing Bayonets.

To be published later,

S. 40. The Trail from the Order.

Raise the rifle by slightly bending the right arm, give it a sharp cant forward by releasing the grasp, seize it at the balance, and bring it at once down to a horizontal position at the full extent of right arm, thumb and fingers round rifle and behind trouser seam.

S. 41. The Order from the Trail.

der— { Raise the muzzle inwards, catch the rifle near the rms. { band and come to the Order.

S. 42. Changing at the Trail.

ange | Bring the rifle to a perpendicular position, the Arms. (right hand level with elbow.

Pass rifle across the body, seize it with left hand at balance, and drop right hand to side.

Three.—Lower rifle horizontally on left side at full extent of arm.

S. 43. The Slope from the Trail.

Give the rifle a slight cant forward, seizing it with the left hand behind the back-sight, and the right hand at the small of the butt, both arms slightly bent.

Carry the rifle with the right hand smartly to the left shoulder, seizing it with the left hand as at the slope.

Three.—Cut the right hand smartly to the side.

C. 11182,

rms.

o.

В

S. 44. The Trail from the Slope.

Arms. Bring the rifle down as in the first motion of Order, seizing it with the right hand at the point balance.

Two.—Bring the rifle smartly to the trail.

S. 45. Short Trail from the Order.

Short— { Raise the rifle perpendicularly about 3 inches from Trail. { the ground.

This is done when halted, in forming sections, half-section or taking any number of paces, forward, backward, or to a fla

S. 46. The Secure from the Slope.

Secure— Bring the rifle down to the full extent of the arm, seize it with the right hand in line with shoulder.

Two. Seize the rifle with the left hand, at the balandard and turn the magazine to the front.

Give the butt a sharp cant to the rear, place breach under the left arm-pit, knob of bolt to rear, muzzle inclined slightly to the right and down same time cut the right hand to the side.

S. 47. The Slope from the Secure.

Slope— Bring the rifle to a perpendicular position oppo Arms. the left shoulder, and seize the small with the rihand.

Two. Solution Place the rifle on the left shoulder with the right hand and seize the butt with the left as before.

Three.—Cut the right hand to the side.

S. 48. Changing at the Secure.

Change Bring rifle to a perpendicular position, left hand —Arms. line with elbow.

Pass rifle across the body, seize it with the right hand at the balance and cut left hand to side.

Three.—Place breech under the right arm-pit.

S. 49. Slinging Arms.

Pass the head and right arm between the sling and rifle, the sling passing over the left shoulder, and the rifle, muzzle upwards, hanging diagonally across the back.

Note.—"See S. 110 for unslinging arms, except that the le is brought to the order."

S. 50. Grounding from the Order.

Bend the knees and place the rifle gently on the ground at the right side, magazine to right, muzzle pointing direct to the front, and hand in line with toes as it places rifle on the ground, and rise again immediately.

S. 51. Taking up Arms.

ke up | Bend the knees, seize the rifle at the right toe, and Arms. come to the Order immediately.

S. 52. Inspecting Arms from the Order.

Cant the rifle, muzzle leading, with the right hand across the body, guard to the left and downwards, barrel crossing opposite point of left shoulder, at the same time meet it with the left hand behind the back sight, thumb and fingers round the rifle, left wrist opposite left breast, both elbows close to the body. Turn the safety-catch over to the front, open the breech, and grasp the butt with the right hand just behind the bolt, thumb pointing to muzzle.

For specion fort 1rms.

1rms.

Examine Come to the loading position, with the rifle so in Examine clined as to enable the officer to look through the Larms. barrel and place the right thumb-nail in front of the bolt.

Each soldier, when the Inspecting Officer has passed the mext to him, will ease springs, order arms, and stand at ease.

## S. 53. To Ease Springs.

Ease— Close the breech, press the trigger, turn the safet Springs. catch over to the rear, and return hand to the small

#### S. 54. Order from the Examine Arms.

Order— Holding the rifle firmly in the left hand, seize —Arms. with the right at the band.

Two. Close heels, bring rifle to the order, and cut aw left hand.

## S. 55. Dismissing with Arms.

A squad will be ordered to Slope Arms before dismissal, a on the command Dismiss the men will turn to the right a move away quietly, carrying their rifles at the Slope.

## S. 56. Paying Compliments with Arms.

When a soldier, carrying a rifle, passes an Officer, he value, and salute by carrying the right hand smartly to small, forearm horizontal, back of hand to front, fingers tended, three paces before reaching, and cutting the hand aw three paces after passing, turning his head towards him as who where the salute is a standard salute; if halted, he will turn towards him a stand at the Order.

Sentries saluting otherwise than by Presenting Arms Slope and carry right hand to small.

#### S. 57. Marching with Arms.

A squad will be ordered to Slope—Arms before marching, id if halted will remain at the Slope unless otherwise ordered.

#### S. 58. SWORD EXERCISE.

Officers will only draw swords when ordered, and upon inspecn or ceremonial parades.

PRAWING AND RETURNING OF SWORDS ATTACHED TO BELTS WITH SLINGS.

## S. 59. (a) On Foot.

Stand at Ease.—Carry the left foot about 10 inches to the left sword hanging forward by the slings, the shoe of the scab-rd resting on the ground close to the left foot, and just in front the heel, the palm of the left hand resting on the top of the t.

Attention.—Bring the sword upright by the side, the shoe of a scabbard resting on the ground as before, the left arm exided, the hand round the scabbard, thumb in front, fingers rear; at the same time bring the left foot smartly up in line th the right, and brace both knees.

Quick March.—Raise the sword smartly with the left hand at first pace, without stooping or disturbing the position of the ly, and grasp the scabbard at the point where the sword ances when held at an angle of 45 deg., the fingers round the bbard, the thumb along the edge,\* the arm fully extended, that touching the back part of the arm.

Halt.—Lower the sword to the ground, as in the position of ntion.

<sup>\*</sup> For officers substitute:—and place the ferefinger below the lower ring of the board, the thumb and remaining fingers round it.

Draw Swords.—The sword is drawn in three motions. Raise the scabbard until the little finger of the left hand is line with the elbow, grasping the back (for officers' sword upper) ring with the thumb and forefinger, the remaining finge closed in the hand, the thick part of the forearm against t side; at the same time pass the right hand smartly across t body to the sword knot, place it on the wrist, give it two turns i wards to secure it, and as the handle is grasped draw out t blade until the hand is in line with the elbow, turning the ed to the rear and straightening the left arm in rear of the thigh, t right arm close to the body, shoulders square to the front. With an extended arm draw the sword slowly from the scabbat edge to the rear, in rear of the left shoulder, and bring it in the Recover, that is, with the bar of the hilt in line with t bottom of the chin, blade perpendicular, edge to the left, elb close to the body; at the same time bring the scabbard upris by the side as at Attention. (3) Lower the sword smartly the Carry, that is, with the hand in front of the elbow and lit finger in line with it, blade perpendicular, edge to the front

Slope Swords.—Relax the grasp of the last three fingers, as without disturbing the position of the hand, allow the back the sword to fall lightly on the shoulder, midway between the neck and point of the shoulder.

Stand at Ease.—Carry the left foot about 10 inches to the left Allow the scabbard to fall forward to the full extent of slings, and place the palm of the left hand on the mouth of shoe of the scabbard resting on the ground, close to the left for and just in front of the heel.

Attention.—Come smartly to the position of Attention as bef described, the sword at the slope, the scabbard upright by left side.

Carry Swords.—Resume the grasp of the last three fingers and ing the blade perpendicular, as in the third motion of drawing ords.

Return Swords.—The sword is returned in three motions. (1) rry the hilt smartly to the hollow of the left shoulder, blade pendicular, edge to the left, elbow level with the shoulder, the same time bringing forward the mouth of the scabbard out 3 inches, grasping the back (for officers' swords, upper) g with the thumb and forefinger; then, by a quick turn of wrist, drop the point in rear of the left shoulder into the bbard and resume the position at the end of the first motion Draw Swords, shoulders being kept square to the front throught this motion. (2) Let the sword fall smoothly into the scabrd, release the hand from the sword knot by giving it two as outwards, the right hand remaining across the body in with the elbow, fingers extended and close together, back of hand up, and bring the sword to the position of Attention. Drop the right hand smartly to the side.

In marching with swords drawn the scabbard is to be raised the word *March*, and lowered to the ground on the word *lt*, in the same manner as described for marching with sword drawn.

On the march (except when on the passing line in marching st), or when manœuvring, the sword is to be at the Slope, th on foot and mounted. When mounted the little finger is be in rear of the hilt.

When the sword is at the Carry mounted, the hilt is to rest on right thigh, the blade perpendicular, the wrist rounded as to incline the edge slightly to the left, the grasp of the er fingers slightly relaxed, the little finger in rear of the

## S. 60. (b) Mounted.

Draw Swords.—(1) Pass the right hand smartly across to body, over the bridle arm, to the sword knot,\* place it on twrist, give it two turns inwards to secure it, and as the hand is grasped draw out the blade until the hand is in line with telbow, turning the edge to the rear, the right arm close to body, shoulders square to the front. (2) With an extendarm draw the sword slowly from the scabbard, edge to the rein rear of the left shoulder, and bring it to the Recover, that with the bar of the hilt in line with the bottom of the cheblade perpendicular, edge to the left, elbow close to the bottom of the thigh, blade perpendicular, edge slightly inclinate to the left, the grasp of the lower fingers slightly relaxed, liftinger in rear of the hilt, arm close to the body, that part of between the wrist and the elbow lightly touching the hip.

Slope Swords.—Bring the lower part of the arm at right and to the upper, hand in front of the elbow, relax the grasp of second and third fingers, and allow the sword to fall lightly the shoulder, midway between the neck and point of the shoder, the little finger still in rear of the hilt.

Sit at Ease.—Keeping the sword at the slope, place the ha on the front part of the saddle, with the right hand over left.

Attention.—Come smartly to the position of Slope Swords

Carry Swords.—Resume the grasp of the second and the fingers and bring the blade perpendicular, the hilt resting on thigh, as in the third motion of drawing swords.

<sup>•</sup> When the sword is attached to the saddle, it may be necessary to draw the blade so as to rest the hilt on the bridle arm before the sword knot is taken the handle properly grasped.

Return Swords.—Carry the hilt smartly to the hollow of the t shoulder, blade perpendicular, edge to the left elbow level th the shoulder; then, by a quick turn of the wrist, drop the int in rear of the left shoulder into the scabbard, and resume position at the end of the first motion in Draw Swords, pulders being kept square to the front throughout this motion.

Let the sword fall smoothly into the scabbard, release the nd from the sword knot by giving it two turns outwards, the ht hand remaining across the body in line with the elbow, gers extended and close together, back of the hand up. (3)

op the right hand smartly to the side.

When Draw Swords is ordered at the walk, the men, after awing, will remain at the Carry until ordered to Slope; but if aw Swords is ordered at the trot or gallop, the men will come the Slope after drawing.

When men are dismounted to lead their horses, they will hook

swords at once without waiting for an order.

Proving.—In proving and telling off with a drawn sword, the ord is brought to the Carry, and again sloped on the command you Were.

- 61. Drawing and Returning of Swords Attached to Sam Brown Belts.
- On Foot or Mounted.—The same as for belts with slings, exbt that the edge of the sword is not turned to the rear either drawing or returning.
  - S. 62. OFFICERS' SALUTE AT THE HALT.

The sword being at the Carry:—

(1) Bring the sword to the Recover, but with the thumb point-z upwards.

(2) Lower the sword to the front at the full extent of the arm, a point in the direction of the right foot, about 12 inches from

the ground, edge to the left, thumb extended in the direction of the point, hand directly under the shoulder. When mounted the sword should be in line with the knee.

(3) Bring the sword to the Recover.

(4) Bring the sword to the Carry.

Notes.—1. The motions are made in quick time.

2. For salute in marching past see S. 308

#### CLEANING AND CARE OF THE RIFLE.

S. 63. General Instructions.

I. The outside should be cleaned daily, all parts of the actiwiped over with an oily rag, and the bore wiped out with of flannelette.

2. Before firing, the barrel and chamber will be wiped fr

from oil.

3. After firing, rifles should be cleaned immediately, to provent corrosion. If this cannot be thoroughly done at the time they must be wiped out, and cleaned as follows, as soon

possible afterwards:—

The bore.—Oil the pull-through gauze, drop the weight from the breech, and pull the gauze through three or four time then put a piece of dry flannelette (never more than 4 x inches) in the loop near the gauze, and pull it through un the bore is "rag clean"; finally draw a piece of oily flannelet through the bore. The end loop is only intended for with drawing the pull-through in case of a jam. Only sufficient as should be used to cover the bore, but not to run into the board the rifle has been fired (boiling water and washing sodated ozs. to 1 gal.) is an effective cleanser. Pull flannelette, soak in the solution, through the bore, which should then be drivand oiled.

The outside and action:—Clean the bolt with an oil rag, especilly the face of the bolt head, the point of the striker, and the tractor; wipe the inside of the body, the magazine entrance, and the exterior of the rifle with an oil rag, and the inside of a magazine with a dry rag. The interior of the bolt should be cleaned by the Armr.-Sergt. Care should be taken to present the browning being rubbed off the rifle.

4. Pull-off is the pressure required to release the nose of the ar from the full bent of the cocking-piece, and, in the short de, should not be more than 6, or less than 5 lbs. Defect ould be remedied by the Armr.-Sergt. only. The direction of a pull-off is slightly upwards, and in using a tester it should held in a line diagonally across the small of the butt.

5. The main spring should never remain compressed except hen the rifle is loaded. Cartridges should only be kept in a magazine when necessary, and failure in the spring to raise e platform is often overcome by tapping the magazine.

6. Bolts are not to be exchanged, as substitution may seriously

fect the rifle's accuracy.

7. No portion of the action is to be taken to pieces except by ose authorized to do so.

# HE THEORY OF RIFLE FIRE AND ITS PRACTICAL APPLICATION.

## S. 64. Definitions.

Axis of the barrel.—An imaginary line following the centre the bore from breech to muzzle.

Line of fire.—An indefinite prolongation of the axis of the reel.

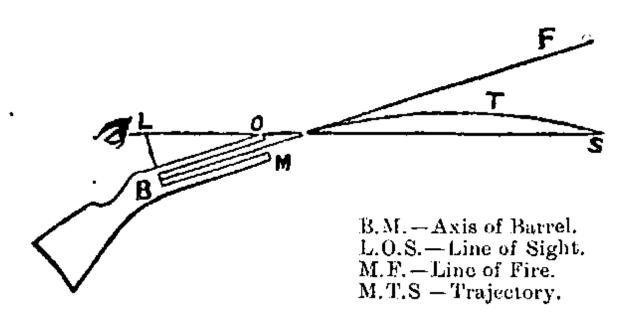
Line of sight.—A line from the firer's eye along the sights to e object aimed at.

Culminating point.—The greatest height reached by the bulle above the line of sight, and is a point a little beyond half the distance of the whole range.

First catch.—That point where the bullet has descende sufficiently to strike the head of a man whether mounted standing, kneeling, lying, &c.

First graze.—The point where the bullet first strikes th ground.

Dangerous space.—The distance between the first catch and the first graze.



## S. 65. Rifling.

- (a) A barrel is said to be rifled when it has spiral grooves in the bore.
- (b) Rifling enables an elongated bullet to be used, the advantage being that it has great weight in proportion to the surfact directly opposed to the air, and therefore great power in over coming the resistance of the air, and thus keeping up it velocity.

(c) When the charge is fired, the bullet is forced into and folws the grooves up the barrel, thus leaving the muzzle with tation on its longer axis, which tends to keep its point foreost to insure accuracy of flight.

#### S. 66. Forces Acting on the Bullet.

- 1. Explosion of the charge which drives the bullet forward.
- 2. Gravity, which draws it towards the centre of the earth th ever-increasing velocity, immediately it leaves the muzzle.
- 3. Resistance of the air, which causes its velocity to decrease ne combined effect of these forces causes the bullet to travel a curved line called the trajectory, which curvature becomes ore pronounced the longer the bullet is exposed to their action hus a bullet leaving the muzzle of a rifle at the rate of about 000 ft. per sec., falls 6 inches below the line of fire in the first 0 yds., which is increased to 2 ft. at 200 yds.

# S. 67. Short Magazine Lee-Enfield Rifle.

The following table illustrates the trajectory of the bullet for e ranges given:—

Height of Trajectory (in	feet) above Line of Sight.
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┗—													
ge ls.	200.	300.	400.	500.	600.	700.	800.	900.	1,000.	1,100.	1,200.	1,300.	1,400.
00 00 00 00 00 00	5·4 9·3 14·1 30·6 54·1 109·5	79.8	13.9 23.6 56.5 104.0	25.8	20-2 75-4- 146-7	24 1 81 6 164 0	$\begin{array}{c} 35.0 \\ 178.7 \end{array}$	\$5.5 192.0	\$2.2 201.0 478.0	75\2 205\0 51 <b>0</b> \0	04°0 206°0 538°5	48.0 202.0 561.0	20 8 192 0 580 0

S. 68. Range Table.

(Muzzle Velocity taken at 2,000 feet per second).

Range.	Remaining Velocity.	Time of Flight.	Angles of Descent for last 100 yards of range.			
Yards,	Feet per Second.	Seconds.	0 47			
600	1,168	1·196				
800	1,016	1·754				
1,000	925	2·376	$egin{array}{cccccccccccccccccccccccccccccccccccc$			
1,500	755	4·188				
2,000	624	6°867	9 44			
2,800	456	10°820	21 18			

#### S. 69. Elevation.

In order to allow for the fall of the bullet it is necessary to direct the line of fire as much above the object to be hit as the bullet will fall below it if the axis of the barrel of the rifle is pointed at the mark. This raising of the barrel to allow for the curve of the trajectory is termed giving elevation.

#### S. 70. Sighting of Rifles.

1. It must be understood that no two rifles behave in a exactly similar manner, and that even if compensation could be made for every error in the sighting of the rifle before issue wear of parts and loosening of screws, &c., would bring about faults from time to time.

Subsequent alterations in the shooting of the rifle can, as rule, be compensated by the use of the fine adjustment, which can also be employed for distances intermediate to those marke on the backsight.

2. It is essential that every man should study the shooting of his rifle, and acquaint himself with its variations from the sighting marked on the backsight, at all ranges at which individual

is practised, in order that he may give his rifle the correct vation for the range.

3. At longer ranges the backsight elevation may be regarded

the best possible guide under all conditions.

## S. 71. Dangerous Space.

1. This decreases as the range increases, the reduction being e to the steeper angle at which the bullet descends at the ager ranges.

2. Dangerous space further depends on the—

- (a) Firer's position and consequent height of his rifle above ground.
- (b) Height of the object fired at.
- (c) Flatness of the trajectory.
- (d) Conformation of the ground.

In regard to the—

(a) Nearer the rifle is to the ground

(b) Higher the object fired at

(c) Flatter the trajectory

(d) More nearly the slope of the ground congerous space.

forms to the angle at which bullet falls

The greater is the dangerous space.

3. A general knowledge of the angle of fall of the bullet in a last 100 yards of its flight, at the shorter ranges, is essential a guide in deciding when individual fire may be opened with ect. The longer the range the more abruptly does the bullet I; consequently, the greater the distance the more accurately ast the range be ascertained. Hence, the limits of individual e are to a great extent governed by the curve of the trajecty, and the power of correctly estimating range; and it sults that, unless the strike of the bullet can be observed, lividual fire cannot be effective on small targets at the longer ages.

4. The firer must also thoroughly understand how the dangerous space is affected by the factors mentioned in para.

## S. 72. Jump.

1. This name is given to a movement and vibration of the rifebarrel caused by the explosion of the charge, and the passage the bullet along the spiral grooves of the barrel. This produc a change in the direction of the axis of the barrel between the instant at which the charge explodes and that at which the bullet leaves the bore. In short magazine L.E. rifles the "jump deflects the bullet both upwards and to the left.

2. Lateral jump is compensated for by setting the foresight the left of the axis of the barrel. The upward jump is allowed

for in the graduation of the backsight.

## S. 73. Drift.

Drift is a term used to express the lateral deviation of the bullet after it has left the barrel. This deviation, which is considerably less than that caused by jump, is brought about by the rotation of the bullet and the position which it assumes in inflight. The left-handed rifling of the service rifle causes the bullet to rotate from right over to left, the point according works over slightly to the left. The consequent increased air pressure on the right side of the bullet therefore forces it to the left. No compensation is made for drift in the sighting.

# S. 74. The Effects of a Heated or Oily Barrel on Elevation.

There is a marked tendency for bullets to fall short when the barrel becomes heated; this should be watched, and aim take accordingly.

As the first round fired from an oily barrel is liable to follo an erratic course, a dry rag should be passed through the bo

before practice is commenced.

#### S. 75. Extreme Range.

About 3,760 yards may be taken as the extreme range of a bullet fired from a service rifle.

#### S. 76. Wind.

The chief cause of trouble to the firer is the effect of wind on the bullet. Its direction and strength can be judged by watching trees, grass, flags, &c., by observing the rate of movement of the radiation of heat from the ground ("mirage"), and by personal sensation.

A side wind acts on the greater surface of the bullet and has consequently more influence on its flight than a wind blowing from the front or rear. A front wind retards it, and demands more elevation. A rear wind lessens the resistance of the air, and calls for less elevation. No guiding rules can be framed. Experience and observation alone can teach the necessary allowance to be made for winds of varying strength and direction. But it must be remembered that, owing to the increased time during which the bullet is exposed to its effect, and to the height attained in its flight, the allowance for wind at long range is out of all proportion to that necessary at short range.

## S. 77. Light.

In bad light the foresight is less distinctly seen than in good light and more of it is unconsciously taken in the line of sight. This naturally affects the elevation used, less being required on a dull than on a bright day.

## S. 78. Ground in Relation to Fire Action.

1. So important is the influence exercised by the shape of the ground on the grouping of bullets, that it is essential for all officers and N.C.O.'s to possess a knowledge of how its features combine to increase or diminish the probability of fire being effective.

In attack, such knowledge will assist them to direct the fire of their men to the best advantage; in defence it will aid them to select the best positions for fire action, and will enable them to take steps to minimise their inherent disadvantages.

2. On level ground, the zone beaten by collective rifle fire varies considerably with the range. Its extent is further influenced by the inclination of the ground to the line of sight.

3. When the ground rises in respect of the lines of sight of the rifles, the depth of the area beaten by the bullets is decreased, and is least when the angle between the ground and the trajectory is 90 deg. E.g., when firing at ground rising at 2 deg., 5 deg., and 10 deg., the depth of the beaten zone at 1,500 yards' range is decreased roughly by  $\frac{1}{4}$ ,  $\frac{1}{2}$ , and  $\frac{2}{3}$  respectively.

Since the grouping of the bullets becomes closer as the upward slope of the ground increases, the effect of errors of estimation of range will be more serious, and as the bullets will fall at a steep angle, the dangerous space will be proportionately reduced. On such ground, therefore, troops should be drawn up in shallow formations, but supports and reserves may be

nearer the firing line than is normally advisable.

4. When the ground beaten by bullets falls in respect of the line of sight, the depth of the beaten zone is augmented, in proportion as the downward slope increases, until it reaches its greatest magnitude when the angle of the fall of the bullets is the same as the slope of the ground.

In these circumstances, the fire becomes grazing, and the extent of the dangerous space nearly identical with the beaten zone. Therefore, at short ranges, where the trajectories are flat, the depth of the beaten zone will be much increased if the ground behind the object fired at falls at a gentle slope. At long ranges, on the other hand, a greater area will be beaten when ground falls more steeply.

It is, therefore, clear that ground far behind the objective will at times be swept by unaimed fire, and it follows that in such circumstances supports should be in extended order, or in shallow columns on narrow frontages.

5. When the objective is a crest line, the beaten zone is greatest, and part of the fire is grazing, when the ground beyond the crest is parallel, or nearly so, to the trajectory of the bullets.

At short ranges a defiladed zone, or space not swept by fire, occurs, greater or less according to the distance from which fire is delivered, the steepness of the forward slope of the ground, the extent of the hill top, and the inclination of the reverse slope:

It appears, therefore, that when the firing line is placed on the crest of a razor-backed hill with steep reverse slopes; supports and reserves will at all ranges be but little exposed to unaimed fire when posted in its vicinity. In other cases, when the crest of a hill is occupied, the vulnerability of supports and reserves will be least if, when the enemy is at long range, they are withdrawn from, and as he approaches closed on, the firing line.

6. When the bullets fall on level ground, difference of level between the firers and the objective beaten by bullets produces the same effects on the beaten zone as when fire is directed at ground inclined to the line of sight. If the fire is from high on to lower ground, the depth of the beaten zone is diminished, as when firing at rising ground. It follows, therefore, that the distances between the successive lines of an assailant advancing against troops posted on commanding ground may be less than is normally advisable.

If the fire is from low ground on to a higher level, the effect will be the same as in the case of fire on ground falling in respect of the line of sight. When the crest of a plateau is held, supporting troops should, therefore, be withdrawn from the

firing line whilst the enemy is at long range.

#### MUSKETRY EXERCISES

#### Instruction in Aiming.

#### S. 79. General Rules.

1. Instruction in aiming will be divided into two stages.

In the preliminary stage the recruit will be taught the method of adjusting the sights to give elevation, and to aim with absolute accuracy at a bull's-eye, placed at such a distance, and of such a size as not to tax his powers. The size of the mark will be diminished and the distance increased as progress is made. He will also be taught to allow for the effect of wind by the use of the wind gauge and by aiming to the right or left of objects as may be necessary.

In the advanced stage natural objects or indistinct targets

should be selected.

#### S. 80. Methods of Instruction in Aiming.

1. 1st Stage.—The instructor will explain to his squad the necessity of strict observance of the following rules:—

(a) The backsight must be kept upright.

(b) Aim must be taken by aligning the sights on to the centre of the lowest part of the mark, the tip of the foresight being in the centre of, and in line with, the

shoulders of the V of the backsight.

When these principles have been mastered the instructor will adjust the sights for any given range, and aim from the rest at the target, with his eye at a point above and in line with the butt plate. Having aimed, he will call on each individual to observe the correct method of aligning the sights on a mark. Each recruit will then act similarly, when the instructor will verify the aim, point out errors, and explain how they would have affected the accuracy of the shot, and how they are to be avoided.

In aiming with the long range sights a similar procedure will be pursued, but the eye will be placed about 1 inch behind the small of the butt.

- 2. The most common faults at aiming are-
  - (a) Taking too much or too little foresight into the V of the backsight.

To emphasize the importance of accuracy in this respect it should be explained that a fine or half sight will cause the bullet to strike about 5 inches and 3 inches lower, respectively, per 100 yards of range, than when the correct sight istaken.

The following method will be found useful to guide a recruit in taking the correct amount of foresight:—Lay the edge of a piece of paper on the upper edge of the backsight cap, when the sight will appear as shown in one of the subjoined diagrams.



(b) Inaccurate centering of the foresight in the notch of the backsight.

The recruit should understand that the consequence of this will be to deflect the muzzle of the rifle to the side on which the line of aim is taken, e.g., if aim be taken over the right edge of the notch, the direction of the line of fire will be to the right of the mark aimed at.

(c) Fixing the eyes on the foresight, and not on the object. This will result in the sights not being accurately aligned on the mark.

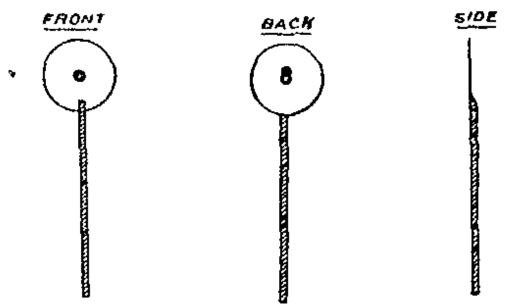
(d) Inclining the backsight to one side.

In this case the bullet will strike low, and to the side on which the sights are inclined.

3. To insure that each man is proficient in aiming, and to clearly bring to his mind the errors arising from any inaccuracies

therein, the following procedure will be carried out :--

The rifle will be placed on an aiming rest, and directed at a sheet of blank white paper, affixed to any convenient target placed at a distance of about 10 yards from the rifle. A marker will stand at one side of the target with a small rod bearing a disc of metal or cardboard, painted white, about 1½ inches in diameter; on this is a black bull's-eye ½ inch in diameter, in the centre of which is pierced a hole just large enough to admit the



point of a pencil. The disc will be held on the paper, the instructor will align the sights on it as laid down in 1 (b), and its position will be marked with a pencil. Each man in succession will be called up and ordered to look along the sights, but without touching the rifle, and when he has satisfied himself as to the correctness of the aim, the disc will be removed. It will then be replaced on the paper and moved at his direction, until its lower

edge is brought into the line of sight, when its position will be marked. This operation will be repeated three times, and the points thus fixed joined, thereby forming a triangle. The relative position of the points with respect to the instructor's aim\* will demonstrate whether the recruit knows how to align the sights correctly. Their position in regard to one another will show whether he is able to aim consistently with the same sight. If the triangle is formed so that it lies vertically on the



paper, it proves that the soldier's principal fault is not consistently taking the same amount of foresight; if horizontally, that the main error is inaccurate centering of the foresight. When one of the sides of the triangle exceeds \( \frac{1}{2} \) inch, the recruit requires further instruction. The aim corrector will also be used to enable the instructor to supervise the soldier's methods and test his progress, the aim being taken from an aiming or firing rest.

4. The use of the wind gauge will be taught to troops armed with the short Lee-Enfield rifle in the following manner:—The instructor, having explained that a variation of one division on the wind gauge scale is equivalent to 6 inches at the target, per 100 yards of range, will question the soldier how many feet

If the recruit's aim is below that of the instructor, it shows that he has taken too full a sight; if above, that his sighting has been too line; if to the right, that the foresight was on the left of a perpendicular drawn through the centre of the notch; if to the left, vice versa.

of deviation would be required to allow for the wind which is blowing,\* and then direct him to set his sights to the range, adjust the wind gauge, and aim.

When he has thoroughly mastered the setting of the wind gauge, it will be explained to him that in an unsteady wind he must be prepared to aim off the bull's-eye or figure, e.g., if, with wind gauge set to allow 2 feet 6 inches right wind, at 500 yards, he is on the point of exerting the second pressure on the trigger and the wind suddenly drops, he must move his aim 2 feet 6 inches to the left of the mark if he is to obtain a hit.

His power of making the correct allowance will continually be tested, and when he has aimed, a fatigue man will show by a marking disc the correct point of aim, so that the soldier by looking along his sights, without touching the rifle, may observe his error.

5. 2nd Stage.—In this stage aim will be chiefly directed at indistinct targets. For this latter purpose a fatigue man will be directed to show himself for a few seconds at different ranges. The squad will then aim from rests at the ground they believe to be occupied. After a short interval the fatigue man will stand up, when errors will be corrected and criticised.

Further exercises of the same nature will subsequently be carried out without the use of rests, with a view to cultivating rapidity in aiming, progress being tested by means of the aim-corrector.

6. Long Range Sights.—In aiming with the long range sights, the procedure explained in para. I will be adopted, but the top

<sup>\*</sup> A ready method of ascertaining the required adjustment is to multiply the number of feet, or fractions of feet, of allowance for wind, by 2, and divide the product by the number of hundreds of yards in the range. The result will be the number of divisions which the wind gauge must be moved.

of the head of the dial sight will be seen in the centre of the aperture. Exercises in these will be chiefly confined to aiming at natural objects and areas of ground.

#### INSTRUCTIONS IN FIRING.

#### S. 81. General Rules for Firing.

- 1. Skill in shooting is entirely dependent on careful individual instruction before the soldier is taken to the range. The lessons which target practice is intended to afford will be of little value unless a recruit is proficient in aiming, expert in the handling of his rifle in all positions, and has overcome the difficulties of releasing the trigger without disturbing the aim.
  - 2. The following motions must be performed:--
    - (a) Load.
    - (b) Adjust the backsight, or long range sights.
    - (c) Aim.
    - (d) Press the trigger.

The motions will be carried out by the trained soldier on the command—(Standing, lying, kneeling, sitting); At (object); At (distance); Fire (or Rapid fire).

- 3. The recruit, on the other hand, will receive individual instruction in each separate motion, and will not be permitted to undertake the succeeding motions until he has thoroughly mastered those which precede them.
- 4. In the early part of the training the instructor, having assembled his squad around him, and directed the men to order arms, or rest, will explain the circumstances in which the position to form the subject of instruction (i.e., standing, kneeling, sitting, lying) would be adopted on service, and whilst demonstrating the correct method of performing each motion will point out clearly its use.

The men will then be directed to carry out the motions without regard to cadence, and the instructor will occupy himself in correcting the faults committed by each man in his squad, for which purpose he should stand five or six paces from him and to his right front. Simultaneous action is not to be attempted, nor will the regulation position be insisted on if unsuited to the soldier's build. The object of the instructor is that each individual shall be taught to perform the necessary motions with ease and accuracy, whilst adhering to the regulation positions as closely as possible.

5. The firing rest will be frequently employed in early instruction to enable the recruit to support the rifle and rest his muscles, whilst the instructor modifies, or corrects his position. An incorrect position, however, usually arises from want of accuracy in the preliminary actions which lead to it, and it is to these that attention must be given, for a faulty position once acquired can-

not easily be corrected.

6. As progress is made the squads will be practised in combining any or all of the motions which have formed the subject of separate consideration, special care being taken that there is no falling off in the accuracy with which they are performed.

7. The instructor will now train the soldier to combine complete case in handling the rifle and from varied classes of cover, with the greatest rapidity of aim consistent with accuracy.

8. In the earlier stages figure targets will be found suitable. Natural objects will also be selected as targets, with a view to accustoming the men to fire at the class of target which is usually afforded on active service. Exercises at moving, vanishing, and advancing targets should also frequently take place.

9. On the signal, or command, Cease Fire, the soldier will close the breech, bring the rifle to the loading position, turn the safety catch completely over to the rear, and await orders.

10. On the command Rest the men will turn over the safety catch and assume any easy position.

#### S. 82. Firing Standing.

- 1. The standing position will as a rule be used to fire from breastworks, high walls, and cover, such as long grass or standing corn, or to take a snap shot, when advancing, at an enemy who suddenly appears.
- 2. To Load .-- Turn half-right and carry the left foot to the left and forwards, so that the body is equally balanced on both Bring the rifle to the right side just above the hip, with the muzzle pointing upwards, small of the butt just in front of the hip, grasping the stock with the left hand immediately in front of the magazine. Turn the safety catch completely over to the front with the thumb or forefinger of the right hand, seize the knob with the forefinger and thumb of the right hand, turn it sharply upwards, and draw back the bolt to its full extent. Take a charger between the thumb and first two fingers of the right hand and place it vertically in the guides. Then, placing the ball of the thumb immediately in front of the charger, force the cartridges down with a firm and continuous pressure until the top cartridge has engaged in the magazine.\* Remove the charger. Force the bolt sharply home, turning the knob well down, and with the thumb or forefinger of the right hand turn the safety catch completely over to the rear. Then scize the rifle with the right hand in front of the left, bring the left foot back to the right, turn to the front, and order arms.

<sup>\*</sup> The magazine will hold two chargers of five cartridges each, but should, in ordinary circumstances, be loaded with one only, as the soldier will thus retain the power of adding another charger, at any time, should necessity demand. If when on the line of march, it is desired to charge the magazine without loading the rifle, the top cartridge may be pressed downwards with the thumb so as to permit the bolt to slide over the cartridge as the breech is closed.

- 3. To Unload.—As when loading; then turn the safety catch completely over to the front. Raise and draw back the bolt, and without turning the knob down, work the bolt rapidly backwards and forwards until the cartridges are removed from the magazine and chamber, allowing them to fall on the ground. Then close the breech, press the trigger, turn the safety catch completely over to the rear, lower the leaf of the backsight and by pressing the bone studs inwards draw the slide back as far as possible; or lower the long range sights by putting down the aperture sight and turning the bead of the pointer on to its bed, and order arms.
- 4. To Adjust the Backsight.—Bring the rifle to the loading position and hold it so that the lines on the backsight can be clearly seen. Press in the bone studs on either side of the slide with the forefinger and thumb of the right hand, move the slide until the line is even with the place on the leaf giving the elevation for the distance named, and see that it is firmly fixed.\* Lower the leaf of the backsight, and order arms.
- 5. To Adjust the Long Range Sights.—Bring the rifle to the loading position, and hold it so that the dial can be clearly seen. Move the pointer to the place on the dial giving the elevation for the distance named, and then raise the aperture sight. Lower the aperture sight, move the bead to its bed, and order arms.
- 6. To Aim.—Load, and direct the eyer on the mark. Then bring the rifle into the hollow of the right shoulder, press it in with the left hand, grasp the small firmly with the thumb and three fingers of the right hand, place the forefinger round the lower part of the trigger, and exert sufficient pressure to take the first pull; the backsight to be upright, left elbow well under the

<sup>\*</sup> To ascertain the number of divisions on the fine adjustment which will give the required extra elevation at any range, multiply the number of feet of extra elevation by 2 and divide the product by the number of hundreds of yards in the range.

rifle, right elbow a little lower than and well to the front of the right shoulder. As the rifle touches the shoulder bring the cheek down on the butt, close the left eye, align the sights on the mark, and restrain the breathing. After a pause bring the rifle to the loading position, turn back the safety catch, and order arms.

7. Pressing the Trigger.—Load, and aim; then press the trigger by a squeezing motion of the forefinger and thumb without any movement of the hand, eye, or arm, until the spring is released. Bring the rifle to the position for loading and load; or turn the safety catch to the rear, and order arms.

Before the soldier is permitted to press the trigger, the method of doing so will be explained to him as follows:—

The instructor, after placing the rifle on two sandbags, will show how the trigger is pressed, and explain at the same time:—
(i) That, as the trigger has a double pull-off, two distinct pressures are necessary to fire the rifle. The first pull should be taken when the rifle has been brought into the position for aiming: the second when the sights are aligned on the mark.
(ii) That the first joint of the forefinger should be placed round the lower part of the trigger. And (iii) that in order not to disturb the aim breathing must be restrained when pressing the trigger.



In order that he may learn from experience the pressure required to release the cocking piece, the soldier will also be directed to place his forefinger under that of the instructor, but without exercising pressure, whilst the instructor carries out the motion. The main object is to release the cocking piece without disturbing the aim.

## S. 83. Firing Lying.

1. The lying position will generally be adopted by troops on open ground, or when firing from continuous low cover, or from

behind small rocks, trees, ant-heaps, &c.

2. To Load.—Turn half-right, bring the rifle to the right side as when standing. Place the right hand on the ground, and lie down on the stomach, left arm and rifle resting on the ground in a convenient position, muzzle pointing to the front. Proceed as when standing. Place the right hand on the ground, rise, and order arms.

3. To Unload.—Lie down as when loading. Proceed as when

standing, then return to the order.

4. To Adjust Sights.—Lie down, draw the rifle through the left hand until the lines on the backsights can be clearly seen,

and proceed as when standing.

5. To Aim.—Lie down, as when loading. Bring the left elbow well forward so that the butt is clear of the shoulder, and proceed as when standing, closing the right elbow towards the left. To obtain elevation, the body must be raised on the elbows and slightly retired.

#### S. 84. Firing in Other Positions.

The recruit will also be instructed to fire-

(a) Sitting, which is most suitable when on ground falling at a steep slope. In this position the right shoulder should be kept well back, and the left forearm supported by the thigh, the right elbow resting against the right knee.

(b) Kneeling, used mainly when firing from continuous cover, or where cover is too high for the lying posi-

tion.

The soldier may kneel on the right knee or on both knees. In the former case the body may be supported on the heel or not, as desired; the left knee will be in advance of the left heel, and the left elbow rest on or over the left knee; the left leg, hand, and arm, and the right shoulder, should be in the same vertical plane when firing in the open. In the latter the body may rest on both heels, or be kept upright to suit the height of the cover, the elbows in both instances being unsupported by the body.

#### S. 85. Collective Fire.

When the men have acquired the necessary aptitude in handling the rifle in all positions, the period of individual instruction will be concluded, and they will be trained to combined action on the command of a leader, and, if circumstances demand, to take independent action in furtherance of the leader's purpose.

If orders are not given as to the rate of fire, it will be "slow," about three rounds per minute. "Rapid" fire is the highest rate consistent with reasonable accuracy (about 15 rounds per minute).

Fire can only be effective when intelligently directed, accurately delivered, and carefully controlled.

# S. 86. Preliminary Exercises.

The squad will be placed in line at one or two paces interval, and on the command from the instructor ("Standing," "Sitting," "Kneeling,"); At (object); At (range); "Fire," or "Rapid Fire," will perform the necessary motions, and continue firing until the whistle is sounded or the command "Ccase Fire" or "Unload" is given. If no orders are given as to the position the men will lie down.

If it is desired to change front, or alter the position of the men, the objective, range, or rate of fire, the instructor will give the necessary commands, but without, as a rule, causing the men to cease fire. The men will be taught to turn the safety-catch completely over to the rear, before a movement is undertaken.

When the squad has gained sufficient experience it will be taught, when in motion, to halt and deliver fire on the executive word "Fire" or "Rapid Fire," preceded by the necessary cautions.

To develop the self-reliance of the men, the complete detail of commands will occasionally be dispensed with. Thus, at an object appearing suddenly for a limited time, the executive command "Fire" or "Rapid Fire" only will be given, on which they will adopt the position they consider most suitable to the tactical conditions, adjust their sights, and open fire.

#### S. 87. Advanced Exercises.

Although the principle of complete control by superior commanders must never be lost sight of, subordinate leaders and men will be trained to think and act for themselves in situations where control of fire cannot be exercised, or when fire can be opened with effect though no orders have been received to do so.

As a general rule the senior officer or non-commissioned officer will order fire to be opened, give the range, and issue subsequent directions as to change of objective and range, or rate and cessation of fire, all of which will be passed to those concerned.

Subordinate leaders, in the absence of orders or instructions, will give the necessary directions for the opening and regulation

of fire as necessity demands. The men, in like manner, by the withdrawal of leaders, will be taught to use their own judgment and discretion.

The exercises will be carried out in skirmishing formations, and fire once opened will, if not countermanded, be continued, at each halt, without further orders.

## S. 88. Judging Distance and Estimation of Range by Eye.

The process of judging distance consists in either (a) meauring the intervening ground with the eye; (b) judging the ange from the impression given to the eye by the object; or c) a combination of the two systems.

It is, therefore, clear that soldiers must be taught first a short nit of measure to be applied to greater distances, and, secondly, he aspect of objects in varying conditions of light, ground, and ackground. To this end the soldier should be trained to recogisc, first, a distance of 100 yards on level ground, and then distances of 200, 300, 400, and 500 yards, which should be marked y posts, flags, dummies, or fatigue men.

#### bjects are over-estimated—

When kneeling or lying.

When both background and object are of a similar colour On broken ground.

When looking over a valley or undulating round.

In avenues, long streets, or ravines.

When the object lies in the shade.

When the object is viewed in mist or failing light.

When the object is only partially seen.

When heat is rising from the ground.

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#### Objects are under-estimated—

When the sun is behind the observer.

In bright light or clear atmosphere.

When both background and object are of different colours.

When the intervening ground is level or covered with snow.

When looking over water or a deep chasm.

When looking upwards or downwards.

When the object is large.

The next stage of instruction should be to train men to estimate for themselves the distance of objects. This can only be attained by careful individual instruction. No guessing should be permitted, and each man, before he gives the range, should explain clearly the process of reasoning on which he has based his estimate, and shall also state whether he considers that good results could be obtained from fire at the target on which he is judging.

Soldiers should be trained, in combination with visual instruction, first to estimate the range of standing, and then lying dummies, or fatigue men, placed at progressively increasing distances; estimates should be made in service conditions as regards position.

They should then be required to discriminate between the distance of objects situated in different directions. Next, they should estimate the range of vanishing objects, and, finally, of features of the ground which might shelter an enemy.

## S. 89. Estimation of Range by observation of Fire.

This method is of value when the ground in the vicinity of the objective is of a nature to show the strike of the bullets.

A considerable volume of rapid and concentrated fire in necessary to enable the strike of bullets to be observed, and for this purpose forty or fifty rifles should be employed. The distance, and nature of the ground, will determine the volume of fire required, but the greater the difficulty of observation the greater must be the volume of fire.

An elevation well under the estimated distance should first be selected, and if the fire can be observed the elevation should be increased by 100 yards at a time until the nucleus of the bullets is seen to fall on the desired spot.

The best position to observe the fire is behind, and, if possible, above the party firing, but in this position it must be remembered that bullets which fall short will be most easily seen, and may be mistaken for the nucleus of the fire, and that all shots will appear to strike nearer the observer than is really the case.

To an observer on or beyond a flank of the party, shots which pass over the mark will appear to fall towards the side on which he is posted, and those which drop short to fall towards the ppposite side.

Thus, if the majority of shots seem to an observer on the ight flank to fall to the right of the mark, the range has been over-estimated, and, if to the left, under-estimated.

#### S. 90. TROOP DRILL DISMOUNTED.

The following should be explained to and understood by

- 1. The leader is responsible for the dressing, pace, and direction of his troop, and, when in line, should always be in front f it, unless otherwise ordered.
- 2. The dressing in line is by the centre, and preserved by the entre guide keeping three paces behind the leader, and the men eeping in line with the guide by glancing towards the centre.

In column of sections, half-sections, or single files, it is by that flank on which the troop leader is marching, i.e., in sections right it is By the left, and in sections left, By the right.

- 3. The intervals between men, except in extended order, is \frac{1}{2}-arm, and corrected by occasionally raising the arm.
- 4. The relative positions of sections may be changed during drill, but the men composing a section are kept together. Whenever the four men of a section are abreast, No. 1 will invariably be on the right of the section, No. 2 next, and so on. In half sections, Nos. 1 and 3 will invariably be on the right of their respective half-sections. In single file, No. 1 will lead, No. 2 next, and so on, and in column of half-sections, Nos. 1 and 2 will lead, except, e.g., when advances by single file or half-sections are made from the left from line, or when moving from line to the left flank by single files or half-sections. In any exceptions, on the command, 'Form sections,' or 'Form half sections,' the half-sections or files in rear will form up, so that members of sections or half-sections will be in their correct relative positions.
- 5. If the command Sections—Right, Left, or About is given when on the move, the men continue in movement; but, i given when halted, the men halt on completing the wheel. I it is desired when moving to do the movements to the halt, the caution To the Halt must be prefixed to the command; for in stance, if a column of sections is marching and required to form into line to their left and halt immediately, the command would be, To the Halt-Sections—Left.
- 6. The distances between sections, half-sections, and singl files are 4, 2, and 1 paces, and between the troop leader and th centre guide 3 paces.
  - 7. An incomplete section is placed second from the left.

- 8. A troop in line goes sections about when required to move n an opposite direction, and sections, half-sections, or single files about, if in column.
- 9. A troop, when in column of half-sections or single file may be ordered to form troop; but in these cases sections will form without taking up correct distance between sections) before moving up into the new alignment.

If in column of half sections or single files the sections must

first be formed before forming line to a flank.

- 10. When a formation is made from and to the halt, or to the halt if on the move, the leading body will advance three paces (before halting) after the command is given.
- 11. All decreases from column of sections or half-sections will be made from the right, and all increases up to sections except as provided in paragraph 4) on the left.
- 12. In the preliminary instructions, movements should be lone from the halt and units placed separately in position.
- 13. When a troop is in line the flank from which formations re made will be named thus:—From the right (or left) Form Half Sections.
- 14. When required to increase front on the march the units n rear will take the next increased pace without word of comnand, and the former pace as they form, unless the command s Mark Time in—Front (if dismounted), when the rear will coninue at the pace moving and Mark time, on the new alignment, the command For—ward is then given to move the troop on.

When required to decrease front on the march, the units ffected will mark time (halt or check pace if mounted) without

word of command, and fall into their places in rear.

15. All wheels at the trot or gallop are made on a moving pivot. All wheels of a troop from the Halt or at a walk are made on a fixed pivot, except when a column changes direction, in which case the moving pivot is uesd.

Leaders and serrefiles changing.

The troop leader circles round by his right and the scrrefiles by their left (that is the right and left before the men go about) and pass the shortest way to their places.

When it is required to fall back for a short distance only with a view of again turning in the original direction, the command, "Sections About" will be preceded by the caution "The troop will retire," and the leader and serrefile will retain their positions. The troop will turn in the original direction on the command, "The troop will advance, Sections-About."

During the retirement the serrefile will be responsible for the leading of the troop. The same principle will be observed in Squadron, Regimental, and Brigade Drill.

## S. 91. Formation of the Troop.

On this command the men "fall in" in line, stand Fall-In (ing at ease, and the roll is called.

The troop leader inspects the men, clothing, arms land equipment.

S. 92. Telling off and proving a Troop.

Troop-Number.-The men number from right to left.

The centre man (or the left hand man of the right half of the troop) is named as the centre guide.

Centre Guide

On the word Prove, the named man will extend his { right (or disengaged arm) to the full extent to the -Prove. front, in line with the shoulder, back of hand to the right (or left) thumb close to forefinger, and fingers extended.

As you \int On the word were cut the arm without noise smartly Were. \to the side.

Tell off *by---*

On the word Sections the right-hand man will call out One, the next man Two, next Three, next Four, next One, then Two, Three, Four; One, Two, Three, Sections. \ Four, and so on. As the right hand man numbers, the left-hand man will call out Four, the next Three, next Two, next One (completing the left section).

Flanks of Sections —Prove.

The Nos. 1 and 4 will prove.

As you-Were.-Cut the arm to the side.

Horseholders-Prove.-The Nos. 3 prove.

As you—Were.—As before.

Sections— Right.

On the word Right each section wheels a quarter circle to the right in four paces on its right-hand man, who marks time and turns on his own ground.

Sections—Right.—As before.

Sections— About.

On the word About each section wheels a half-{ circle to the right in eight paces on its right hand man, who marks time and turns on his own ground.

The leader then places himself close in front of, and facing, the centre guide, and dresses the troop.

EyesCentre. –Dress $\,$ 

On the word Dress the men will turn their head and eyes right or left as the case may be, raising the left arm if on the right, and the right arm if on the left, of the guide (disengaged arm if with rifles) and get their dressing as in squad drill.

On the word Front (given when the troop is Eyes—Front. { dressed) every man will turn his head and eyes to the front and drop the arm.

Stand at—Ease.—As before.

#### Decreasing the Front.

S. 93 (a). From Troop to Sections.

On the word March the right section advances, the troop leader placing himself in line with and on the FormSections. left of it, the other sections mark time, right inclin-From the and move in succession by the diagonal march, each Right (or section making a left incline together when its righhand man is immediately behind the right hand Left). Quick- | man of the section in front of it, and following on a four paces distant, the men covering the correspond March.ing men of the section in front.

Troop—Halt.—On the word Halt every one remains steady. Movements may be similarly made from the right or left by half sections or single files.

S. 94 (b). From Sections to Half Sections.

On the word March the Nos. 1 and 2 of the leading section advance, the troop leader placing himsel in line with and on the left of it. The remainded mark time. Nos. 3 and 4 of the leading section in Quick- | cline to the right, follow, and cover at two paces dis The remainder move off in succession in th Isame way, keeping their proper distance and covering Troop—Halt.—As before.

S. 95 (c). From Half Sections to Single Files.

On the word March the No. 1 of the section leading advances, the troop leader placing himself line with and on the left of him. The remainded No. 2 inclines to the right. mark time. marches straight forward as it comes to his turn covering and following No. 2. The No. 4 inclines t the right, covers and follows No. 3. The remainded move off in succession in the same way.

Halt Sections. March.

Form

FormSingle Files.Quick— . March.

#### INCREASING THE FRONT.

S. 96 (a). From Single Files to Half Sections.

To the Halt.
Form
Half
Sections.
Quick—
March.

On the word March No. 1 of the section leading advances three paces and halts. No. 2 inclines to the left, and forms on the left of No. 1, the troop leader closing to the left and making room for him. No. 3 marches straight forward, halts at two paces from and covers No. 1. No. 4 inclines to the left and forms on the left of No. 3. The remainder form in the same way.

Sections may also be formed direct from single file.

S. 97 (b). From Half Sections to Sections.

 $egin{array}{c|c} Solution & Halt. & Solutions. & Solutions. & Solutions. & Solution &$ 

On the word March the Nos. 1 and 2 of the section leading advance three paces and halt. Nos. 3 and 4 incline to the left and form on their left, the troop leader making room for them. The remainder form in the same way.

S. 98 (c). From Sections to Troop.

To the Halt.

Form

Troop.

Quick

March.

On the word March the leading section advances three paces, and halts, the other sections incline to the left until opposite their places, when they incline to the right and form on the left of those already formed, the troop leader moves to his place in front of the centre guide.

The troop can be formed on the right of the head of the plumn by the command On the right, Form Troop,—when all he rear sections will incline to the right and form on the right those already formed. It must, however, be clearly undertood that the troop is always formed on the left, unless the aution On the right, is given.

#### MOVEMENTS TO A FLANK.

S. 99 (a). By Sections.

Sec.—Right (or Left).—On the word Right (or Left) the whole wheel sections right (or left).

Quick—March.—As before.

S. 100 (b). By Half Sections.

Half Sec. On the word Right (or Le/t) the half sections wheel to the right (or left).

Quick - March. - As before.

S. 101 (c). By Single Files.

Right (or Left)—Turn.—As before. Quick—March.—As before.

#### SADDLERY.

# S. 102. Manner of Fitting Saddlery.

The Bit should touch the corners of the mouth, but should hang low enough not to wrinkle them.

The Curb Chain should be laid flat and smooth under the jaw and should admit two fingers easily between it and the jawbone

The Headstall should be parallel to and behind the cheekbone

The Noseband should be the breadth of two fingers below the cheekbone, and should admit two fingers between it and the nose.

The Throat Lash should admit the breadth of two fingers between it and the horse's throat, with the buckle I inch below the browband, on the near side.

The Head Rope should be fastened on to the lower ring of the jowl piece, or, where bridles are without jowl piece, then on the ring provided, passed round the near side of the neck and fastened on to the standing part of the rope with a coil of turns of which the top end should be 6 to 8 inches from the horse's lowl. They should be worn fairly tight, and not hanging loosely about the shoulders.

The Saddle should be placed in the middle of the back, the front of it, if possible, about the breadth of the hand behind the

blay of the shoulder.

The Numnah when used should be raised well into the fork of the saddle over the withers by putting the arm under it, the ront strap to be carried over and in front of the front arch of the saddle.

The Saddle Blanket when used will, as a rule, be folded the ongest way of the blanket in two, and then again into three, he ragged edge of the blanket to be on the near and rear side, o be placed crossways on the horse, care being taken that, in putting it on, it is pushed well up into the arch of the saddle, and that it projects at least 2 or 3 inches in front of the saddle.

The Girth must be tightened gradually, and not with violence, and should admit one finger between it and the horse, slack

irth frequently causes sore back.

The Surcingle lies flat over and is not tighter than the girth.

#### RIDING INSTRUCTION.

#### S. 102. General Remarks.

Military equitation consists in the skilful and ready applicaon of the "aids in horsemanship" by which the rider guides and controls his horse in all its paces, and in a settled balance of the body, which enables him to preserve a firm seat in every ariety of movement.

"Aids in horsemanship" are the motions and proper applicaons of the bridle hand and leg to direct and determine the rnings and paces of the horse, by which the horse will obtain a light mouth and yield to the impulse he receives from the rider, who should be able to guide his horse with his bridle hand and legs, and be capable on all occasions of preserving a firm seat, and of having his right hand and arm at full liberty for the use of his weapons.

Horses are to be ridden on all four reins, and kept well up to their bits either at a walk or a trot. At the trot each man should rise in the stirrups, throwing the weight of his body forward. The weight of the body should be almost entirely supported by the knees and thighs pressing against the horse's sides, and by the feet resting in the stirrups; in this manner it is hardly ever upon the seat of the saddle, and is borne by the side bars, and thus supported by the ribs of the horse, the possibility of injuring the backbone is minimized.

The training of the horse is a matter of great importance to the efficiency of all mounted troops. Although it is unnecessary that the horses provided for mounted troops, who rely mainly upon their dismounted action, should be as highly trained as those provided for cavalry, yet it is of the utmost consequence that all horses should stand still to be mounted should be easily handled in manœuvre, stand fire, and above all

lead well.

No pains should be spared to reach a high standard of efficiency, and every effort should be made to train the horses to stand quite still by themselves when their riders dismount to fire.

Care must be taken that the men do not ride too short, and that they sit well down in the middle of the saddle. They should be told how to preserve their balance, and at the same time to sit easily and without stiffness.

If a man standing in the stirrups can just clear the pomme

with his fork, the stirrups are about the right length.

A man may often guide his horse as much by his legs as by his hands; if ridden with a light give-and-take feeling, the horse usually will not pull at his rider. Men must be taught to use the sides of the legs, and to keep the heels down.

Great care should be taken at all times to prevent the men from sitting on their horses in a slovenly way.

#### S. 104. Positions.

Attention.—Stand (as in Squad drill) on near side of horse, feet in line with horse's fore feet, hold the near top rein with right hand about 6 inches from ring. Keep horse's muzzle level with your chest.

Stand at Ease.—The hand will slide down from the rein (which will be kept in the hand) to the full extent of the arm, at the same time carry the left foot about 1 foot length to the left.

# S. 105. Leading and Standing to the Horse.

Reins Over.—The men standing on the near side of the horse in line with the horse's fore feet will, while the reins are on the neck, put the bottom reins over and in front of the top reins, and then pass the top reins over the head, and hold them with the right hand, the forefinger between them, and about 6 inches from the horse's jaw, the right hand as high as the shoulder, the end of the reins in the left hand, which hangs by the left side.

In Front of your Horses.—Take a full pace forward with the right foot, and turn about on the ball of it. Take a top rein in each hand near the rings, still holding the end of them in the left hand. Raise the horse's muzzle the height of your own chest, and 6 inches from it, hands as high as the shoulders (elbows down). Make the horse stand even. This is how a horse is shown for inspection.

Stand to your Horses.—Take a full step forward with the right foot, to the horse's near side, and turn left about on the ball of it, coming to Attention.

Instruction should be given in these movements when the reins are hanging on the horse's necks.

Leading the Horse.—Horses are led with the reins held as detailed for Reins Over.

Leading through a narrow Opening.—The man will place him-self in front of his horse. Taking a rein in each hand, near the bit, and stepping backwards, will see that the horse's hips are clear of the posts. When the horse is through, the man will place himself again on the near side.

# S. 106. Mounting.

Prepare to Mount.—Leaders and odd numbers will lead forward one horse's length. Turn to the right, place right foot opposite stirrup, and with the left hand take up the reins as follows:-Right lower between the 2nd and 3rd fingers, left lower between the 3rd and 4th fingers, right upper between the 1st and 2nd fingers, left upper outside the 4th finger. Then seize reins at the ends with right hand, and draw them up until an even and gentle feeling is obtained on the horse's mouth, at the same time placing the left hand about 12 inches in front of the saddle and grasping with Then throw ends of reins over the it a lock of the mane. left forefinger and to offside of horse's neck, and close left thumb on reins. Take hold of the stirrup with the right hand till the left foot is placed in it, seize the waist of the saddle with the right hand (well over).

Mount.—Springing off the right foot, carry the right leg over the cantle by slightly bending the knee, and drop gently into the saddle. At the same time shift the right hand to the pommel, place the right foot in the stirrup, quit the mane with the left hand, cut the right hand to the side. Even numbers will then dress up into line.

# S. 107. Mounting with Rifle.

Prepare to Mount.—At the same time the reins are taken up, place the rifle on the near side of the horse's neck and seize it (butt down) in the left hand at the outer band, sling to front.—Bring it to the Advance.

# S. 108. Dismounting.

Prepare to Dismount.—Leaders and odd numbers will move forward one horse's length. Take hold of the reins with the right hand above the left, slide the left hand forward 12 inches from the saddle, grasp a lock of the mane in the left hand, take the right foot out of the stirrup, and place the right hand on the pommel of the saddle.

Dismount.—Raise the body from the saddle, supporting it with the right hand and left foot, swing the right leg clear of the horse, drop on the ground, the right foot to reach the ground before the left foot quits the stirrup. The even numbers will then move up into line, and all will come to attention as soon as possible. If it is desired that the even numbers should not dress up after dismounting, the command, Dismount, will be preceded by the caution, Even Numbers Stand Fast.

# S. 109. Dismounting with Rifle.

Prepare to Dismount.—Raise the rifle perpendicularly in front of the face, magazine to the left hand as high as the chin, lower the butt sling to the front under the left arm and in front of the near wallet, seizing it with the left hand at the outer band.

Dismount.—Bring the rifle to the order at the left side.

#### S. 110. Positions.

Mounted.—The head and body erect and square to the front, the left upper arm hangs straight from shoulder, fore arm nearly at right angles to the upper, hand 3 to 6 inches from and opposite centre of waist, back of hand to the front, thumb pointing across the body, reins thrown over left thumb with thumb closed on reins. Right arm hangs easily from shoulder, behind thigh, back outwards and tips of fingers turned up. This is "Attention."

Sit at Ease.—Place the left hand on pommel of saddle and the right on top of the left.

Advance Arms.—The right hand grasping the rifle behind the back sight is placed with the flat of the rifle resting on the upper part of the right thigh, muzzle of rifle pointing to the horse's left ear, and right elbow slightly inclined outwards.

Carry Arms.—From the "Advance," without altering the grasp, place the butt in the hollow of the right thigh, muzzle to lean to the front, and slightly to the right, trigger-guard to the left.

Sling Arms.—Raise the rifle above the head, and with a left circular movement pass the head between the rifle and sling, lower the weight on to left shoulder with the sling in front of, and the rifle behind the body, at the same time slip the right arm between the sling and the rifle.

Unsling Arms.—Bend the right arm, slip elbow under the rifle and with it give the rifle a cant forward until it is hanging on the neck, then seize it with the right hand at the balance, and by an upward circular motion disengage and bring it to the advance.

# S. 111. Saluting.

A man when mounted without arms will, when two horses' lengths from the officer, bring his right hand smartly up to his bridle hand, turn his head towards him, and, after a short pause cut his right hand to Attention looking to his front after passing.

If halted, and an officer approaches, he will come smartly to

Attention, and proceed as before.

If at the Advance, he will, when two horses' lengths from the officer, bring his rifle to the *Carry*, turn his head towards him, and, after passing, look to his front and Advance Arms.

If the rifle is slung, he will salute as without arms.

An officer when mounted salutes the same as when dismounted.

The words of command when paying or returning a compliment are Attention, Carry—Arms. Eyes—Right (or Left).

Passing an Officer.—If leading a horse the soldier will turn his lead smartly and look the officer in the face.

# S. 112. Mode of Swimming a Horse.

Before swimming his horse the rider should slip the stirrups up to the top of the leathers, securing them from slipping by placing the leathers through the stirrups. The reins should be inbuckled or knotted, so that the horse cannot catch his feet in them. He should ride into the water, and as soon as the horse is out of its depth throw himself flat on the water on the lown stream side, guiding the horse with the reins. The man should regain the saddle as soon as the horse regains its footing.

Note.—In swimming horses over a wide stream where boats are available, horses should be stripped with the exception of the bridle, and led in rear of the boats, which should be steadily owed over.

# S. 113. Teaching Horses to Stand Steady.

Single horses can be kept stationary in the following ways:-

- (a) By being trained to stand whenever the reins are taken over the head and placed on the ground.
- (b) By securing the reins to the stirrup iron, or girth.

# S. 114. Teaching a Horse to Stand Still Without being Held.

There is no necessity to point out the importance of horses being trained to stand still without being tied up. With a horse thus trained a man can jump off and fire, or if he gets a fall the chances are that the reins will come over the horse's head, and that the horse will stand where it is.

They can be trained by any of the following ways:-

First Method.—Tie a strong piece of rope to the bit, and fasten a sack to the end of it. The effect of this is that as the horse moves forward he treads on the sack, and gives himself a severe jar in the mouth; after a few lessons it will be found that he will not move when the reins are thrown over his head.

Second Method.—Throw the reins over the horse's head, at the same time fasten a cord from the bit to fetlock. This will give him a similar jar in the mouth every time he makes a step.

Third Method.—A weight, such as a sand bag, weighing about 10 lbs. to 14 lbs., fastened to the top rein hung over the horse's head will answer the purpose.

However well trained a horse may be to stand alone, there is always a risk, unless fastened so that he cannot move, that he will move off either to join other horses, or to get water or food, or on account of being frightened.

# S. 115. Walking on Foot.

The best long distance performances of mounted troops have een done by those who made a habit of walking on foot a great leal when on the march, especially down hill. Horses can asily be taught to lead well at a walk, and it is not difficult to rain them to move in quick time.

# S. 116. Unsaddling.

A frequent cause of sore backs is the stoppage of the circulation under the saddle, due to the saddle being girthed up and

emaining for long hours in this position.

Even when there is not time to "unsaddle," loosening the irths and shifting the saddle eases the horse greatly. If unddling be regularly practised, it is surprising how very short time it takes. It is advisable in warm weather to unsaddle nee a day on the drill ground, or in the open country, whenever he horses are absent from their stables for any length of time. In cold weather, the girths should only be slackened, and the addle shifted, as taking the saddle off may cause a chill. When he saddles are removed, the backs should be at once handabbed, slapped with the flat of the hand, and rubbed with leady pressure against the direction of the hair for a few minutes order to restore circulation.

# S. 117. Rolling in the Sand.

Nothing freshens a horse up more than a good roll in the sand, ey soon pick up the habit. A handful of sand poured over the ck often induces a horse to lie down and roll.

# S. 118. Weight off the Back.

Another most important point to be impressed on all ranks is e fact that even the lightest soldier is a heavy burden, and ery minute that weight is removed from the horse's back is a refreshing period of relief. Hence, when the men are working independently during long days, they should be told to dismount as often as practicable, and instructors should practise them in this by frequently making them dismount for a few minutes at a time. The relief to the horse may be compared to that experienced by a man putting down his rifle or a bundle for a few moment's rest when on the march on foot.

#### S. 119. STABLE DUTIES.

1. The establishment and maintenance of a proper system of stable discipline are of the first importance. Upon this the health and condition of the horses, and consequently the efficiency of the corps, depend. Stable duties must never, there fore, be allowed to sink to the level of a mere fatigue, the same punctuality and regularity is to be observed as for any other parade.

Squadron officers will attend all stables.

2. On Stables sounding the men "Fall in" by troops in stable dress with grooming kit, and answer their names.

The troop leaders will then detail sufficient men to lead the horses to water, two men to draw the feed, and the remainder clean the troop lines while the horses are watering, this work to be completed by the time the horses return. On return of the horses from water each man will take over his horse, secur it on the lines, and groom it.

During stable hours no man is to leave the stables or hors lines without the permission of his troop officer, nor is an man to stop grooming to clean his saddlery until his horse i passed as clean.

Officers will carefully note the condition of a horse's coat both as to cleanliness and health. The mane and tail should also be examined.

3. An officer (mounted) will be in charge of each squadron's horses going to water.

No man will, under any circumstances, lead more than four

horses.

The captain of the day (mounted) will superintend the

watering of all horses.

Horses are to be taken quietly to and from water without trotting or hurrying, and should, when possible, be watered before, and not under ordinary circumstances until two hours after feeding.

Full time is to be given the horses while drinking, and care

must be taken that the men do not hurry them.

The feeds, both of corn and hay, will be made out by a N.C.O., assisted by the stable orderlies and placed behind the horses.

The horses are not to be fed before the senior officer on the lines or in stables orders the Feed to sound, on the report being

made to him that the feeds are ready.

The senior officer, on the report All Fed being made to him, will order the Dismiss from stables, before which no officer, N.C. officer, or man will leave stables or horse lines. On no account is a horse to be groomed whilst feeding.

Before turning out of stables everything is to be properly

arranged in its place:—

Barrows emptied, litter squared, tools collected, buckets

filled, saddlery arranged, and stablemen properly told off.

4. Officers commanding squadrons will satisfy themselves that due provision has been made for watering, feeding, and grooming horses of men who are not at stables; also that squadron-farrier sergeants inspect each horse's shoes, back, &c., at all stables, that any horses ailing have been sent for the veterinary officers' inspection at the time fixed, and any horse equiring shoeing to the forge.

Troop leaders are responsible that all the horses of their sections are properly looked after and fed.

For inspection, or when a senior officer enters a stable or visits the horse lines, the order will be given Stand to your Horses.

The men will resume work on the order Carry on.

- 5. In the day time during non-stable hours the horse lines or stables are in charge of line sentries or stablemen. These men come on duty to relieve the night stable piquet at the warning for morning stables. Their duties are to keep the lines and stables clean, to prevent horses injuring themselves or others, and to take the nose bags off when they have finished feeding. The officer on duty, when he visits the stables or horse lines, will satisfy himself that these duties are performed. The meals of the line sentries or stablemen are brought to them by the orderlies.
- 6. Horses on the sick-list will not remain in the squadron stables or lines, but will be removed to the sick horse lines, and placed under special charge of the veterinary officer.

7. Horses should be brought into the lines as cool as possible. If horses are sweating the men should dismount, loosen girths,

and lead ten minutes before reaching lines.

Horses should under ordinary circumstances be unbitted and their girths loosened when watered, and if possible the men must dismount.

If, when the saddle is removed, a horse's back is found to be wet, it should be dried. The removal of a saddle too soon is a frequent cause of sore backs.

If the horses are not brought in till near the men's dinner hour they will be watered and fed only. Stables will sound after

the men have had their dinners.

After the horses are sufficiently groomed the men should get to work at their kit and saddlery.

When the horses are not fed at the end of the stable hour, each man should be permitted to leave stables as soon as the N.C. Officer of his troop is satisfied that he has done his work.

# S. 120. SKIRMISHING. General Rules.

1. Skirmishing implies extended order, in which each individual should act and think for himself, and make use of all his powers, mental and physical, to attain a common object. It is I essential that the intelligence of each man should be developed by every possible means, and that a spirit of independent action, subject to the control and general directions of the troop and section leaders, should be encouraged.

2. In order that the soldier may become a skilful, active, and

resourceful skirmisher, he should be trained to use his wits.

3. It is an important formation against a well-armed enemy. The attack is generally carried out by successive lines of skirmishers, who work forward, to decisive range, and then gradually merging into one another, push forward until they form a strong firing line, enveloping, or partly enveloping, the enemy's position at the closest possible range.

4. For instructional purposes a squad with arms, will be ormed, and, after a few drills, two squads should be exercised ogether, and the methods of reinforcing, retiring, and rushing

carried out.

5. In order that the recruit may be accustomed to use his inelligence and initiative from the commencement of his training is a skirmisher, it will be explained to him that it is a tactical exercise, and not a drill; that the object is to teach him the practical methods of advancing and retiring, the use of cover, ind the application of fire; and that mechanical precision in performing the various movements is not to be aimed at.

- 6. Skirmishers come to the "trail" when extending and stand at ease after closing, without word of command, correct dressing and keeping step are to be dispensed with, when halted they will either lie down or take up such a position behind cover as will afford them protection, and enable them to use their rifles with effect.
- 7. Although words of command are used for drill purposes it is to be distinctly understood that in the practical work all orders, as far as possible, are to be conveyed by signal.

8. At drill (dismounted), skirmishers will extend at the double and close in quick time; the section on which the close

is made will halt if the line is not already halted.

- 9. When mounted, extensions will be made at the next increased pace, or at the trot if done from the halt, and sections will close at the next increased pace, the section on which the close is made continuing to move forward, unless the section on which the close is made is halted, or the movement is ordered to be done "to the halt," in which cases the sections will close at the trot.
- 10. During exercises the squadron and troop leaders should occasionally fall out as casualties, and the men carry on the practices.
  - S. 121. Special Points for Instruction and Explanation.

Some of the most important points to teach skirmishers are-

- 1. The systematic and intelligent use of cover, and the difference between it and concealment.
  - 2. Nursing the ammunition.
  - 3. Fire effect, and surprise fire.
  - 4. Rapid, concealed, and protected advances.
- 5. In taking cover the first principle is to adapt a position that with the minimum of exposure the rifle can be effectively used.

- 6. Exposure on sky line or against background which would show them up.
  - 7. Avoid crowding.
- 8. That cover should be selected when advancing, and if there is no cover near, or that which exists is already occupied, they must throw themselves down in the open and lie as flat as possible.

# S. 122. Course of Instruction.

To be divided into preliminary training and practical application.

# S. 123. Preliminary Training.

This will be carried out on level ground as a drill, intervals being generally maintained, and all movements, commands, signals, being strictly in accordance with these instructions.

# S. 124. Practical Application.

This will be conducted in such a way as to give skirmishers in opportunity of practising the various duties they may be called upon to carry out in the field, and should embrace the ollowing:—

- 1. Attack of an enemy in position.
- 2. Defence of a position.
- 3. Reconnaissance of a position or locality held by an enemy.
- 4. Reconnoitring ground over which an advance is to be made.
- 5. Driving in patrols, scouts, and snipers.
- 6. Covering a retirement.
- 7. Occupying positions and quickly denying ground to the enemy.

# S. 125. Preliminary Training.

Extending from line advancing.

From the centre by sections  $to\ldots\ldots$ paces— "Extend."

On the word *Extend*, the centre section will open out to two paces (one horse's length mounted) from its No. 3, and move straight on, the remain ing sections will right or left incline as the case may be, double, and, on gaining their intervals will left or right incline into line and take up the Quick March. The men of each section will open out to two paces from the left if on the right of, and from the right, if on the left of, the centre section, and the extension is meant to be the in terval between the sections after the men in the sections have opened out.

Extensions from a flank are similarly carried out.

# S. 126. Closing from Line.

On the word Close the centre section will close on its centre— { No. 3, and halt, if line not already halted, the other "Close." | sections will wheel inwards and re-form line.

# S. 127. Extending from Column of Sections.

On the right(or le/t)

On the word Extend the leading section will continue straight on and open out to two pace from its No. 3, the sections in rear will right (or left) incline at the double, and form in line a the proper interval on the right of the leading "Extend." (section and then take up the Quick March.

On the command to Close after extending from column, the squad will re-form in line in close order, and then, if necessary he moved on in sections.

# S. 128. Extending to a Flank.

From the rear section to the right (or left) to ...paces—"Extend."

On this command the rear section wheels in the required direction and halts, the remaining sections wheel in succession when the required interval is reached.

# S. 129. Inclining when Extended.

" Right Incline." On the word *Incline* each man will turn halfright and move on by the diagonal march. *Left Incline* will be the command to resume the former direction.

# S. 130. Changing Direction.

Change direction half-right (or left) on the centre section.

On the word Section the centre section will wheel half-right and move on, those on its right will step short and align themselves with the centre section, the sections on its left will right incline at the double, and get in line with the directing section at proper interval.

Changes of direction may also be made half-right (or left) n the right (or left) section.

# S. 131. Retiring.

c—tire. On this command the men will turn about and move on in the new direction.

# S. 132. Practical Skirmishing.

When the preliminary training is finished its practical application will be taught on broken ground, and although uniformity of action is not to be demanded, nor too much care given to intervals and dressing, still each man should move with smartness and alacrity, strictly maintaining both silence and attention

Advances may be made alternately or otherwise, at the

double, in quick time, or even by crawling.

Orders are to be conveyed by signal or by passing them along the line of skirmishers.

A section will be ordered to direct, and the direction pointed out to all. Each section takes its share in maintaining the direction towards the objective. The troop leader remain with the section of direction, and the others conform to their movements in marching, changing, direction, halting, and retiring, signals are unnecessary and the method has the advantage of stimulating the interest and intelligence of the men

Skirmishers should be taught to report the enemy's dispositions, and to call attention to movements of other units.

Intervals may vary considerably and depend on the nature of the ground, the character of the operation, and the volume of fire it is desired to bring to bear. It should be clearly recognised that over-extension results in loss of control, and diminishes the volume of fire, and is dangerous in close country or wheneve counter attack is probable. It is essential, therefore, before extending that the front to be occupied should be carefully explained. The normal interval for extension is sixtee paces.

Intervals are increased or reduced by the order being passed along the line *Increase or Decrease the Interval to......*paces.

### S. 133. Cover.

The importance of concealment must be impressed on all anks. Officers and N.C. Officers must set an example in this espect, and see that it is followed by the men.

Cover to be efficient must fulfil the following conditions:—

- (a) Afford a good view of the ground in front.
- (b) Permit the free use of the rifle.
- (c) Give concealment to the firer.
- (d) Provide protection against the enemy's fire.

Instructors should, as far as possible, illustrate the various ses of cover.

# S. 134. Fire Effect.

The fire unit is the troop or section, it must be explained hat—

- (a) Fire is most effective when it is steadily delivered at a mark that can be seen.
  - (b) Success depends mainly upon accurate individual fire at decisive range, and long range fire should not be used without special directions.

(c) In crises, and against large and conspicuous targets, fire should be as rapid as is compatible with accuracy. In ordinary cases fire should be slow.

- (d) The moral and material effect of concentrated fire is greater than when each man fires at a mark of his own selection.
- (c) Oblique, or enfilade fire is more effective than frontal and gives better results, and usually has greater moral effect.
- (/) Fire delivered unexpectedly at short ranges gives good results, and men should watch for such chances.

(g) A few good men, widely extended, and concealed, may by rapid fire, often deceive the enemy, and inflic serious loss.

Every available rifle should be placed in the firing line, and the serrefiles, unless required for supervising or other duty should be in line, and firing with the troop.

# S. 135. Fire Discipline.

Fire discipline means strict attention to the signals and order of the commander, combined with intelligent observation of the enemy. It insures the careful adjustment of the sight deliberate aim, economy of ammunition, and prompt cessation of fire when the target disappears, or the leader sounds his whistle.

It requires of the men endurance of the enemy's fire, ever when no reply is possible; and, when superior control no longer exists, a cool and intelligent use of the rifle.

#### S. 136. Attack Practice.

The following rules are given as a guide:-

1. Extensions should be made, if possible, under cover, and instructions as to direction and objective given before extending

- 2. Whilst the general direction is maintained, the men may deviate to the right or left to take advantage of cover, but regain their intervals before crossing exposed ground.
  - 3. That they do not crowd.

4. In order to take advantage of a well-sheltered approach from one position to another, they may move in file, but only when ordered to do so by their leader.

5. Exposed ground will, if the enemy's fire is heavy and accurate, be crossed by rushes at the quickest possible pace Ground which affords slight cover may be crossed by running

creeping, or crawling forward by ones or twos by different courses, at different times and from different points of the line.

- 6. It is important that before or during an advance each man should mark out for himself the new position he intends to occupy—which should be as nearly as possible—to his front, and not mask or interfere with the fire of his comrades.
  - 7. The men of a section should keep together.
- 8. When two or more troops are advancing in a general line, and it is no longer possible to retain this formation under the enemy's fire, the advance will be continued by alternate rushes. The leader of the body ordered to advance will give the order or signal to his men. He will lead the way, halt as before decribed, and commence firing. When he halts and opens fire, he next troop which has been firing in order to cover the dvance, will now rush forward, halt in line with the troop in ront, and open fire; or each successive troop may be taken beyond the one in front.

# S. 137. Position of Leaders.

Troop and squadron leaders place themselves where they an best carry out their duties; but, as a rule, they should be n front, and show the way from cover to cover. In open round, when the line is halted and the enemy's fire heavy, hey must lie down among the men, and near the centre of their ommands.

# S. 138. Duties of Leaders.

- 1. To explain clearly to every man the objective of the hanceuvre about to be carried out, and how it is to be reached.
  - 2. To select the successive halting places.
  - 3. To determine the method of advance.
  - 4. To maintain the general direction.

- 5. To prevent crowding.
- 6. To point out target and give the range.
- 7. To control the expenditure of ammunition, and report when it is running short.
  - 8. To lead the way from cover to cover.
  - 9. To prevent wild firing.
  - 10. To repeat signals and obey orders promptly.

# S. 139. Duties of Rank and File.

It should be impressed upon the men that combined action is always more likely to be successful than isolated efforts, and that men fighting under the control of leaders and alongside comrades are more confident and co-operate more effectively than when each man advances, retires, or halts, as seems best to himself.

It is to be recognised, however, that when men are extended at wide intervals, and also when under heavy fire, troop and even section leaders cannot always exercise direct control. Hence the men must learn to act independently, first by clea explanations, then by practice accompanied by constant ques tioning, until every individual knows exactly what is expected of him when left to himself, viz.:—

- 1. Continue fighting, and do his best to carry out his commander's intentions.
  - 2. On no account to retire or give ground.
  - 3. Fire deliberately, and husband ammunition.
- 4. If reinforcements come up, take the orders of the nearest officer or N.C.O.

# S. 140. Reinforcing.

It is inevitable in action that regiments, squadrons, and troops will become mixed up. It is important to accustor men to such conditions, and to make them understand that hey use their intelligence and their eyes, confusion may be eadily reduced to order. For this purpose two troops may be extended in two parallel lines. On the word or signal Renforce the rear troop will advance and occupy the intervals a the front line, no regard being paid to the order in which the nen place themselves.

Attention should be given to the following:—

- 1. The men should at once look to the nearest troop leader orders.
- 2. They should re-organize when the cover affords a good portunity.

Troops should be practised in reinforcing on either flank by rolonging the line to the right or left.

# S. 141. Assembling.

Troops will be taught to assemble after attack practice, in clumn in rear of their leaders. On the command "Assemble" coop leaders will double out and take up their position in clumn, the men falling in at the double without noise in rear their respective troop leaders.

# S. 142. Retiring.

Retirements must be conducted with the greatest circumpection. If well in hand, the men may retire from cover to over at the quickest possible pace, a few of the most active eing left behind for a short time at each halt to cover the remember of the remainder. Troops may also retire alternately, ffording each other mutual support, by taking up successive re positions. If, however, the men are at all shaken, as when a attack has failed, the retirement must be in quick time, and I ranks should exert themselves to the utmost to insure that

it is carried out, notwithstanding losses, with steadiness and regularity, it pulls the men together, and imposes caution or the enemy. A rapid retreat, in such conditions, is a fruitfu source of panic, and gives the enemy much encouragement.

An extended line should also practice withdrawing men on at a time, with instructions to rally under cover. In all form of retirement in extended order the men will turn about.

# S. 143. Relieving.

- 1. When halted, the new line extends, if possible, under cover advances to the old line, and lies down in the intervals. The old line then retires under its protecting fire, and closes when it reaches cover, or halts at a suitable distance in rear.
- 2. When retiring, the new line extends a considerable distance in rear, and each man selects a good position. The old line doubles through the new, and closes when it reaches cover, or halts at a suitable distance in rear.

# S. 144. Rallying.

Skirmishers attacked by cavalry should form Rallying Square, by one or two sections closing back to back, and delivering well directed fire.

# S. 145. Defence Practice.

The chief points to be attended to in the occupation of a post or position are—

- 1. Each skirmisher is in a position to use his rifle effectively
- 2. Invisibility.
- 3. Ranges ascertained as far as possible.
- 4. Protection of flanks.

#### DISMOUNTED DUTY.

#### S. 146. General Instructions.

The cases where mounted troops would be most effectively employed upon dismounted duty are—

(a) To seize and hold tactical positions, often far in advance of the slower moving infantry columns, and

to deny their occupation to the enemy.

(b) While holding the enemy in front to turn and outflank him upon all occasions, and even by a widely extended manœuvre to threaten his rear.

(c) To force a defile, or to seize a bridge, fords, &c.

(d) To offer resistance, during a retreat, sufficient to compel the enemy to deploy, and thus to gain time.

(e) To support cavalry or reconnoiting parties by covering their retreat through a defile, or by taking advantage of any other suitable position for bringing fire to bear unexpectedly on pursuing cavalry.

(f) To form strongly posted points for the support of cavalry when attacking, and to hold in check an enemy's cavalry and artillery at bridges, fords, defiles, &c.

(g) To defend camps, bivouacs, and unoccupied posts.

With reference to (b) a well directed fire opened upon the flank or rear of an enemy by even a small body of dismounted men, well placed under cover, has frequently had the effect of turning the enemy out of a strong position.

The utmost care is required in dismounting men where oppos-

ing cavalry could attack them.

Troops should dismount for fire action, if possible, under cover.

The nearer horses are to the men the better, as they ain confidence thereby and can then allow the enemy to

approach within easy range, at the same time retaining this power to mount and move off rapidly.

Mounting and dismounting must be carried out expeditiously

and when mounted, the men should get away quickly.

Sections and larger units on fairly level ground where no im mediate cover is available should gallop to the point where the are to dismount, and the led horses should be taken to the bes available cover.

# S. 147. Methods of Carrying out Dismounted Duty.

Dismounted duty may be performed by the following methods:—(1) By the whole force dismounting and linkin horses. (2) By three-fourths dismounting and leaving the Nos. mounted in charge of the horses of each section. Nos. 3 will b dismounted as soon as practicable.

Method (1) is applicable when a long continued dismounted action is contemplated, and when the horses are required to re main stationary. In the event of the dismounted men havin left their horses at a distance, and it not being advisable to with draw them from the firing line, the Nos. 3 only may be sent bac to bring up the horses, the remainder maintaining their position

Link Horses

Action.

Troop leaders and odd numbers advance on horse's length.—All dismount. The even num bers bring their horses up into line, and close is towards the centre; the men then take one pac to the front, and turn about facing their horses The head-ropes, without unfastening the knot are brought over the horse's head clear of the reins Each man then passes his head-rope to the ma on his then right, who secures it with two half hitches to the jowl-piece of his own horse's hear collar.

Officers' horses will be linked on the right and serrefiles on the left of their troops.

Horses may be "ringed" into a circle by bringing round and

ying the flanks together.

A horse guard will be detailed.

Horses may also be coupled or left singly by tying their heads ound to the saddle.

Method (2) has the advantages of quickness and mobility,

nd should be usually adopted.

The troop leader and the odd numbers advance one horse's length, and all except Nos. 3 (who sling their rifles) dismount as rapidly as possible, the even numbers bring their horses up in line, and the horses of each section are handed over to the Nos. 3. The men then double out and form ten paces in front of their horses.

S. 148. How the Horses should be Handed Over.

Nos. 1, 2, and 4 will drop the bottom reins on to their horse's eck, and take the top reins clear over the horse's head and and them to No. 3; No. 1 passing the reins between the jowliece and jaw of No. 2's horse. No. 3 will shorten up the reins of the led horses as far as practicable. Unless this is done good eading cannot be insured.

The horses will be left in charge of an officer or N.C.O., who

responsible that—

1. Precaution is taken against surprise.

2. Constant communication is kept up with the firing line.

3. Unless there is ample cover they are not to be in the line of fire in rear of the dismounted men, but, if possible, removed to a flank.

4. The horses of each section are kept distinct, with their heads towards the firing line.

#### S. 149. Dismounting to a Flank.

If it be required to dismount to the flank when in column of route (i.e., column of sections), Nos. 1, 2, and 4 dismount and give their horses to No. 3, who will not advance in this instance.

#### S. 150. To Mount.

The horses will be brought up and halted close to the me who will remain steady until the command or signal *Moun* when they will run rapidly to their horses, mount independently and take their places in the ranks.

As soon as the Nos. 3 have released the horses, they will mov up two horses' lengths, and the sections will reform on them

Note.—As a general rule, the horses will be brought to the men.

# S. 151. Drill and Manœuvre of Led Horses.

They should be exercised by word of command or signal, an accustomed to move at the trot or gallop in line or column.

A horse must be taught to lead well, and should be frequentle exercised over bad ground, the man leading by the reins draw over the horse's head. The Nos. 3 mounted will be frequently practised in leading the other horses of their sections.

If a horse will not lead at first, he can be easily taught

followed by another man with a whip.

The horses should also be practised in being led by the medismounted, each man taking his reins over and placing harm through them. Blank ammunition should occasionally lafted in this position.

# S. 152. Explanation of Movement.

It is of the utmost importance that the object of an intended movement should be fully explained to all ranks before a action takes place, and the few moments so employed will be more than repaid by the results gained from intelligent action

# S. 153. Occupation of a Position.

The following is a simple method of occupying a defined osition by any given number of men whom it is desired to place multaneously in the firing line.

The officer commanding the troop or squad will select in the entre of the given position some conspicuous and definite oject, for example, a tree, bush, or rock. He will similarly elect objects upon the right and left of the position. These ojects will be indicated to the centre man (or section), and to be flank men (or sections) respectively. When thoroughly nderstood by the whole troop, the officer commanding will rect the remaining men (or sections) to fill up the intervals. In will then give the command Extend, Double (or Gallop) [arch.]

The men named will then move direct upon the objects, the mainder opening out and dividing the intervals.

The centre man (or section) will be usually detailed as the it of direction.

Upon the arrival of the men upon the position indicated, each ill select and take up a position and lie down, being careful to expose himself against the sky line.

The movement will be constantly practised by single mend by sections until it is understood.

This movement constitutes the basis of the modern system of tack, and if carried out by the men mounted the extension hould invariably be by sections, the front of the position lected varying according to the strength of the body of pops.

# TROOP DRILL MOUNTED.

# S. 154. Fundamental Principles of Mounted Drill.

The principles of mounted drill are identical with those for the soldier on foot having regard to the difference in intervals, distances, and pace.

The essentials of mounted drill are simplicity, and rapidity and the first principle for the execution of any movement is that each unit is to be led to its position in the new formation by the shortest route in the simplest manner, and as rapidly as possible

The object when training any body of mounted men is to se exercise it that it will be able to manœuvre by following its leade without commands.

The following are the principal tests by which the general drill efficiency of a body of mounted troops can be judged:—

- (I) That commands and signals are obeyed simultaneously and correctly.
- (2) That there is absence of noise and confusion.
- (3) That the various units are handled by their leaders aliked in close or extended formations, by signal and in silence, with rapidity and smoothness.

#### And when in close formation-

- (4) That pace and direction are carefully maintained.
- (5) That distances and intervals are correctly kept from the unit of direction.
- (6) That wheels are accurately made.
- (7) That words of command are distinctly given.
- (8) That cohesion and steadiness are properly observed.

nd when in extended order—

- (9) That the men act independently, with confidence, intelligence, and rapidity.
- (10) That troop and section leaders have sufficient latitude given them.

# S. 155. Proving a Troop.

Flanks of sections and others *Prove* by bringing the rifle to the arry, returning to the Advance on the command, As you—ere. If the rifle is slung the men act as in foot drill.

#### S. 156. Movements.

The various movements done on foot will be practised ounted, the command Walk—March being substituted for wick—March and Trot for Double; also three horses' lengths r three paces except with regard to the positions of troop aders and serrefiles, who will be one horse's length in front and rear respectively of the troop.

Marching in line and column.

Decreasing and increasing the front.

Inclining, in line and column (for short distances only).

Wheeling or changing direction, in line and column.

Advancing in column from line halted.

Forming column from line advancing.

Forming troop to the halt from column.

Forming troop in any direction from column on the move.

When required, formations may be made to the outer or inner nk.

#### S. 157. Pace and Direction.

To be a good judge of pace is one of the essential qualification

of a leader of mounted troops.

Officers and N.C.O.'s are not to be considered fit to lead unt they have acquired proficiency in riding at the fixed rates over measured distances.

Evenness of pace is of great importance in manœuvrin mounted men, and N.C.O.'s and section leaders should accustomed to set pace and give and keep the direction.

The commander of every unit is responsible for the leading his command, the direction, if necessary, being indicated by hir

The rates of marching are, at a walk, 4 miles; trot, 8 miles and gallop, 15 miles per hour.

# S. 158. Dressing.

This consists in-

- (1) Every horse and rider being in a perfectly square position to the front.
  - (2) The preservation of correct intervals between files.
- (3) The maintenance of the proper distance from the trocleader. All dressing will be towards the centre, and shoul when possible, be done on the move and in rear of an alignmer No time is to be lost for dressing so long as the general lies correct, but this does not prevent the ranks being dressed any point for an accurate alignment at the halt.

#### S. 159. The March in Line.

This march is regulated by the following principles:-

(a) Strict uniformity of pace.

(b) Correct and steady direction.

(c) Riding with proper intervals and distances.

(d) Looking straight to the front without crowding.

Iny change of direction of the troop leader is conformed to by he centre guide turning his horse the same degree when he rrives at the point where the troop leader changed, and by the hen gradually but quickly placing their horses in the same irection and parallel to the leader's front.

In order to secure steadiness in the ranks it is important that a moving off from the halt at the trot or gallop the horses hould be first put in motion at the walk, and then gradually but apidly brought to the trot, and from it to the gallop. A simiter gradation of pace is to be observed in coming to the halt com the gallop or trot.

The walk, trot, or gallop must commence and cease simulaneously throughout a body of troops.

If from any cause the leader's pace becomes irregular, the adance will be regulated by the centre guide.

If an obstacle stops a man, he will, without orders, drop back the serrefile rank, resuming his place as opportunity offers.

# S. 160. Wheeling on a Fixed Pivot.

All wheels of a troop from the *Halt* or at a walk are made on fixed pivot except when a column changes direction. The roop leader moves on an arc with a radius equal to half-troop rontage.

# S. 161. Wheeling on a Moving Pivot.

Wheels at the trot or gallop, and at all paces when a column hanges direction, are executed on a moving pivot. The troop eader moves on an arc with a radius as follows:—

17 men in ranks (war strength), 12 yards.

14 men in ranks (peace strength), 9 yards,

The same general principles are to be observed as in wheels on a fixed pivot.

The troop leader continues, during the wheel, the same pace that the troop was moving at before the wheel was ordered.

The inner flank man will check to three-fourths the pace, the outer flank moves half as fast again as the centre, and the original pace will be resumed on completion of the wheel.

# S. 162. The Wheel About of Troops.

For drill and instructional purposes, the wheel about of troops to the right and left should be practised.

#### MOVING TO A FLANK.

# S. 163. (a) By Half Sections.

Half Sections The right half section wheels to the right and Right, Walk marches to the flank. The remainder move of —March. in succession in the same manner.

# S. 164. (b) By Single File.

Single Files Right, As for half section, substituting the word Walk—March. File for Half Section.

### SQUADRON DRILL.

#### S. 165. General Instructions.

It should be understood by all ranks that—

1. Each unit forming in succession To the Halt will, by order of its leader, halt a horse's length in rear of the alignment, dress up to it, and sit at ease.

- 2. Troops number from right to left in line, and front to rear n column and echelon as 1st, 2nd, 3rd, and 4th troops.
- 3. If a troop has less than nine men in the rank, it is advisable or drill purposes to divide it among the others, and thus avoid ontinually telling off fresh centre guides.
- 4. In Column to Line formations, the third troop forms on the ight, and the second and fourth troops form on the left, of the eading troop, unless otherwise ordered.
- 5. In movements from *Line to Column*, unless a flank is named he formations will be made on the 2nd troop, followed in succession by the 3rd, 1st, and 4th troops.
- 6. When a movement is carried out simultaneously the comnands will be given by the squadron leader.

# S. 166. Dressing and Covering.

- (a) The centre guides cover their troop leaders at one horse's length distance.
- (b) The men keep in line with the guides.

#### When in line-

(c) The troop leaders keep their alignment with and proper interval from the troop leader next them on the dressing hond.

#### Vhen in column—

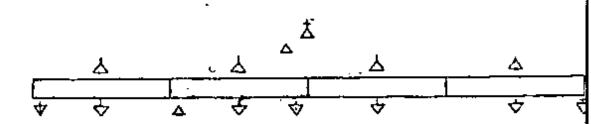
(d) The troop leaders cover the leader immediately in front at troop wheeling distance.

#### S. 167. Direction.

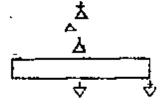
The centre (or second) troop leader (unless another is named) irects the squadron, and the squadron leader may indicate the bject or instruct the directing troop leader to follow him.

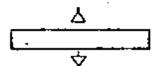
# S. 168. Formation of the Squadron.

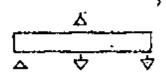
(a) Line.

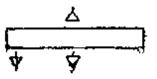


(b) Squadron Column.

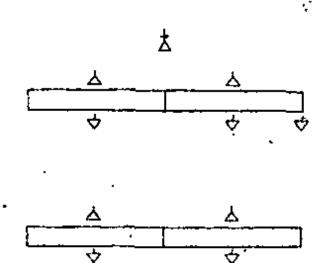








## (c) Column of Half Squadrons.



S. 169. Post of Officers, &c.

Squadron Leader, for parade or inspection, one horse's length n front of the troop leaders, and opposite the centre of his quadron. When drilling, he is not restricted to any position.

Troop Leader, one horse's length in front of his centre guide.

Serrefile Officers-

In Line, one horse's length in rear of the centre of squadron.

In Squadron Column, one horse's length from the left flank and opposite the centre of squadron.

In Sections, one horse's length on the outer flank of the section covered in line.

Troop Sergeant, one horse's length in rear of centre guide.

Serrefiles, one horse's length behind the troop to which posted, f there be only one (in addition to the troop sergeant) he covers he right-hand man; if two, they cover the flank men, the senior being on the right, except where otherwise ordered. In Column f Sections they ride on the outer flank and in line with the ection covered In Line.

### N.O. Officers—

- In Line—Squadron Sergt.-Major one horse's length in real of right flank. Squadron Quarter-Master Sergt. one horse's length in rear of left flank. Farrier Sergt. one horse's length in rear of right flank of 3rd troop.
- In Squadron Column—In the same position and in real of the same troops as in line.
- In Column of Sections—Squadron Sergt.-Major on the outer flank and in line with the leading section Squadron Q.-M. Sergt. on the outer flank and in line with the rear section.
- On the March—The Squadron Sergt.-Major rides behind the rear body to check irregularities.

A trumpeter, when accompanying his leader, rides ½ horse's length interval on his left, and the same distance in rear of him. At other times he is in rear of the left flank of the troop, the other trumpeter being in rear of the left flank of the 3rd troop.

## S. 170. Proving a Squadron.

Squadron—Attention. Flanks of Troops—Prove. As you—Were. Centre Guides—Prove. As you—Were.

THE SQUADRON MARCHING.

### S. 171. (a) In Line.

On the leader's command or signal Walk—March the squadron moves off, the directing troop leader being responsible for the pace and direction. The others look to their front, align themselves with, and keep correct interval from, the dressing point by an occasional glance. When this can be well done, the

quadron should be practised in making long advances, comnencing at a walk, and increasing the rate, to the trot and allop, and back again to the trot and walk.

# S. 172. (b) In Squadron Column.

The leading troop leader pays attention to the pace and direcion, and the others correctly cover the leader immediately in ront of them.

# S. 173. (c) In Column of Half Squadrons.

This is carried out on the same principle as the March in Line, he left troop leader of the first half squadron directs, and the eft troop leader of the second half squadron is responsible for overing him at troop wheeling distance.

# FORMATION OF SQUADRON COLUMN.

### S. 174. (a) From Line Halted.

Column from the Right (or Left) Walk— March.

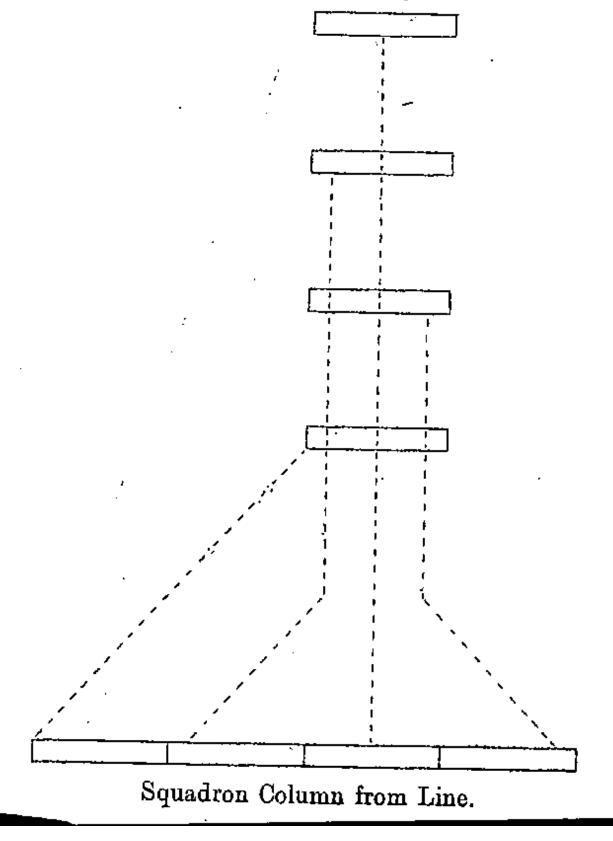
On the word March the squadron moves off, the leaders of the 2nd, 3rd, and 4th troops then at once give the command Troop, Right—Incline, and lead their troops until they themselves are successively in rear of the troop leader next in front, when they say Troop, Left—Incline, and follow, correctly covering the troop in front at column distance.

If the flank is not named the squadron moves off, the 2nd troop being followed in succession by the 3rd, 1st, and 4th troops.

If required to be done to the halt the leader halts his squadron when column is formed.

# S. 175. (b) From Line on the Move.

The squadron leader gives the command Form Squadron Column—From the Right (or Left) or Squadron—Column, and the movement is done in the same way as when halted.



S. 176. (c) From Column of Half Squadrons Halted.

On the word March the leading half squadron advances and the 2nd troop leader gives the command Troop, Right-Incline, followed when he is behind the 1st troop leader by Troop Left-Incline; the 3rd troop leader (when the 2nd troop is at column distance from him) will give the command, Troop, Walk-March; the 4th troop leader (when the 3rd troop moves off) will give the command Troop, Right-Incline, Walk-March, followed when covering the 3rd troop by Troop, Left-Incline.

S. 177. (d) From Column of Half Squadrons Moving.

On this command the troop in the leading half quadron squadron on the flank named will continue to move forward, and the other troop in the leading half  $\bar{C}olumn$ From the { squadron will incline and cover it; the troop leaders of the rear half squadron will give the command Right (or Troop—Halt, and then proceed as in forming when halted.

S. 178. (e) From Column of Sections.

The squadron leader gives the command Form-Troops, and each troop forms in line.

FORMATION OF COLUMN OF HALF SQUADRONS.

S. 179. (a) From Line Halted.

Column of From the Right (or Left) Walk-March.

quadron

Column

rom the

light (or

Lett)

Walk—

March.

Form

Left).

On the word March the squadron moves off, the leaders of the 3rd and 4th troops give the Half Squadrons command Troop, Right (or Left)-Incline, { followed (when behind the half squadron in front) by Troop, Left (or Right)—Incline, closing to troop distance, and dressing by the left troops.

If the flank is not named the squadron moves off on the word March; the 1st troop leader gives the command Troop, Left-Incline, followed by Troop, Right-Incline when behind the 2nd troop; the 4th troop leader gives the command Troop, Right-Incline, followed by Troop, Left-Incline when behind the 3rd troop, the dressing is by the left troops of each half squadron.

## S. 180. (b) From Line on the Move.

The command will be Form Column of Half Squadrons, or Form Column of Half Squadrons from the Right (or Left) and the formation will be done the same as from line halted.

# S. 181. (c) From Squadron Column Halted.

On the Left ( (or Right) Form. Column of . Half Squadrons -Walk— March.

On the word *March*, the squadron moves off, the 2nd and 4th troop leaders give the command, Troop, Left (or Right) Incline—Trot, and when opposite their places on the left of the 1st and 3rd troops they give Troop, Right (or Left)-Incline, followed on nearing the alignment by Troop—Walk; the 3rd troop leader gives the command Troop-Trot, and closes to troop distance from the 1st troop.

# S. 182. (d) From Squadron Column on the Move.

(or Right) FormColumnof Half Squadrons.

On the Left On the word Column, the 2nd and 4th troop leaders will give the command, Troop, Left (or Right—Incline, Trot, and form on the left (or right) of the 1st and 3rd troops, the 3rd troop leader will give the command, Troop-Trot, followed, when at the proper distance, from the 1st troop by the command, Troop-Walk.

S. 183. (e) From Column of Sections.

n the Left or Right) Form Column of Half quadrons.

Each troop leader gives the command Form— Troop, and then proceeds as in forming from Squadron Column.

#### FORMATION OF LINE.

S. 184. (a) From Squadron Column Halted.

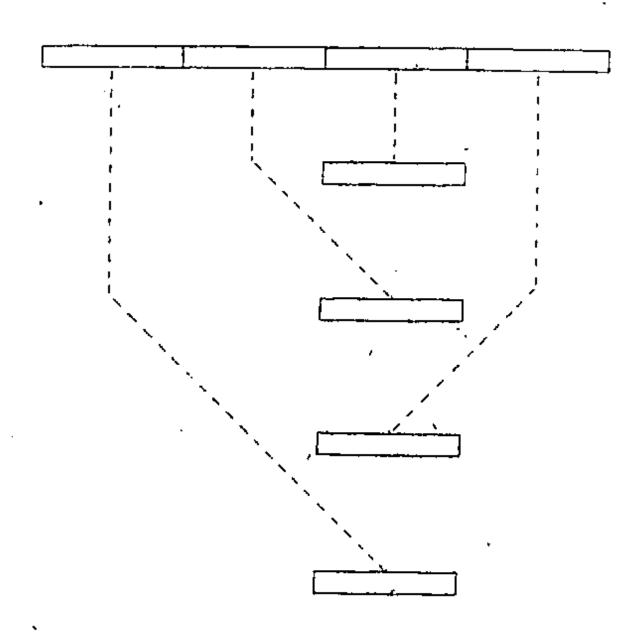
Form Squadron Walk— March. On the command March the squadron will advance, the 2nd and 4th troop leaders will then at once give the command, Troop, Left Incline—Trot, and each in succession will form on the left of the leading troop by giving the command, Troop, Right—Incline, when opposite their places, followed on nearing the alignment by Troop—Walk. The 3rd troop will form on the right of the 1st troop in a similar way.

S. 185. (b) From Squadron Column on the move.

Form— Squadron. {

On the word Squadron the 3rd troop leader will give the command Troop, Right—Incline, Trot, followed by Troop, Left—Incline, when it arrives opposite, and Walk when about one horse's length in rear of its place in the alignment. The 2nd and 4th leaders will act in a similar way, and form on the left of the leading troop.

Line may also be formed on the right or left of the leading troop by giving the command, On the Right (or Left) Form—Squadron.



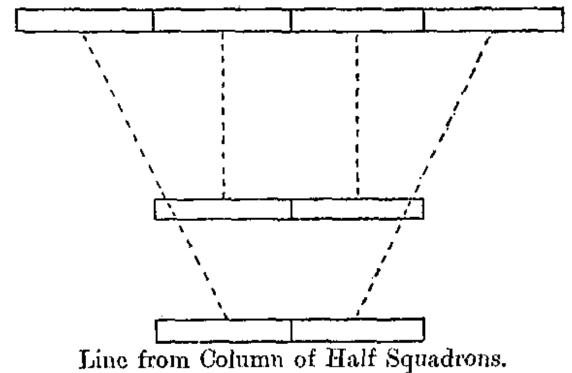
Line from Squadron Column.

S. 186. (c) From Column of Half Squadrons halted.

Form Squadron Walk— March. On the word March the squadron will advance, the troop leader on the right of the rear half squadron will give the command, Troop, Right Incline—Trot, and when opposite his place on the right of the leading half squadron, Troop, Left—Incline, followed on nearing the alignment by Troop—Walk; the troop leader on the left of the rear half squadron will give the command Troop, Left—Incline—Trot, and form in a similar way on the left of the leading half squadron.

Line may also be formed on the right or left of the leading half squadron by the command On the Right (or Left) Form—Squadron, in which case the 3rd and 4th troops will by command of their leaders incline in one line and form on the named flank.

S. 187. (d) From Column of Half Squadrons on the move. The command is Form—Squadron, or On the Right (or Left) Form—Squadron, and the troop leaders proceed as in Forming from the halt.



S. 188. (e) From Column of Sections.

Form— Squadron the troop leaders will give the command, Form—Troop, and proceed as in forming line from squadron column.

S. 189. Forming Oblique Line from Line or Squadron Column.

This can be done by wheeling troops half-right (or left), followed by the command, On the Right (or Left) Form—Squadron, in which case the rear troops form on the refused flank of the leading troop, that is to say:—

(a) If from line, and the troops have been wheeled halfright, the rear troops will be ordered to form on the left of the leading troop and vice versû.

(b) If from squadron column, and the troops have been wheeled half-right, the rear troops will be formed on the right of the leading troop and vice versâ.

S. 190. Forming Line to the Halt from Squadron Column.

To the Halt Form— Squadron.

On the word Squadron the leading troop moves on three horses' lengths, and is halted, and sat at ease by its leader, the others form on the right and left (or on the right or left if ordered) as before at a walk.

FORMATION OF COLUMN OF SECTIONS.

S. 191. (a) From Line on the move.

Form
Sections from
the Right
(or Left) of
Squadron.

On this command the right section of the line continues to advance, the remaining sections inclining to their right will, in succession, follow and cover. S. 192. (b) From Squadron Column on the move.

Formthe Right (or Left) of Troops.

On this command the right section of each Sections from troop continues to advance, and the remaining sections inclining to their right will, in succession, follow and cover the leading section of their troops.

S. 193. (c) From Column of Half Squadrons on the move.

FormSections from the Right (or Left) of Half Squadrons.

On this command the right section of the lead. ing half squadron continues to advance, and the remaining sections in the half squadron inclining to their right will, in succession, follow and cover. The troop leaders of the rear half squadron will give the command Troop-Halt, and will advance their troops in sufficient time to connect with the rear section of the troop preceding them.

CHANGES OF DIRECTION.

S. 194. (a) In Line.

The squadron is never wheeled in line; troops should wheel ight or left, and the squadron re-form.

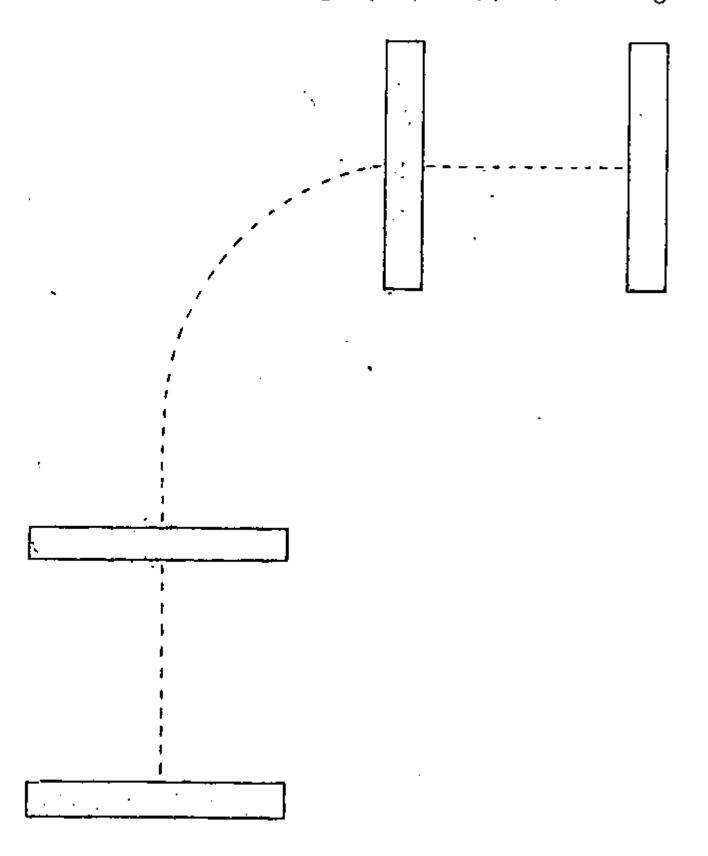
S. 195. (b) In Squadron Column.

Walk—March.—As before.

On the word Wheel the 1st troop leader gives the HeadRight (or command Troop, Right—Wheel, the 2nd, 3rd, and Left)— 4th troop leaders give the same commands when Wheel. they arrive at the wheeling point. Sec Plate.

If desired to change at less than \( \frac{1}{2}\)-circle, the squadron leader ives the command For-ward, when the 1st troop is at the ngle he wishes the change made, the 1st troop leader instantly lives the command, Troop For-ward, and the others in sucession give similar orders, after wheeling the required angle.

The Squadron Column should also be practised in changing its head by the command  $Head \frac{1}{2}$ -Right (or Le/t), i.e., wheeling.



S. 196. (c) In Column of Half Squadrons.

Changes of direction in this formation are not to be made. The troops should wheel to either hand, which will form the column of half squadrons in the new direction.

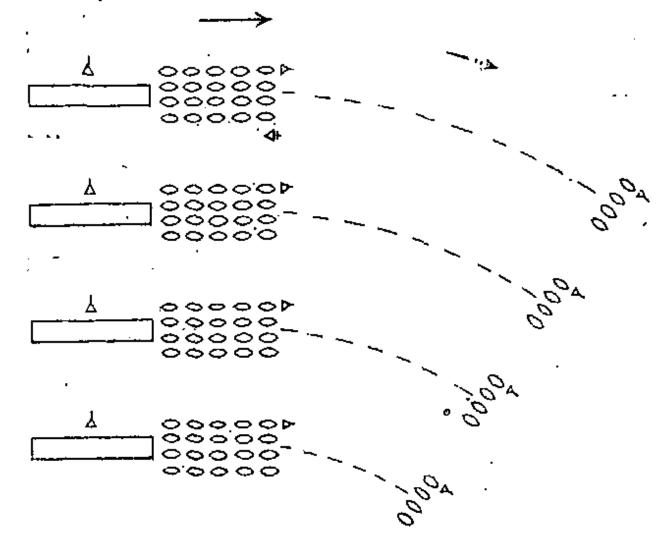
S. 197. (d) In Column of Sections.

Head On the word Wheel the leading section wheels Right (or Left) in the required direction, and the remainder do likewise in succession.

S. 198. (e) Squadron Column Marching to a Flank in Sections

changing direction.

Squadron On the word Wheel the leading sections of troops will wheel as one line, the remaining sections following and covering their respective leading sections.



S. 199. Squadron in Column of Sections wheeling the Head of Troops.

[Heads of Troops Right (or Left) —Wheel.

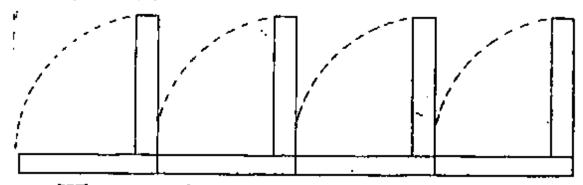
On the word Wheel each troop changes it direction, and the troop leaders place them selves one horse's length in front of theil leading sections.

MARCHING TO A FLANK.

S. 200. (a) From Line.

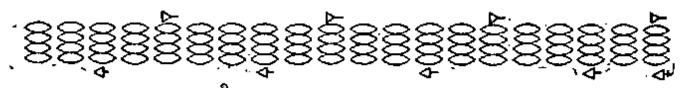
The squadron may be moved to a flank—

(1) In squadron column, by the command Troops Right (or Left)—Wheel.



Note.—When stationary, the command will be Troops Right (or Left) Wheel, Walk—March. If required to be done to the halt, the command will be "To the Halt, &c."

(2) In Column of Sections, by the command Sections— Right (or Left) in which case each troop leader place himself on the inner flank of, and, in line with, the leading section of his troop.



S. 201. (b) From Squadron Column.

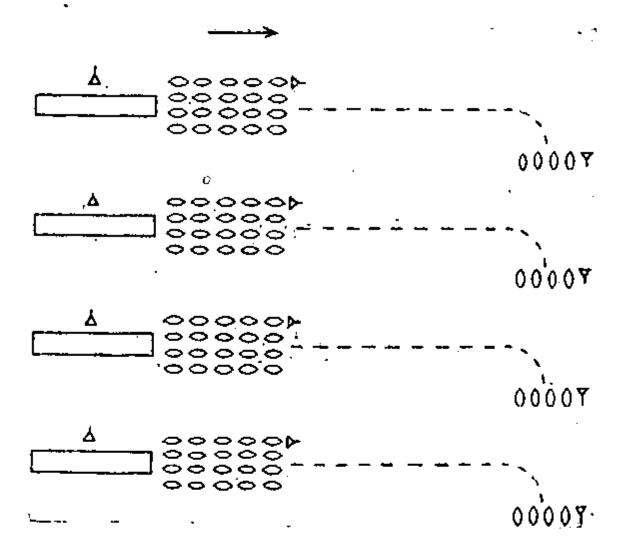
The squadron is moved to a flank by the command Section—Right (or Le/t). In this case each troop leader places him self one horse's length in front of No. 4 of the leading section

if Sections—Left he is one horse's length in front of No. 1), e., No. 4 or No. 1, as the case may be, follows his troop leader.
S. 202. (c) From Column of Half Squadrons. The squadron is moved to a flank by the command Sections
-Right (or Left), and the leading troop leaders of each half- quadron place themselves one horse's length in front of their irst section, and the leaders of the troops following them march in line with, and on the inner flank of, their leading sections.
·

S. 203. Squadron Column Marching to a Flank in Section and Forming Column of Sections.

Heads
of Troops
Right—
(or Left)
Wheel.

On the word Wheel each troop changes its direction, and the leader moves to the inner flank of h leading section.



#### ECHELON.

S. 204. Advancing in Echelon from Line halted.

Echelon

Troops

From the

Right

Form

chelon of

Troops

Right.

rom the

r Le/t).

The leader of the 1st troop will give the command Walk—March, and when it reaches wheeling distance from the 2nd troop, the 2nd troop leader will give the command, Troop, Walk—March, and direct the marching of his troop, so that the right hand man is at column distance from, also in rear and on the left of, the left-hand man of the leading troop. The 3rd and 4th troops will do likewise in succession.

S. 205. Forming Echelon from Line Moving.

On this command, the 1st, 2nd, and 3rd troop leaders will give the command, Troop—Trot (or Gallop), followed by Troop—Walk (or Trot), when each has reached its proper distance from the troop in rear of it.

This can also be done from the left by the command, Echelon Troops from the Left, when the 2nd, 3rd, and 4th troop leaders ill increase the pace, and each in succession move to column stance from the troop in rear and on the right of it.

S. 206. Forming Line on the Move from Echelon.

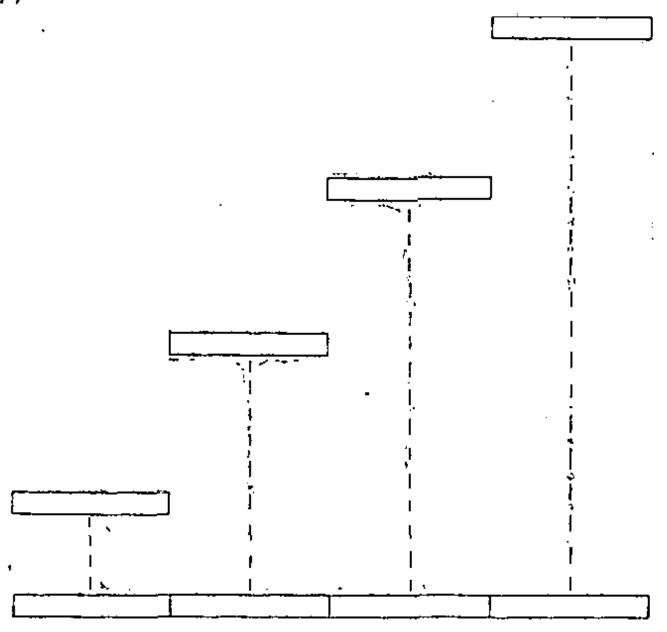
Form— On the word Squadron the rear troops take the next increased pace by their leader's command, and resume the original pace (also by command) when in line with the leading troop.

The squadron may be formed to the halt on the command To e halt, Form—Squadron. The leading troop moves forward ree horses' lengths and halts, the rear troops forming on it. it is required to form on any named troop in rear, the comand will be To the halt, on the . . . . troop, Form—Squadron, in hich case the troops in front will go Sections—About, by

command of their leaders, and after being led in rear of the new alignment Sections About—Halt, Dress up, Sit at Ease.

In echelon the leading body is responsible for the pace an direction, and the rear bodies for the intervals and distances.

The direction is changed by the command, *Troops—Right* (of *Left*) Wheel.



S. 207. Moving through Rough Country.

Advances through rough, broken, bush, or rocky country can be made by advancing in single files from the right of sections. It may be done by the command, Single files from the right of

dections, and the original formation resumed by the command, Form—Sections, or it may be done by giving the whistle sounds or Rally, the same signal being used to re-form the sections.

S. 208. SHELL FORMATION.

1. This movement is valuable when marching within the

angerous zone of artillery fire.

2. It admits of both the front being rapidly expanded and the epth between troops increased without reducing the flexibility f the squadron.

3. It tends to considerably minimize casualties.

4. It furnishes four complete and successive lines of troops vailable to support or reinforce each other quickly.

S. 209. (a) From Squadron Column moving.

On the word  $\overline{F}$  or mation each troop will extend Shell—) from its centre by single files to about 3 yards ormation. interval, and occupy a frontage equivalent to that taken up by the whole squadron when in line.

This interval can be increased when squadrons are working

ngly.

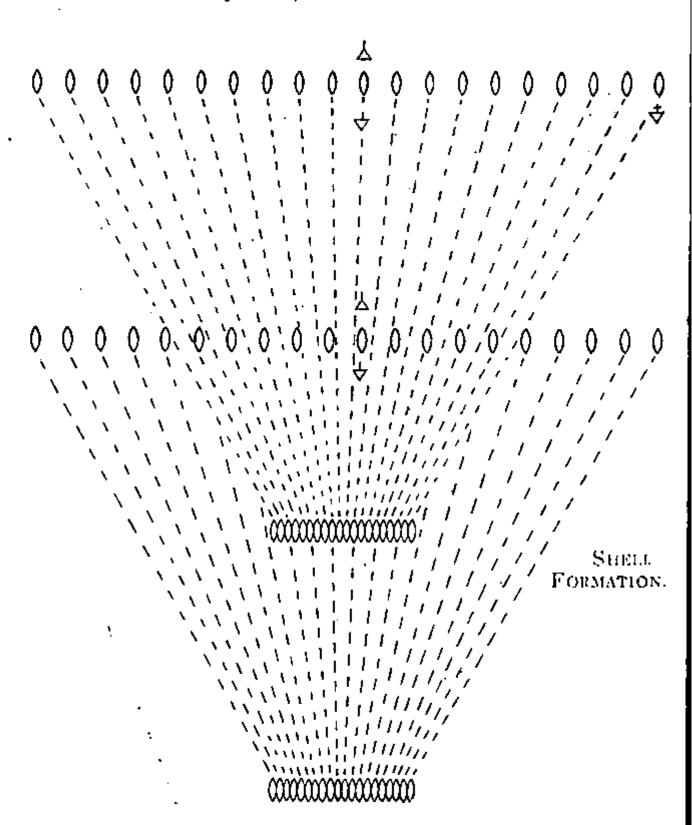
If necessary, the distance between troops is increased by the mmand........Paces between Troops, when the troops in ont will get the named distance (and intervals at one and the me time) from the rear troop, by following their leader at the creased pace, and resuming the former pace in due course. rrefiles retain their relative positions in rear of troops.

S. 210. (b) From Squadron Column halted.

ShellWalk— March.

On the word March the whole squadron advances and extends to about 3 yards interval bermation tween single files. If the distance between troops is to be increased the leading troops will follow their leader at a trot, and resume the walk when they reach the named distance.

Plate showing a squadron with 80 men in the ranks, that is each troop of 20 men covering a frontage of 80 yards. (19 is tervals of about 3 yards each = 60 yards, plus 20 yards for the 20 horses; total, 80 yards.)



### S. 211. To Close from Shell Formation.

The squadron will close by signal or command, the troops in rear conforming in this respect to the movement of the eading troop. If the squadron is halted, troops will close at he trot, otherwise at the next increased pace. If column listance has been increased, the troops in rear will close, whilst hey will continue to move forward until they arrive at column listance. If the leading troop has been halted, the troops in ear will move up to column distance at the trot after closing, therwise they will move up at the next increased pace.

#### S. 212. GROUND SCOUTS.

Although every man in the squadron is to be instructed in he duties of ground scouts, a sufficient number of men must be elected for their superior intelligence and good horsemanship, nd especially trained as the scouts of the squadron.

The duties of scouts are to ascertain whether the ground in ne immediate vicinity, in front of the squadron (and on its anks in column), is suitable for mounted troops, to point out betacles, and to indicate the best points of passage.

Scouts must be careful not to unnecessarily expose themselves view on high ground, or against the sky line.

Single troops should always throw out scouts in difficult ound; a squadron should never manœuvre over unknown or token ground without being preceded by a ground scout.

The number of scouts employed, and the distance to which ey are to go out, must depend upon the nature of the ground and the rapidity with which the body is moving; they must

not, however, be more numerous than is absolutely necessary and must be sufficiently in advance to give ample warning obstacles, but never out of sight of their squadrons.

Under ordinary circumstances, one man per squadron is sufficient, and, as a general rule, ground scouts should not be less than 200, nor more than 500 yards at the outside, away from their squadrons; if on a flank, they must know what sort of ground intervenes between them and the column.

Squadron commanders are responsible (without any order that one scout from each squadron gallops out to a point at suitable distance, as explained above, in front of the centre his squadron if in line, or line of squadron columns, or opposithe exposed flank of the squadron; in the latter case, also, the leading squadron sends out an additional scout ahead of the column. After reaching this point, each scout conforms as far as possible to the pace and to any change of direction of his squadron.

When moving fast over very difficult ground, two scouts may with advantage be sent out by each squadron; one man can the halt to point out a passage, while the other explores the natural of the ground.

The following signals are to be used by ground scouts:—If the ground is boggy, or otherwise impassable, they will halt an raise their rifles perpendicularly; they will then make for what ever point appears practicable, pointing towards it with the rifle.

If the ground within view in front and on either side is qui impracticable, a scout will face his squadron, raise his rifle at ride in to the squadron to report.

As the duties of ground scouts in broken ground take a good deal out of the horses, squadron commanders will be careful to equalize the work among their scouts, and to save all unnecessary galloping; thus, if a line retires over ground not previously traversed, fresh scouts will be sent out to the new front, and those already out will rejoin their squadron.

#### REGIMENTAL DRILL.

#### S. 213. General Instructions.

The following principles should be carefully observed:-

- 1. Formations should be as simple as possible, and units moved to their positions by the shortest route.
- That, although the relative position of troops and squadrons may often be changed, the troops of each squadron must be kept together.
  - 3. The Adjutant acts as a guide for direction and pace.

The second squadron will be the squadron of direction unless otherwise ordered.

The troop of direction will be-

- In Line and in Double Echelon, the left troop of the squadron of direction.
- In Line of Columns of Half Squadrons, the left troop of the leading half squadron of the troop of direction, and
- In Line of Squadron Columns, and in Mass, the leading troop of the squadron of direction.

- 4. The flank squadron on the hand towards which "changes of direction" or movements in "echelon," or "inclining" are made is the directing body.
- 5. In line formations (except Echelon) the movements are made from and on the centre troop (or centre squadron, if in line of squadron columns), unless otherwise ordered, and in column, on the leading squadron, and the squadron to which the troop belongs (or the squadron) is called the "base squadron."

In formations to COLUMN from LINE, LINE OF SQUAD-RON COLUMNS, or MASS, the 3rd squadron forms in rear of the 2nd, followed by the 1st and 4th, unless otherwise ordered.

- 6. In formations to LINE, LINE OF SQUADRON COLUMNS, or MASS from COLUMN, the 2nd and 4th squadrons form on the left, and the 3rd squadron on the right, of the leading one.
- 7. In formations To the halt the pace is not increased, except that, when squadrons are first formed before being brought or to a new alignment, the rear troops form at an increased pace
- 8. If an increased pace is taken to bring a unit on to a new alignment, it will be ordered to resume the former pace or reaching the serrefile rank of the body formed on.
- 9. In movements from column of sections, squadron leader will first form troops, and then complete the formation, except in forming line to a flank, when sections may wheel.
- 10. The command Head, Half-Right means the head of the body will make a half-right wheel, and then move on at that angle; but squadrons should not be formed until the troops are properly covered.

- 11. The regimental leader, before giving a command or signal, should, if possible, place himself on the right or left front of the flank to which he intends making the movement.
- 12. Squadron leaders repeat Commanding Officer's cautionary commands before giving the executive commands to their squadrons; but they do not repeat his executive commands unless required by circumstances to do so. In ceremonial drill, squadron leaders do not repeat words of command.
- 13. The Commanding Officer's cautionary command is shown marginally in italics, and his executive commands in block letters.
- 14. In formations To the halt, the squadron on which the movement is to be made will advance its depth before halting, unless otherwise laid down.
- 15. In forming up on markers, the troop leader whose duty it is to form on his units' marker will be in line with and on the marker's right, and facing the opposite way.

Post of Officers, Etc.

# S. 214. Commanding Officer.

Manœuvre.—Where he can best superintend and make his commands heard or signals seen.

Inspection.—Eight yards in advance of the centre of the squadron leaders.

When Personally Leading.—Twenty yards in advance of the squadron leaders, and in front of the directing point.

	2nd in Command.	Adjutant.	R.S. Major.
Line Line of S.C Col. of Sds	In line with Sqdn. Ldrs. (or 1st S.L.), and two horses' lengths interval (6 paces on foot) on right of right-hand man	In line with T, Ldrs. (or 1st T.L.) covering 2nd in command	In line with right- hand man, cover- ing Adjutant
Col. of Tps	2 horses' lengths in front of 1st Sadn. Leader	3 horses' lengths be- hind—right-hand man of rear unit	
Manœuvre	Assist C.O., and su- pervise the outer flank in changes of front, position, or direction	15 yards in front of the directing troop leader	On right of, and in line with, direct- ing Troop leader

#### S. 215. FORMATIONS OF THE REGIMENT.

The regiment is formed in-

Line.

Line of Squadron Columns.

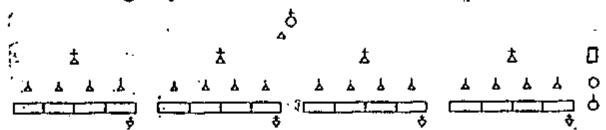
Mass.

Column of Troops.

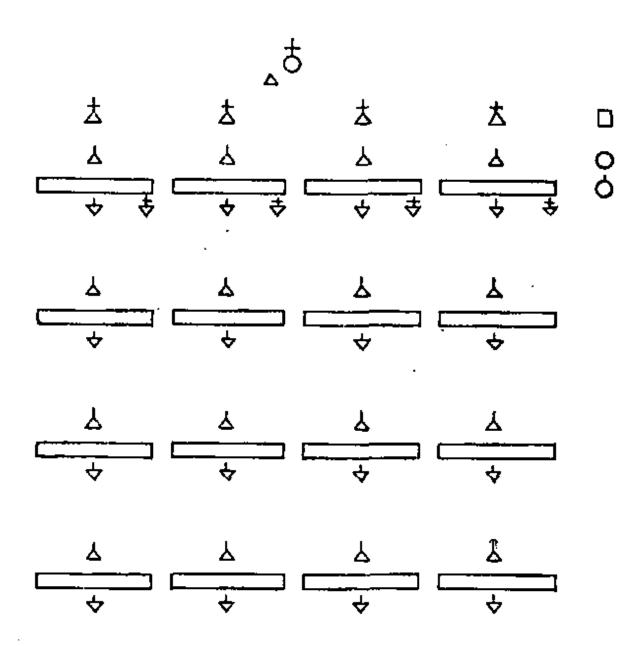
Column of Squadrons.

Echelon.

(a) Line.—Eight yards' interval between squadrons.

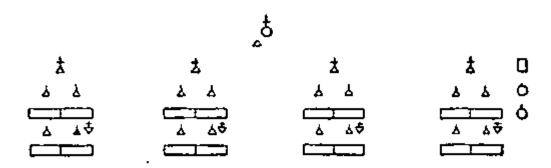


(b) Mass.—Line of Sqdn. Cols. closed to 2 horses' lengths interval.



(c) Line of Squadron Columns.—Each Squadron in Squadron olumn with an interval between them equal to the frontage of Il their rear troops plus 8 yards.

(d) Line of Column of Half Squadrons.—Deploying interval plus 8 yards between squadrons.



# REGIMENTAL MOVEMENTS.

### S. 216. Explanatory.

The following movements are given as a guide for the drill of the regiment mounted, and deal with formations at the Walk—March unless otherwise stated. It is to be distinctly understood that they are only to be taken as examples, and do not furnish an exhaustive list of the movements a regiment is capable of executing:—

## S. 217. THE REGIMENT MARCHING.

The regimental leader's caution is The regiment will advance. Squadron leaders repeat this caution and the adjutant places himself 15 yards in front of the directing unit. The executive command WALK—MARCH is then given by the regimental leader.

## S. 218. (a) In Line.

On the word MARCH each squadron advances, the troop leaders keeping in line with, and maintaining their intervals from, the leader next them on the dressing hand.

# S. 219. (b) In Line of Squadron Columns, (c) In Mass.

On the word MARCH each squadron advances, the 1st troop leaders of each squadron keep in line with, and maintain their intervals from, the leader next them on the dressing hand, the other leaders cover the leader next in front of them at the proper distance.

# S. 220. (d) In Column of Troops.

On the word MARCH every troop advances, its leader maintaining the distance and covering from the leader next in front of him, the leaders of the 1st troops in the 2nd, 3rd, and 4th squadrons being careful to preserve a distance equal to their frontage (plus 8 yards) from the rear troop of the preceding squadron.

# S. 221. (e) In Column of Squadrons.

On the word MARCH each squadron advances and dresses by its 2nd troop, the leaders of which in the 2nd, 3rd, and 4th squadrons, cover the directing leader of the squadron next in front.

#### S. 222. MACHINE GUNS.

Machine guns will generally form and march in rear of their regiments.

#### FORMATION OF LINE.

S. 223. (a) From Line of Squadron Columns.

Form

-Line.

Each squadron leader gives the command Form —Squadron.

S. 224. (b) From Mass.

The 1st squadron leader gives the command Head  $\frac{1}{2}$  Right—Trot, and when opposite the left of his new place Head  $\frac{1}{2}$  Left, followed by On the Right Form—Squadron. The 2nd squadron leader gives the command Form—Squadron. The 3rd and 4th give Head  $\frac{1}{2}$  Left—Trot, followed, when their leading troops are behind the place where the right of the squadron will be, by Head  $\frac{1}{2}$  Right, and then On the Left Form—

The formation of Line from Line of Squadron Columns is not made according to this Plate.

Mass.

If this movement is done to the halt, the 1st, 3rd, and 4th quadrons will reach their places in rear of the new alignment y a square movement in sections, and then form squadron on he right and left respectively.

S. 225. (c) From Column of Troops.

The 1st squadron leader gives the command Form—Squadron, the 2nd squadron leader gives Head ½ Left—Trot, followed, when the right-hand man of the leading troop is opposite his place in the new alignment, by Head ½ Right, and then, On the Left Form—Squadron; the 3rd gives Head ½ Right—Trot, and when the left-hand man of the leading troop is opposite his place, Head ½ Left, followed by On the Right Form—Squadron. The 4th squadron forms in the same way as the 2nd, and on its left.

S. 226. (d) From Column of Squadrons.

The 2nd and 4th squadron leaders give Squadron Column—From the Left, the 3rd gives Squadron Column—From the Right, and they each then proceed as in forming from column of troops.

If done To the halt, the 2nd and 4th squadron leaders give Sections—Left, and when opposite their places in the new alignment Sections—Right. The 3rd squadron leader gives Sections—Right, and when opposite his place Sections—Left. If from and to the halt, the regimental leader gives the cautionary command To the Halt, Form—Line; the 2nd and 4th squadron leaders give Sections—Left, the 3rd gives Sections—Right, and on the regimental leader's executive command, WALK—MARCH, the 1st squadron moves up three horse's lengths, and the others form on its right and left.

Form —Line.

### FORMATION OF LINE OF SQUADRON COLUMNS.

S. 227. (a) From Mass.

Line of Squadron— Columns. The 1st squadron leader gives the command Head ½ Right—Trot, followed when at deploying interval by Head ½ Left. The 3rd and 4th give Head ½ Left—Trot, followed at deploying interval by Head ½ Right.

If done To the Halt, the 1st squadron leader gives Sections—Right (the 3rd and 4th give Sections—Left), followed when at deploying interval by Sections—Left (or Right). If done from and to the halt, the regimental leader's cautionary command is To the Halt, Line of Squadron Columns. The squadron leaders give Sections right and left to their troops as before, and then remain steady until regimental leader's executive command WALK—MARCH, when the 2nd advances three horses' lengths and halts, the others proceed as before.

S. 228. (b) From Column of Troops.

Line of Squadron— Columns. The 2nd and 4th squadron leaders give the command  $Head \frac{1}{2} Le/t$ —Trot, followed when at deploying interval by  $Head \frac{1}{2} Right$ . The 3rd gives  $Head \frac{1}{2} Right$ —Trot, followed at deploying interval by  $Head \frac{1}{2} Le/t$ .

In forming to a flank the regimental leader's command is HEADS OF SQUADRONS RIGHT (or LEFT) WHEEL.

S. 229. (c) From Column of Squadrons.

The 1st and 3rd squadron leaders give the command Squadron Column From the Right. The 2nd and 4th squadron leaders give Squadron Column From the Left. The 1st squadron moves straight on. The 2nd squadron changes its head slightly and moves up at the trot to deploying interval on the left of the leading squadron. The 3rd squadron gives Head \( \frac{1}{2} \) Right—Trot, followed when at deploying interval by Head \( \frac{1}{2} \) Left—Trot, followed when at deploying interval by Head \( \frac{1}{2} \) Right.

In forming to a flank From Column of Squadrons, the reginental leader's command is TROOPS, RIGHT (or LEFT)—

VHEEL.

Line of

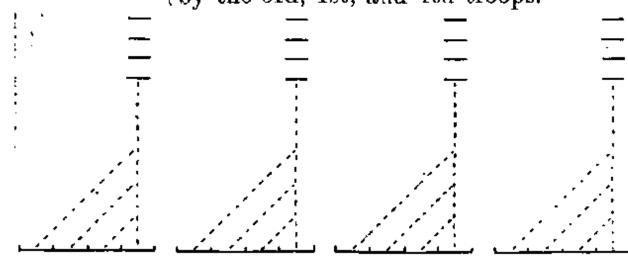
quadron-

Columns.

S. 230. (d) From Line.

On the command From the Right, the right troops of each squadron will move forward, followed in succession by the 2nd, 3rd and 4th troops. If the command is Squadron—Columns.

On the command From the Right, the right troops of each squadron will move forward, followed in succession by the 2nd troops of each squadron will move forward, followed in succession by the 3rd, 1st, and 4th troops.



LINE OF SQUADRON COLUMNS FROM THE RIGHT OF SQUADRONS.

#### FORMATION OF MASS.

S. 231. (a) From Line of Squadron Columns.

The 2nd squadron continues to move forward. The 1st gives  $Head \frac{1}{2}$  Left—Trot, followed (when his squadron is opposite its place) by  $Head \frac{1}{2}$  Right. The 3rd and 4th change their heads  $\frac{1}{2}$  right, and then 1 left when expected their places.

left when opposite their places.

Form —Mass If this is done To the Halt, the 1st squadron leader gives the command Sections—Left, the 3rd and 4th give Sections—Right, and each forms on the 2nd squadron by giving Sections Right (or Left) as the case may be. If done from and to the halt, the squadron leaders wheel their commands sections right or left, and remain steady until the regimental leader's executive command WALK—MARCH, when they complete the formation.

S. 232. (b) From Column of Troops.

The 2nd and 4th squadrons form on the left of, and the 3rd on the right of, the leading squadron by changing the direction of their heads outwards, and then inwards, when opposite their places.

S. 233. (c) From Column of Squadrons.

Form
—Mass.

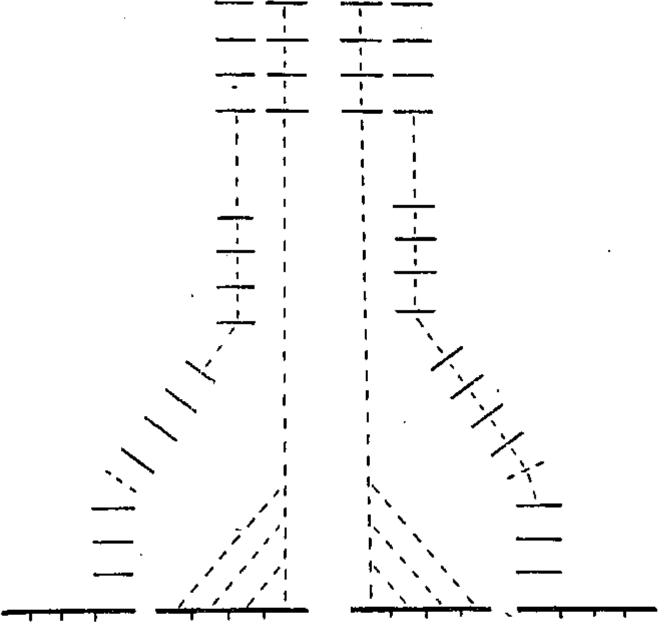
The 1st squadron leader gives the command Squadron Column from the Right, and moves straight on. The 2nd squadron leader gives the command, Squadron Column—Trot, and moves up on the left of the leading squadron. The 3rd squadron leader gives the command, Squadron Column from the Right, and moves up at a trot (changing the head of his squadron slightly) on the right of the leading squadron. The 4th squadron leader gives the command, Squadron Column from the Left, and moves up on the left at the trot.

Form

Mass.

S. 234. (d) From Line.

The 1st and 2nd squadron leaders give the command Squadron Column from the Left. The 3rd and 4th give Squadron Column from the Right. Then the 1st, 3rd, and 4th squadron leaders give the necessary commands to change their heads on to, and in line with, the 2nd squadron.



FORMATION OF MASS FROM LINE.

NOTE.—This movement should not be done To the Halt. The regimental ader will give the command, To Halt, if necessary, when the movement completed.

### FORMATION OF COLUMN OF TROOPS.

S. 235. (a) From Column of Squadrons.

Column of Troops or On this caution each squadron leader Column of Troops gives the command Squadron Column, or From the Right (or Squadron Column from the Right (or Left). Le/t).

### S. 236. (b) From Line.

The 2nd squadron leader gives the command Squadron Column from the Left, and moves straight on.

The 1st squadron leader gives the command Squad-Column ron Column from the Left, and changes the head of

his squadron to cover the 3rd squadron.

The 3rd and 4th squadron leaders give the command Squadron Column from the Right. The 3rd squadron follows the 2nd, the 1st follows the 3rd, and the 4th follows the 1st.

This may be done from a flank of the line by the regimental leader's cautionary command, Column of Troops-From the Right (or Left). Then each squadron leader gives the command Squadron Column from the Right (or Left). The 1st or 4th squadron moves straight on, the remainder change the heads of their squadrons, and cover in column of troops.

of

Troops.

S. 237. (c) From Line of Squadron Columns.

The 2nd squadron moves straight on. The 1st squadron leader gives the command  $Head \frac{1}{2}$  Left, followed, when behind the 3rd squadron, by  $Head \frac{1}{2}$  Right. The 4th squadron changes its head  $\frac{1}{2}$  Right, and follows the 1st squadron. The 3rd gives the command  $Head \frac{1}{2}$  Right, and follows the 2nd squadron.

If this is done from a flank, the regimental leader's cautionary command is Column of Troops from the Right (or Left). Then the 2nd, 3rd, and 4th squadron leaders give the command Head Right (or Left), followed by Head \(\frac{1}{2}\) Left (or Right), and in succession follow the leading squadron.

## S. 238. (d) From Mass.

Column Columns except that the squadrons other than the preceding one will be halted until the preceding squadron is clear of their respective flanks.

Note.—In all formations To Column of Troops, the leading troop leaders of the 2nd, 3rd, and 4th squadrons must keep troop-wheeling distance, plus 8 yards, from the rear troop of the squadron in front of them.

# FORMATION OF COLUMN OF SQUADRONS.

S. 239. (a) From Line.

The 2nd squadron moves straight on. The 1st squadron leader gives the command, Troops, ½ Left. The 3rd and 4th give Troops, ½ Right, and when each squadron arrives opposite its new place, the leader will give the command to wheel his troops behind, and on to, the parallel alignment of the preceding squadron.

This may be done from a flank of the line by the regimental leader giving the caution, Column of Squadrons from the Right (or Left), when the squadron on the named flank moves forward and the others follow by moving half right or left.

S. 240. (b) From Line of Squadron Columns.

The 2nd squadron leader gives the command Form Squadron. The 1st gives Head ½ Left. The 3rd and 4th give Head ½ Right, and when they have respectively arrived behind the right and left flanks of the leading squadron the 3rd gives Head ½ Left, and on reaching column distance from the leading squadron, he gives On the Right Form—Squadron. The 1st gives Head ½ Right, followed when at column distance from the 3rd by On the Left Form—Squadron. The 4th does the same as the 3rd, and follows the 1st squadron.

S. 241. (c) From Mass.

The 1st, 3rd, and 4th squadron leaders give the command, Halt. The 2nd gives Form—Squadron, and when it has reached column distance the 3rd squadron leader will give Walk—March, followed by On the Right Form—Squadron, the 1st and 4th squadrons will move off similarly and form in rear.

Column of Squadrons. S. 242. (d) From Column of Troops.

lumn

ons.

Each squadron leader gives the command, Form $guad \cdot (Squadron.$ 

#### ECHELON.

S. 243. (a) Advancing from Line Halted.

thelon of [ The 1st squadron leader gives the command, juadrons. Walk-March. The others give Walk-March in from the isuccession, when at a distance equal to their frontage (plus 8 yards) from the unit preceding them. Right.

Note.—If the command is Echelon of Squadrons from the Left, le 4th squadron leader gives the command Walk—March, folwed by the 3rd, 2nd, and 1st.

S. 244. (b) Forming from Line Advancing.

The 1st, 2nd, and 3rd squadron leaders give Echelon of the command Trot, followed by Walk, when Squadrons. they reach the proper distance from the unit rom the Right. next in rear.

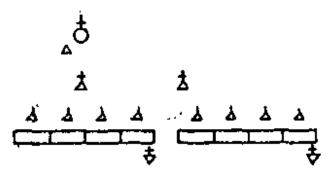
If the formation is to be made by the left squadron leading, le cautionary command is Echelon of Squadrons from the Left, nd the 4th, 3rd, and 2nd squadron leaders give the command rot, and get their distances from the 1st, their order being langed.

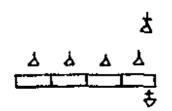
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S. 245.	(c)	Advancing from	Line of	Sqdn. C	Cols. Halted
S. 246.	(d)	Forming from vancing	Line o	of Sqdn.	Cols. Ad- As from line.
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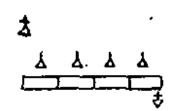
ECHELON OF SQUADRON COLUMNS FROM THE RIGHT—FROM LINE OF SQUADRON COLUMNS.

#### S. 247. DOUBLE ECHELON.

The 2nd and 3rd squadron leaders give the comchelon of mands Walk—March, and the 1st and 4th give Walk Squadrons. —March, when the 2nd and 3rd have reached squadron distance from them plus 8 yards.







In double echelon squadrons are numbered from right to left.

#### CHANGES OF DIRECTION.

S. 248. (a) In Line.

This will never be done. A slight change may be effected y shouldering.

# S. 249. (b) In Line of Squadron Columns.

Change Direction RIGHT— WHEEL. On the word WHEEL, the first troops of each squadron wheel as one line, the remaining troops covering the leading troop of their squadrons. When a \frac{1}{4}-circle has been wheeled the regiment moves forward without orders.

### S. 250. (c) In Mass.

Same as in line of squadron columns. Wheeling at angle less than 90 deg. should be constantly practised.

S. 251. (d) In Echelon of Squadron Columns.

The regimental leader gives the command Heads of Squadrons RIGHT (or LEFT) WHEEL.

S. 252. (e) In Column of Troops or Sections.

The regimental leader gives the command, Head of Regiment RIGHT (or LEFT) WHEEL.

#### MOVEMENTS TO A FLANK.

S. 253. Line of Squadron Columns moving in Sections to a Flank and Wheeling each Squadron.

SECTIONS—RIGHT (or LEFT).—As before.

Squadrons
RIGHT
(or LEFT)
WHEEL.

On the command WHEEL the leading section of each troop in each squadron wheels round in one line, and moves forward after completing \( \frac{1}{4} \) circle, the remaining sections in each squadron covering their leading sections.

Column of troops may be formed from this movement by wheeling sections right or left.

S. 254. Line of Squadron Columns moving in Sections to a Flank and Wheeling each Troop.

SECTIONS—RIGHT (or LEFT).—As before.

Heads of Troops On the command WHEEL the head of each RIGHT (or troop wheels as directed, thus forming a line of squadrons marching to a flank in column of sections.

Column of squadrons may be formed from this movement by wheeling sections right or left.

### OBLIQUE FORMATIONS.

S. 255. (a) From and to Line of Squadron Columns.

The regimental leader gives the command HEADS OF QUADRONS HALF RIGHT (or LEFT), and, after each quadron has wheeled the required angle, he gives the command INE OF SQUADRON COLUMNS. If the change is half ight the 2nd, 3rd, and 4th squadrons move up on the left of, nd in line with, the 1st squadron at the next increased pace by heir leader's command, and if the change is half left the 3rd, and 1st squadrons take the next increased pace by their eader's command and move up on the right of and in line with he 4th squadron.

S. 256. (b) From and to Line.

The regimental leader gives the commands TROOPS, HALF RIGHT (or LEFT) followed by on THE RIGHT (or LEFT) FORM SQUADRONS; if the troops have been wheeled half ight, squadrons will be "formed" on the left, and vice versa; and FORM LINE. If the troops have been wheeled half ight, squadrons will Form Line on the left, and vice versa.

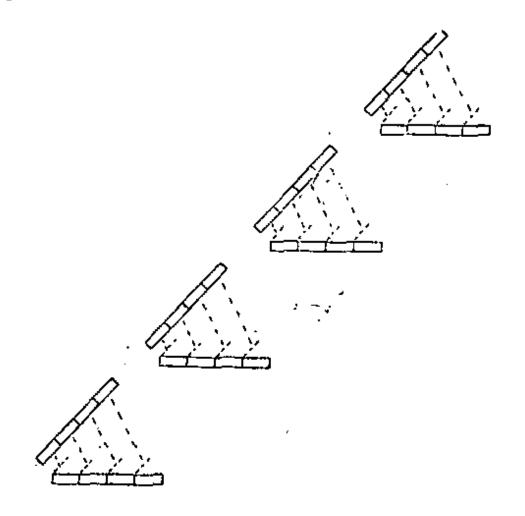
§. 257. (c) From Column of Troops to Line of Squadron Columns.

The regimental leader gives the command HEADS OF SQUADRONS HALF RIGHT (or LEFT), followed by LINE OF SQUADRON COLUMNS, when the rear squadrons will, if squadrons have been wheeled half right, form on the right, and if half left, on the left of the leading squadron.

S. 258. (d) From Echelon of Squadrons to Line.

The regimental leader gives the command TROOPS HALF LEFT (or RIGHT), followed by on THE RIGHT (or LEFT)

FORM—SQUADRONS. The illustration shows the troop wheeling half left and forming squadrons, which brings the regment in line



### COLUMN OF ROUTE.

S. 259. (a) From Line.

The regimental leader's command is COLUMN OF ROUTI FROM THE RIGHT (or LEFT). The squadron on the named flank will move off in sections from the right (or left), the remaining squadrons will form sections from their flank nearest the flank of the regiment from which the movement is made, and follow and cover by the shortest route; a distance of 10 yard being allowed between squadrons.

If done from either flank of the 2nd squadron, the 3rd, 1st, and 4th squadrons will follow in this order, and if done from ther flank of the 3rd squadron, the 2nd, 4th, and 1st squadrons ill follow in this order.

The squadrons which are to follow in rear in each of these ases will form sections from the flank nearer the squadron which to lead.

S. 260. (b) From Line of Squadron Columns.

Sections will be formed from the right (or left) of troops of ach squadron, and the movement then carried out on the same rinciples as "from Line."

S. 261. (c) From Mass.

Sections will be formed from the right (or left) of troops of ach squadron, and the movement then be carried out on the ame principle as "From Line."

S. 262. (d) From Column of Squadrons.

Each squadron will form column of sections from the named lank, and move off, allowing 10 yards distance between squadons.

S. 263. (c) From Column of Troops.

Each troop will form column of sections from the named lank, 10 yards distance being allowed between squadrons.

### BRIGADE DRILL.

### S. 264. General Instructions.

1. Brigade movements will be executed on the same prin-

iples as those laid down for the regiment.

2. In forming line, line of squadron, columns, mass, or line of nasses, from column or echelon, regiments will be first formed, and then brought into the general alignment.

- 3. In formations from Column to Line, the second regime will form on the left, and the third on the right, of the leading.
- 4. When regiments have to move independently, commanding officers must name their regiments before giving the executive commands. Thus (From Line of Squadron Columns).—Column of masses to the right, ——th Light Horse, Right form—Mass

5. In line or any line of columns formation, the centre trod or squadron is the directing unit, and the regiment to which the body belongs is called the directing regiment.

- 6. In movements in line, line of squadron columns, mass, line of masses, the brigade major will act as guide, about 2 yards in front of troop leaders, and be responsible for the direction and pace, the unit in rear of him (usually the centre of of the line) will be the dressing point. Adjutants march with the troop leader of their regiments nearest the dressing point, an pay special attention to the preservation of the correct interval between regiments, except the adjutant of the directing regiment who will ride in his usual place, and follow the brigade major.
  - 7. Commanding officers must move their regiments rapidle into position, and not devote their attention to details of regimental drill, they give the orders for the movement of their regiments either by command or signal.
- 8. When the brigadier's order is given by signal, regimental leaders will only give the necessary signal or order for their squadrons to move, and squadron leaders will then act. If the order is conveyed verbally, regimental leaders will in a cases repeat it, and subsequently give the executive command required (if further command necessary) for the movement of their regiments.
  - 9. Squadron leaders do not repeat the brigade order.

- 10. When the brigadier's order is not distinctly heard, or is not understood, each regimental commander, when the intention is obvious, will conform to the movement executed by the other regiments.
- 11. In formations or movements from the halt, the brigadier's cautionary command is repeated by regimental leaders who then give their cautionary commands, after a pause the brigadier gives an executive signal (usually whistle or trumpet sound), on which regimental leaders give their commands.
- 12. The flank regiment on the hand to which changes of direction or movements in cchelon are made is the directing regiment.
- 13. The following evolutions deal with a brigade of three regiments on the move:—Commanding officers must understand that if they are done "To the halt," or "From and to the halt," the base regiment will advance only its own depth, and they must therefore be prepared in some cases to complete the formations by a square flank movement instead of wheeling the head of their commands.
- 14. The explanations refer to formations on and from the centre regiment (called the base regiment). When in line or any line of columns, they may be done on or from the right or left regiment by naming the flank.

#### Post of Officers.

# S. 265. (a) Brigadier.

Manœuvre.—Where he can best superintend and direct the movements of his command.

Parade.—30 yards in front of the leading officer or officers, and opposite the centre of the brigade.

Marching Past.—30 yards in front of the leading officer.

### S. 266. (b) Brigade Staff.

Staff Officers.—6 yards in rear of brigadier, and 3 yards interval from each other.

Gallopers.—3 yards in rear of staff officers, except when the staff, including gallopers, does not exceed four, in which case the staff will form in one line.

# S. 267. Formations of the Brigade.

- (a) Brigade Mass.
- (b) Column of Masses.
- (c) Line of Masses.
- (d) Line of Squadron Columns.
- (e) Line.
- (f) Column of Troops.
- (g) Echelon of Regiments.

#### S. 268. THE BRIGADE MARCHING.

The brigadier's caution is *The Brigade will Advance*, followed (after regimental leaders have repeated it) by the executive signal of the brigadier, after which each regimental leader will give the command WALK—MARCH (or the signal *Advance*).

#### FORMATION OF MASS.

S. 269. (a) From Line of Masses.

Brigadier's Caution.—Form Brigade Mass.

Ist regimental leader gives the command LEFT WHEEL—TROT, followed, after wheeling the 1th of a circle, by FOR-WARD; the regiment continues at this angle to such a place that after it has wheeled the 1th of a circle to the right by the command, RIGHT—WHEEL it will be on, or parallel to the alignment, with 16 yards' interval from the base regiment.

2nd regimental leader gives the command FOR-WARD.

3rd regimental leader gives the command RIGHT—WHEEL, TROT, followed by FOR-WARD, after wheeling the 1th of a circle, and closes on the left of the base regiment in the same manner as the 1st regiment closes on the right of it.

# S. 270. (b) From Column of Masses.

Brigadier's Caution.—Form Brigade Mass.

-1st regimental leader gives the command FOR-WARD.

2nd regimental leader gives the command LEFT—WHEEL, TROT, followed, after wheeling the 1th of a circle, by FOR-WARD, and when the regiment arrives opposite its place in the new alignment, RIGHT—WHEEL, followed, after wheeling the 1th of a circle, by FOR-WARD.

3rd regimental leader gives the command, RIGHT—WHEEL, TROT, followed, after wheeling the §th of a circle, by FOR-WARD, and when the regiment arrives opposite its place in the new alignment, LEFT—WHEEL, followed, after wheeling the §th of a circle, by FOR-WARD.

# S. 271. (c) From Line of Squadron Columns.

Brigadier's Caution-Form Brigade Mass.

1st regimental leader gives the command On the Left FORM—MASS, and when this is done he wheels the regiment until it is on, or parallel to, the alignment, with 16 yards' interval from the right of the base regiment.

2nd regimental leader gives the command FORM—MASS,

which is made on the 2nd squadron.

3rd regimental leader gives the command On the Right FORM—MASS, and then he wheels the regiment and forms on the left of the base regiment at 16 yards' interval.

### FORMATION OF LINE OF MASSES.

S. 272. (a) From Brigade Mass.

Brigadier's Caution.—Form Line of Masses.

Ist regimental leader gives the command RIGHT WHEEL—TROT, followed, after wheeling the §th of a circle, by FOR WARD, when deploying interval is reached he brings the regiment on, or parallel to, the alignment by the commands LEFT—WHEEL and FOR-WARD.

2nd regimental leader gives the command FOR-WARD.

3rd regimental leader gives the command LEFT—WHEEL TROT, followed, after wheeling the \$\frac{1}{2}\$th of a circle, by FOR WARD, when deploying interval is reached he brings the regiment on, or parallel to, the alignment by the commands RIGHT—WHEEL and FOR-WARD.

S. 273. (b) From Column of Masses.

Brigadier's Caution-Form Line of Masses.

1st regimental leader gives the command FOR-WARD.

2nd regimental leader gives the command LEFT—WHEEL, TROT, followed, after wheeling the 3th of a circle, by FOR-WARD, and after reaching the deploying interval the regiment is brought on, or parallel to, the alignment by the commands, RIGHT—WHEEL and FOR-WARD.

3rd regimental leader gives the command RIGHT—WHEEL, TROT, followed, after wheeling the 1th of a circle, by FOR-WARD, and after reaching the deploying interval the regiment is brought on, or parallel to, the alignment by the commands LEFT—WHEEL and FOR-WARD.

S. 274. (c) From Line of Squadron Columns.

Brigadier's Caution.—Form Line of Masses.

Each regimental leader gives the command FORM-MASS.

### FORMATION OF COLUMN OF MASSES.

	Ġ	•
	* * *	
. 275. (a) From Brigade Mass.	<b>+ + +</b>	
Brigadier's Caution. — Form	ð	
olumn of Masses.	1	
olumn of Masses.  1st regimental leader gives the		
mmand LEFT—WHEEL, fol-	\$·	
wed, after wheeling the hth-	<u> </u>	- <b>-</b>
a circle, by FOR-WARD, and		A wheel of
hen the regiment arrives in rear		regiments to
the column, RIGHT—WHEEL		either hand
th circle) and FOR-WARD.		will form Bri-
2nd regimental leader gives the		gade Mass.
mmand FOR-WARD.		_
3rd regimental leader gives the		
mmand RIGHT—WHEEL, fol-		
wed, when the regiment arrives		
chind the leading one, by LEFT-	$\overline{-}$	
HEEL.		

### S. 276. (b) From Line of Masses.

Brigadier's Caution.—Form Column of Masses.

1st regimental leader gives the command LEFT—WHEEL, ROT, followed, after wheeling the 1sth of a circle, by FOR-ARD, and when the regiment arrives in rear of the column, it vers in column by the commands RIGHT—WHEEL (1sth rele) and FOR-WARD.

C. 11182.

2nd regimental leader gives the command FOR-WARD.

3rd regimental leader gives the command RIGHT—WHEE TROT, followed, after wheeling the \$\frac{1}{2}th\$ of a circle, by FOI WARD, and on arriving behind the 2nd regiment, it covers column by the commands LEFT—WHEEL (\$\frac{1}{8}th\$ circle), at FOR-WARD.

S. 277. (c) From Line of Squadron Columns.

Brigadier's Caution.—Form Column of Masses.

Ist regimental leader gives the command On the Left FORM MASS. When this is done he gives LEFT—WHEEL, follower after wheeling the \$\frac{1}{2}\$th of a circle, by FOR-WARD, and on arriving in rear of the column, he covers off by the commands RIGH—WHEEL (\$\frac{1}{2}\$th circle) and FOR-WARD.

2nd regimental leader gives the command FORM—MASS.

3rd regimental leader gives the command On the Right FOR

—MASS, when this is done he gives RIGHT—WHEEL, follow after wheeling the 3th of a circle, by FOR-WARD, and follow the 2nd regiment by the commands LEFT—WHEEL (3th circle and FOR-WARD.

# FORMATION OF LINE OF SQUADRON COLUMNS

S. 278. (a) From Brigade Mass.

Brigadier's Caution.—Form-Line of Squadron Columns.

1st regimental leader gives the command, Right—Wheel, followed, after wheeling the §th of a circle, by For-ward. The rement continues at that angle until the base regiment complete its formation, when the command Left—Wheel, is given to bri it on, or parallel to, the alignment, followed by Line of Squadr Columns from the Left.

2nd regimental leader gives the command Line of Squadron lumns.

3rd regimental leader gives the command Lest-Wheel, folved, after wheeling the 1th of a circle, by For-ward. The iment continues at that angle until the base regiment comtes its formation, when the command Right—Wheel is given bring it on, or parallel to, the alignment, followed by Line Squadron Columns from the Right.

S. 279. (b) From Line of Masses.

Brigadier's Caution.—Form Line of Squadron Columns.

Each regimental leader gives the command Line of Squadron lumns.

If this is to be done from a flank of the regiments the brigadicr list name the flank in his cautionary command.

S. 280. (c) From Column of Masses.

Brigadier's Caution.—Form Line of Squadron Columns.

1st regimental leader gives the command, Line of Squadron lumns.

2nd regimental leader gives the command Left—Wheel, folwed, after wheeling the 1th of a circle, by For-ward, the regient continues at that angle until the leading regiment completes formation, when the command Right-Wheel is given to bring on, or parallel to, the alignment, followed by Line of Squadron lumns from the Right.

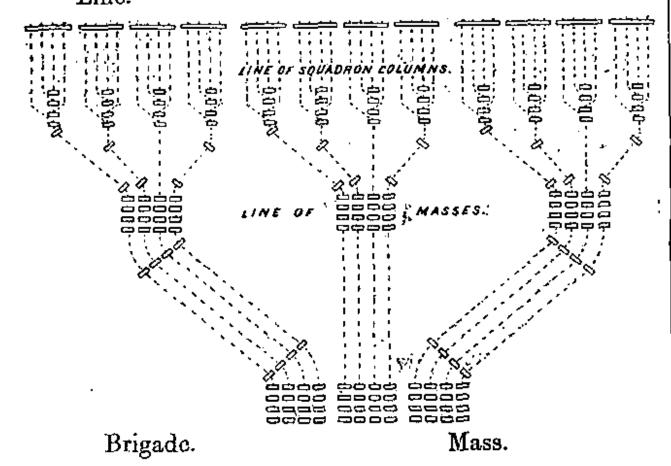
3rd regimental leader gives the command Right—Wheel, folwed, after wheeling the 1th of a circle, by For-ward, the regient continues at that angle until the leading regiment comtes its formation, when the command Right—Wheel is given bring it on, or parallel to, the alignment, followed by Line of uadron Columns from the Left.

# Diagram showing the formation of-

(1) Line of Masses from Brigade Mass.

(2) Line of Squadron Columns from Line of Masses.

(3) Line from Line of Squadron Columns. Line.



### CHANGES OF DIRECTION.

Brigadier's Caution.—The Brigade will wheel to the Right (Left).

S. 281. (a) In Brigade Mass, (b) In Line of Masses, (c) In Line of Squadron Columns.

The leading troop of every squadron will wheel together one line, and the rear troops cover their respective leading troops.

# S. 282. (d) In Column of Masses.

The leading regiment wheels in the usual way, and the others to likewise in succession as they reach the wheeling point.

### MOVEMENTS TO A FLANK.

S. 283. (a) From Brigade Mass.

(i.) From Brigade Mass to Column of Masses.—Brigadier's Caution.—Column of Masses to the Right (or Left).

Each regimental leader gives the command RIGHT (or LEFT)

WHEEL.

(ii.) From and to Brigade Mass.—Brigadier's Caution.—Mass to the Right (or Left).

1st regimental leader gives the command RIGHT—WHEEL.

2nd regimental leader gives the command RIGHT—WHEEL, followed, after wheeling the circle by FOR-WARD, and when apposite place on the left of the 1st regiment the new alignment is reached by another half wheel to the right.

3rd regimental leader gives the command SECTIONS—ABOUT, followed by LEFT—WHEEL, and is formed on the

right of the leading right.

# S. 284. (b) From Line of Masses.

(i.) From Line of Masses to Column of Masses.—Brigadier's

Caution.—Column of Masses to the Right (or Left).

Each regimental leader gives the command RIGHT (or LEFT) WHEEL, the 2nd and 3rd regiments then close to a distance equal to their frontage in mass plus 16 yards from the regiment preceding them.

(ii.) From Line of Masses to Brigade Mass.—Brigadier's

Caution.—Brigade Mass to the Right (or Left).

This is carried out as in forming mass to a flank from Mass.

### S. 285. (c) From Column of Masses.

(i.) From Column of Masses to Brigade Mass.—Brigadier' Caution.—Brigade Mass to the Right (or Left).

Each regimental leader gives the command RIGHT (or LEFT

 $\mathbf{WHEEL}$ .

- S. 286. (d) From Line of Squadron Columns.
- (i.) From Line of Squadron Columns to Column of Squadrons—Brigadier's Caution.—Column of Squadrons to the Right (o Left).

Each regimental leader gives the command TROOPS RIGHT

(or LEFT) WHEEL.

(ii.) From Line of Squadron Columns to Column of Troops.— Brigadier's Caution.—Column of Troops to the Right (or Left).

Each regimental leader gives the command HEADS Of SQUADRONS RIGHT (or LEFT) WHEEL.

### CHANGES OF FRONT.

Carried out from and to the halt and made To the Right (or Left) on any regiment, by bringing one flank forward, and throwing the other back.

S. 287. (a) To the Right on the Right Regiment.

Brigadier's Caution.—Change front to the Right ( $\frac{1}{2}$  or  $\frac{1}{4}$  right on the Right Regiment.

Each regimental leader give the cautionary command Righ

-Wheel.

Brigadier's executive command Walk—March.

1st regiment wheels the  $\frac{1}{4}$  of a circle, moves up its depth, and halts.

2nd and 3rd regimental leaders give the command FOI WARD, after wheeling the 1th of a circle, and continue in the

irection until opposite their respective markers, when they heel another \$\frac{1}{8}\$th of a circle to the right, and march by the right n the marker.

S. 288. (b) To the Right on the Left Regiment.

Brigadier's Caution.—Change Front to the Right ( $\frac{1}{2}$  or  $\frac{1}{4}$  right) is the Left Regiment.

1st and 2nd regimental leaders give the executive command

ECTIONS—ABOUT.

-3rd regimental leader gives the cautionary command Right—Vheel.

Brigadier's executive command Walk—March.

Ist and 2nd regimental leaders give the command RIGHT—VHEEL and FORWARD, after wheeling the 1sth of a circle, new continue at that angle to such a distance that when they were the command to right wheel another 1sth of a circle, their egiments will be marching to the rear of, and parallel to, the ew alignment, when the rear troops of their regiments are lear of the new alignment they give SECTIONS—ABOUT, and march by the lest on their markers.

3rd regimental leader wheels the 1 of a circle, moves forward

he depth of his regiment, and halts.

### GUARDS.

General Instructions for Guards and Sentries.

S. 289. Guards.

1. Commanders of guards are to make themselves thoroughly equainted with all the orders for their guards, as well as with hose on each sentry's post. The standing orders of the guard re to be distinctly read and fully explained to the men as soon s the guard has mounted. Every relief is to be regularly aspected before going to, and also on returning from, its post.

- 2. Commanders and non-commissioned officers of guards wi exercise the greatest vigilance to insure the efficient performance of all duties and to check all irregularities on the part of the guards. The commander will visit his sentries at least twice be day and twice by night, to ascertain that they are alert on the posts and acquainted with their orders, in addition, at freque and uncertain intervals, send a non-commissioned officer with a man to perform the same duty.
- 3. Commanders are never to quit their guards except for the purpose of visiting their sentries, and will then inform the nein command of their intention and probable time of absence They are also to prevent any N.C.O. or soldier from quitting the guard without leave, which is to be granted only for specipurposes.
- 4. Armed parties marching with arms at the secure, or who with side-arms only, will pay and return compliments as u armed parties.
- All guards are to be carefully inspected by the adjutar before mounting and dismounting.
- 6. Neither officers, N.C.O.'s, nor men are on any account take off their clothing or accourtements while on guard.
- Should a fire break out, or any alarm be raised, all guare are to be immediately under arms and await orders.
- 8. In case of sickness of soldiers in arrest they must at one be conveyed to hospital, or the medical officer of the day I sent for.
- 9. All persons should be prevented from loitering about the guard, and no one allowed to bring beer, wine, or spirits to the guard or soldiers in arrest, except a pint of beer at the dinner hour for each man on guard who may require it.

- 10. When the guard dresses in overcoats, account ments are be worn outside of greatcoats. Uniformity in dress must ways be observed by guards and sentries.
- 11. Soldiers on being confined in the guard room or tent ill be searched. Should a soldier be confined in a room or nt other than that of his own corps, a report will as soon as saible be forwarded to his C.O., who will send an escort for m.
- 12. When guards turn out they will fall in with sloped arms d bayonets fixed. When commanded by an officer, he will three paces in front of the centre; with senior N.C.O. on the and junior on left; when by a N.C.O., he will fall in on e right. The trumpeter will fall in three paces on the right the N.C.O. Guards are to Turn out at the commencement the réveille, retreat, and tattoo (last post) sounding, and be refully inspected by their commanders.

They will also turn out at all times when armed parties of any anch of the service approach their posts; to Armed Corps\* ey will present arms, and before other armed parties they ll stand with sloped arms. They will not turn out to unarmed rties.

If a N.C. Officer is in command of a guard he will not present ms with the guard.

Guards will not turn out after retreat or before réveille, except tattoo (last post), on the approach of an armed party, in ses of alarm, or to receive grand or visiting rounds, nor will by during this period pay any compliments, except to grand and, to whom they will present arms.

By the expression "Armed Corps" is meant a regiment of light horse, a battery artillery with its guns, a brigade of artillery without guns, garrison artillery of less than two companies, engineers of not less than four companies, and a battalion infantry with or without colours.

13. Regimental guards turn out to their commanding officer ("presenting arms") once a day, and to the captain and sull altern of the day, "sloping arms," and to other persons according to the orders received.

14. The commander will see that the guard tent is cleaned out by 8.45 a.m., and the immediate vicinity kept free from

rubbish.

15. Guards, including reliefs, rounds, and patrols, will mare with sloped arms and bayonets fixed.

16. In wet weather arms will be carried at the Secure.

### S. 290. Sentries.

- I. Will not present arms to any officer or armed party (except grand rounds) after sunset; but as long as they can discert an officer, they will turn to their front on his approach, at salute with the rifle at the slope.
  - 2. In sentry boxes salute by coming to attention.

3. Are relieved every two hours.

4. Pay compliments as prescribed in S. —

5. Take charge of all Government property near their post

6. Allow no nuisance to be committed on or near their post

7. Deposit their haversacks, water bottles, and caps, who not in wear, in the guard tent, and the greatcoats (except wherequired to be worn) in the sentry boxes.

8. Walk about with sloped arms and bayonets fixed.

- 9. The front, and the extent of the walk, should be point out to each sentry when posted. They must walk to and from their posts in a brisk and soldier-like manner. They must no account quit their arms, lounge, or converse with any or nor must they stand in their sentry-boxes in good or even moderate weather.
  - 10. They will always turn outwards when turning about

11. A sentry will not quit his post till properly relieved,

# S. 291. Relieving or Posting a Guard.

- 1. When the ground admits a new guard will advance in line owards the front of the old guard, and will be drawn up when ossible fifteen paces in front, or when not possible, six paces rom the left of the old guard.
- 2. As soon as this is completed, the old guard will present rms and the new guard will return the salute.
- 3. Both guards will in like successive manner slope arms, rder 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 benging to the old guard will accompany it, to bring in the elieved sentries. If the relief moves in line, he will be on the eft flank, the corporal of the new relief on the right. If in le (or as in file) he will be at the head, the corporal of the new elief on the right of the rear man. As soon as all the sentries re relieved, the two corporals will change places, and the corporal of the old guard will assume command. While the relief marching round, the commander will take over the property a charge of the guard according to the list in the old guard eport, also prisoners (if any).
- 5. When the reliefs have returned, and all the men of the old nard have fallen in, both guards will be called to attention, and ordered to slope arms.
- 6. The old guard will then move off, the new guard presenting
- 7. When the old guard is clear of the ground, the new guard ill slope arms, and if not already there, will move on to the ignment vacated by the old guard. Arms will then be redered, and the commander of the guard will read and extain the orders of the guard to his men. These orders will also

be read and explained to the men forming the first relief wher they come off sentry. The men of the guard will then be dis missed to the guard room.

- S. 292. Relieving and Posting Sentries and Marching Reliefs.
- 1. On the approach of the relief, the sentry, with rifle at the Slope, will place himself in front of the sentry-box. The corporal of the relief will proceed as follows:—

Relief .- Halt. At about six paces from the sentry.

The new sentry will then move out from the relief and fall is on the left of the old sentry, facing in the same direction. The old sentry will then give over his orders, the corporals seeing they are correctly given and understood.

Pass.—The old sentry will move to the place in the relic vacated by the new sentry, and the new sentry will close two paces to his right.

Relief, Quick—March.—The relief will be marched off.

- 2. When a sentry who is to be posted on a new post har reached the post assigned to him, he will be ordered to ha and face in required direction. The corporal will then rea and explain the orders to him.
- 3. The object for which he is posted, the front of his post, an the extent of his beat, will be clearly pointed out to a sentr when first posted.
- 4. Marching Reliefs.—Reliefs of fewer than four men will I formed in line. When of four men or upwards they will I formed in half sections. (In streets and narrow places, relief should always be marched in single file.) When marching i line, the corporal will be on the right; when in single file, of the rear file.

# S. 293. Sentries Challenging.

1. When it becomes dark the sentries will challenge in the llowing manner:—On the approach of a person the sentry will Il out in a sharp tone, Halt! Who comes there? when on a post here a sudden rush could be made upon him, he will at once me to the loading position, with point of bayonet height of an's chest. If the person approaching gives a satisfactory ply, the sentry will say Pass friend; All's well, remaining at ie Slope or (\*Engage), till he has passed. If the person aproaching answers Grand (or Visiting) Rounds, the sentry, if ere is no countersign, will say Pass grand (or visiting) rounds; ll's well; presenting arms as they pass if they are grand unds. But if there is a countersign, he will say, Stand grand r visiting) rounds; Advance one and give the countersign, at the me time coming to the loading position as above. In this sition he will receive the countersign; and if it is correct ill say Pass grand (or visiting) rounds; All's well; and proceed above described. If sentry is on or near the guard room tent door he will proceed as in S.

# S. 294. Sentries Paying Compliments.

On the approach of an officer and when he is at least 15 paces stant, the sentry, if on the march, will halt, front and ope arms; if standing at ease, he will come to attention and ope arms.

He will *Present Arms*, as they pass—(a) to Their Excellencies e Governor-General and Governors; (b) to General and Field ficers when in uniform; (c) to Officers of the Navy entitled ereto, when in uniform. He will only salute all other officers they pass.

To all armed parties (except those which belong to his or guard), whether they are commanded by an officer or not, t sentry will present arms. The party will return the complime by marching at the slope (except when arms are at the seculor when only side-arms are carried) receiving the comma Eyes Right (or Left). If an officer is in command of the parthe will salute in the usual manner on giving the word, Einstein Right (or Left); if a N.C.O., he will not salute.

To all unarmed parties a sentry will slope arms, unless the are commanded by an officer, in which case he will salute according to the rank of the officer. In return, the commander the party gives Eyes Right or Eyes Left, as the case may and if an officer, salutes, and, having passed, gives Eyes Fro

# S. 295. Guards Turning out at Night.

The following form will be observed when a guard is visit by the field officer or captain of the day, termed grand or visiti rounds:—

On their approach the sentry at or near the guard-room do will challenge: Halt! Who comes there? The officer will rep Grand (or Visiting) rounds. The sentry will then call: Guard turn out. The guard will fall in with bayonets fixed and ar sloped, and, if there is no countersign, the commander will cout: Advance, grand (or visiting) rounds; All's well. To grand rounds the guard will present; to visiting rounds the guard will remain at the slope.

If there is a countersign to be given, a N.C.O. with two mof the guard will double out, and when about ten paces from the rounds he will order the men to halt, when they will hand come at once to the loading position with bayonets about he height of a man's chest. The N.C. officer will then repethe challenge: Who comes there? The reply will again

rand (or visiting) rounds, the non-commissioned officer calling: tand grand (or visiting) rounds. Advance one and give the untersign. Rounds will then in a low voice give the countergn, which the non-commissioned officer alone will carry, in ouble time, for verification to the commander of the guard. I correct the commander of the guard will call out, Advance and (or visiting) rounds; All's well. The men will then double ack to the guard, and rounds will advance to the guards, hich will present arms to grand rounds.

### ESCORTS.

S. 296. General Instructions.

For the Governor-General.—1 Officer, 1 Sergt.-Major, 1 Trumeter, 20 Rank and File.

For a State Governor.—1 Officer, 1 Scrgeant, 1 Trumpeter, 2 Rank and File, and will be distributed as per plate.

S. 297. GOVERNOR-GENERAL'S ESCORT.

S. 298. STATE GOVERNOR'S ESCORT.

Note, - Not drawn to scale.

An escort should be told off and formed up in such a manner that its different parties can move off in succession in the required direction without any delay or confusion, and without the advanced parties having to pass across the front of the reaparties. Thus, if the escort is to move towards its right, should be told off from its right; if towards the left, it should be told off from the left. In all cases the N.C.O.'s and me composing an escort must be instructed beforehand as to the exact positions they are to occupy.

The position for the officer or N.C.O. riding by the carriag (unless other special instructions are given) is near the door with their bodies in line with the carriage window. The office in command of the escort should ascertain beforehand on which side of the carriage the principal personage will be seated, an will invariably ride on that side. In most cases it will be on the right, and the following instructions are framed on that supposition. The School N.C.O. takes post on the opposite side of the carriage with the carriage window.

the carriage.

If His Excellency desires to speak with any one, the officer of the escort must drop slightly back, in order to allow the perso to approach the carriage, resuming his original position the instant the conversation is ended. The officer in comman of the escort has a most important duty to perform. He is a all times immediately and solely responsible for the safety of His Excellency. His place cannot be supplied by any one no belonging to the escort, and he must on no account be interfered with by any person. All orders regarding the disposal, dismissal, cloaking, &c., are to be taken from the A.D.C. in waiting The only authorized pace for escorts are the Walk and the Trot

The escort ride with their Rifles at the Advance (Swords at the Carry, Lances at the Trail). The two leading and rear men of the advanced and rear guards respectively in all escorts will

ride with rifles at the Carry (without word of command). The pace is regulated by the carriage, and the different parties of the escort must be careful to preserve their distances from it. In most cases 50 yards is the distance to be maintained between the different parties of the advanced and rear guards of an escort, but this distance may be diminished according to circumstances. As a rule the rear of that party of an escort which immediately precedes the carriage will keep at a distance of about 8 yards in front of the leaders' heads, and the head of the party immediately following the carriage will be-4-yards distance behind the carriage.

On all occasions the greatest care must be taken that the pro-

gress of the carriage is in no way impeded.

Escorts are formed up with rifles at the Advance (swords at the Slope, Lances at the Order) facing the point at which the carriage is waiting. On the appearance of His Excellency the officer in charge will give the commands Royal Salute, Carry Arms (Carry Swords or Lance), on which the officer salutes, and the trumpet sounds. As soon as His Excellency is ready to start, the commands Form the Escort—March, is given, on which the advanced guard immediately moves off at an increased pace until it gains its proper distance, the rear guard remaining still until the carriage has moved past, when it will take up its position. Immediately the escort moves off, rifles will be brought to the Advance (except the two leading and two rear men of the advanced and rear guards respectively), swords to the Carry, and lances to the Trail.

When the destination is reached, the two men of the advanced guard form up at such a distance beyond the point at which the centre of the carriage will draw up (and facing towards that point) as will bring the commander of the escort opposite the carriage door when he is in the centre of the escort. The

remainder of the escort as they reach the advanced men will form upon them on the inner flank. On His Excellency quitting the carriage, the officer gives the command Royal Salute, Carry Arms (Carry Swords or Lance), on which the officer salutes and the trumpet sounds, as at the start.

The escort will form up for the return journey, and march off in the same formation (from the right whenever practicable), and on arriving at its destination will form up in the manner

previously described.

Escorts will turn out in Review Order unless otherwise ordered.

### REGIMENTAL PARADE MOVEMENTS.

POSTS OF OFFICERS.

S. 299. (a) Commanding Officer.

In All Formations.—In front of the centre of the line or leading body, two horses' lengths in advance of the leading officer or officers.

In marching and ranking past in any formation, after passing the saluting point, the commanding officer falls out and places himself by the reviewing officer, except when marching past by wings, or with the regiment in line.

### S. 300. (b) Second in Command.

In Marching and Ranking Past.—In all formations, except wings, in rear of the regiment, one horse's length behind the adjutant (half horse's length when ranking past). In wings, in front of the centre of the rear wing, two horses' lengths in advance of the leading officers.

# S. 301. (c) Adjutant.

In Marching or Ranking Past.—In all formations, one horse's length in rear of the serrefile rank and on that flank of the rear unit which is the nearer to the saluting point.

# S. 302. (d) Squadron Leader.

In Marching, Trotting, and Galloping Past by Squadrons.— One horse's length in front of the line of troop leaders, opposite the centre of his squadron. In regiments with colours, the leading squadron commander is one-horse's length in front of the colour.

In Ranking Past.—In front of the squadron, half horse's length in advance of the first troop leader.

NOTE.—In regimental parade movements, after passing the saluting point the squadron commander falls out to the right, and places himself on the right of the commanding officer while his squadron is ranking past.

# S. 303. (e) Staff Officers.

In one rank at close files, at two horses' lengths interval, on the right of the adjutant.

# S. 304. (f) Trumpeters and Band.

As a rule, during the parade movements, the trumpeters will be formed with the band which is posted on the right of the staff at one horse's length interval from them.

If the band is not present, the whole of the trumpeters will usually be formed on the right of the staff officers, at one horse's length interval from them. The commanding officer's trumpeter is half-horse's length to the flank and to the rear of that officer, on the flank further away from the saluting point.

## S. 305. Inspection or Review of the Regiment.

The regiment is formed in Line, or Line of Column of Half-Squadrons on the ground where the reviewing officer is to be received.

A point is marked about 150 yards in front of the centre, at which the reviewing officer will generally take his station.

On the command Officers, to the front—March, the officers Carry Swords, and with the colour bearer come to the front in the intervals between the troop leaders, they are dressed By the Right by the 2nd in command, and he gives the command, Eyes Front when completed.

Squadron leaders do not repeat the words of command while

the regiment remains stationary on the parade line.

When the reviewing officer presents himself before the centre of the regiment, the command General Salute, Eyes Centre, Carry—Arms is given and the officers taking the time from the regimental leader salute. The colour salutes such persons only as are entitled to that honour. The band plays the first part of a slow march, or trumpets sound, according to the reviewing officers' rank, after which the officers (taking the time from the regimental leader) recover and carry swords.

The reviewing officer then goes to the right, accompanied by the commanding officer, and passes along the regiment, the band playing or trumpets sounding until he leaves the line.

When the inspection is completed, the command Advance Arms is given, on which the officers slope swords, and Officers Take—Post, when the officers and colour bearer move to their former positions.

## S. 306. FORMATION FOR REVIEW IN MASS.

The staff, except the adjutant, will be in rear of the centre at a horse's length distance; the band three horses' lengths in

rear of the staff. If required, the staff and band may be formed on the right, at the same intervals as when the regiment is in line.

Before the reviewing officer arrives on the ground, the commanding officer gives the command Officers, to the front—March, on which the officers (except the staff officers) come to the front at the trot, and take post at one horse's length in front of their squadrons.

While passing down the line, during the inspection of the ranks, the trumpeters of general and commanding officers will

ride together in rear of the party.

### S. 307. MARCHING PAST.

The regimental leader gives the caution, The Regiment will March Past in Squadron Column. Troops, Right Wheel—Walk, March. The staff (except the adjutant) fall out and remain in

rear of the saluting point.

Markers are placed by the adjutant as follows:—B and C about 60 yards on the right and left of the saluting point. A at such an interval from and on the left of B to allow sufficient depth for the regiment to form mass (i.e., about 70 yards). D about 70 yards interval from and on the right of C. The markers keep their arms at the Carry while the regiment is marching past. The band marches in front of the column.

When the leading troop arrives at a point opposite marker A the regimental leader gives the command *Head Left—Wheel*, and directs the march on marker A. A similar change of direc-

tion is made when within wheeling distance of marker A.

On all occasions when marching past by squadrons, wings, or regiments, either at the walk, trot, or gallop, the colour bearer and escort post for marching past when the leading body wheels into line from column of troops at the commencement of the

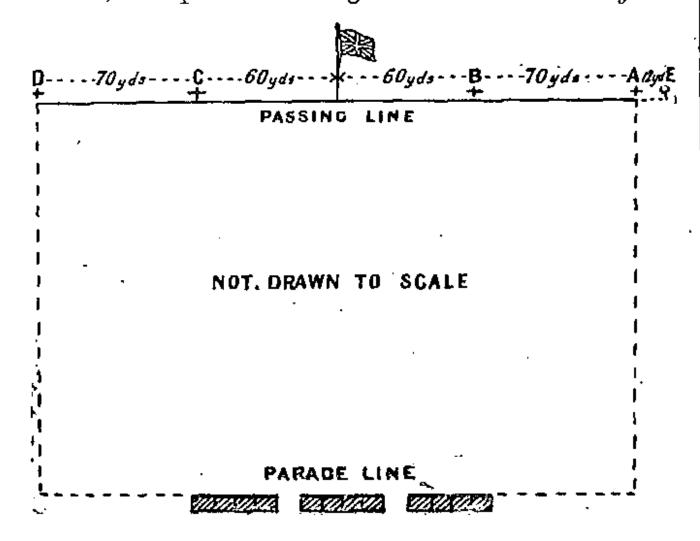
passing line. They resume their ordinary posts in column of reaching the end of the passing line at the fourth marker.

When the squadron arrives at marker B, the squadron leade

gives the command Carry Arms.

The band (or trumpeters, when there is no band), six horses lengths in front of the commanding officer, commences to play immediately after the leading troop has wheeled on to the passing line at A, and, after passing the reviewing officer, it wheels to the left, clears the flank of the column, then wheels to the left about so as to take up a position opposite the saluting point and plays while the regiment is passing.

When the leading troop of each squadron arrives at the marker B, the squadron leader gives the command Carry Arms



Eyes Right, on which the troops dress by the right, and continue to do so until opposite marker C. The serrefiles dress by the right. While passing from B to C it is the duty of the man on the flank of each troop which is the nearer to the saluting point to keep the flank exactly upon the line of markers.

The officers, when at 10 yards of the reviewing officer, commence the salute. The serrefile officers, if more than one, take the time from the officer on the right of their rank. At 10 yards beyond the saluting point the officers recover and carry their

swords.

# S. 308. Officers' Salute in Marching Past.

First motion: 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, edge to the right.

Second motion: Bring the sword by a circular motion to the

Recover, keeping the elbow as high as the shoulder.

Third motion: Still keeping the elbow to the height of the shoulder, bring the hilt to the right shoulder, hand as high as the elbow, during this motion let the finger nails come in line with the edge of the sword.

Fourth motion; Lower the sword to the front to the full extent of the arm, the point over the right foot, edge to the left, thumb extended in the direction of the point, elbow very slightly bent, hand directly under and not in front of the shoulder. The four motions should be combined in one graceful movement. If mounted, slow time, and dismounted, quick time.

When each squadron arrives at marker C, the squadron gives the command Advance Arms, Eyes Front.

The squadron leaders wheel their commands to the left on the marker D.

#### S. 309. MARCH PAST AT THE TROT.

The regimental leader gives the caution Trot Past by Troops (or Squadrons).

If the trot past is to be by squadrons, each squadron is formed

in line as it arrives on the passing line.

At the marker B squadron leaders give the command Carry Swords, and at C Slope Swords. Rifles are kept at the Advance, and troops look to the front.

#### S. 310. MARCH PAST AT. THE GALLOP.

The regimental leader gives the caution Gallop Past by Squadrons. This movement is generally performed by entering the passing line at marker D. At marker C each squadron leader gives the command Carry Swords, and Slope Swords at B, and is wheeled off the passing line at A.

After galloping past, the bands will at once clear the front at the trot, and move to the position indicated by the staff officer. The troops will usually form line of squadron column facing the saluting point, or, if the space is restricted, line of masses.

The officers will carry their swords as usual, but the men will keep their arms at the advance, and troops look to the front.

As soon as all the squadrons have wheeled off the passing line at A, the commanding officer gives the command *Trot*.

The regiment, on arriving on the original parade line, is again formed as before, or otherwise as ordered.

The markers, on the conclusion of the march past, rejoin their regiment.

The line of officers is dressed, from the flank towards which the dressing is, by the second in command or adjutant.

The reviewing officer is received as described for a regiment in line.

On the conclusion of the inspection of the ranks, the commanding officer gives the commands Advance Arms, Officers take Post, March.

### S. 311. ADVANCE IN REVIEW ORDER.

If the regiment is to advance in review order at the conclusion of a review, it will be formed as required on the original parade line, the band being formed in rear of the centre at three horses' lengths distance from the serrefile rank. The commanding officer gives the caution Officers to the Front, on which the officers move to the front and take post as before. The commanding officer then gives the words Advance in Review Order, Carry Arms, Walk -March, officers carrying swords on the word March, on which the regiment will advance by the squadron of direction until within 40 or 50 yards of the reviewing officer, when it will be halted and receive the command General Salute, Eyes Centre, the officers saluting and the band playing in the same way as when receiving the reviewing officer. During the advance, the band commences to play on the command March, and ceases on the command Halt. After the officers have recovered and carried swords with the commanding officer, the regiment will wait for orders.

The commanding officer will subsequently give the command Advance Arms, Officers take Post—March.

In the advance in review order, squadron commanders only repeat the command *Halt*.

# S. 312. The Brigade.

The bands will be massed 25 yards in rear of the centre, standing in the same order as their respective regiments. When formed on parade for inspection the brigadier is ten horses' engths in front of the line of commanding officers. Staff officers we horses' lengths in rear of them, one horse's length interval

from one another. Gallopers one horse's length in rear of staff officers, except when the staff, including gallopers, does not exceed four officers in number, in this case, the staff will form in one line.

If the brigade is formed for the review or inspection of a royal personage or superior officer, on the latter presenting himself, the brigadier will give the command Attention, Royal (or General) Salute, Carry Arms, the time being taken by commanding officers from him. The officers will have been brought to the front before the royal personage or superior officer is received. If the latter inspects the troops, the brigadier will accompany him during the inspection, but commanding officers will remain at their posts. The brigade staff while passing down the line will precede the brigadier by two horses' lengths. Gallopers one horse's length in front of the staff.

When a brigade has been directed to form up for inspection a squadron of one regiment is named as the squadron of direction, the two markers of that regiment take posts outside the points where the right and left of the squadron of direction will stand when at Order, and the markers of the other regiments mark the points where the right and left flanks of their respective regiments will stand, dressing upon the markers of the base regiment. In the absence of the staff officer, the adjutant of the regiment furnishing the base squadron will, as on all similar occasions, place the base marker and superintend the dressing.

The march past will usually be conducted in the same order a is laid down for the single regiment, regiments moving off is succession. When marching past in any order of formation column distance will be kept between regiments and brigades in ranking past, the distance between them will be eight horses lengths.

The intervals between the markers, who will be posted as uring the parade movements of the regiment, must be regulated

p suit the ground and the number of troops on parade.

When the markers move out or on the order of the staff officer, he bands will trot through the nearest interval, and form in ne at marker B, ready for marching past and awaiting the order of advance from the staff officer.

While on the passing line, the brigade-majors and aides-deamp are two horses' lengths in front of their brigadiers, and at ne horse's length interval from each other, the gallopers (if resent) being one horse's length in front of the staff officers. Brigadier are two horses' lengths in front of the commanding fficers of their leading regiments. Officers salute as in the arade movements of the regiment.

When marching past the brigadier falls out after saluting, and laces himself at the saluting point while their brigades are passing, their aides-de-camp and trumpeters accompanying them.

The staff officers at the head of the column follow the bands t sufficient distance to insure their clearing their front on wheeling off the passing line. The bands wheel to the left after passing the saluting point, wheel again, and form facing the rejewing officer, at a sufficient distance from the passing line allow the troops to march past in the order of formation equired.

## 313. TACTICAL EMPLOYMENT OF LIGHT HORSE.

The predominant characteristic of Light Horse is the action the man and horse combined.

It is the power to move with rapidity and cover long disnces in a comparatively short time, that gives to Light Horse s great moral and material effect, and enables it to combine oth attack and surprise to the best advantage. At times, when acting independently, or with Infantry, is will have to adopt the method applicable to the prolonged at tack of a position, involving the employment in the initial stages of a thin firing line, and the subsequent gradual strength ening thereof by the sending forward of supports and reserve until a firing line of the maximum possible strength is established as near the position as possible, with a view of securin superiority of fire, before delivery of the final effort.

But sometimes the detached nature of the employment devolving upon Light Horse in connexion with the fight, whe acting in conjunction with the other arms, and frequently where acting alone, will make its striking by this method highly undesirable, and a long fire fight will be unsuitable; for example in outflanking movements, in striking at the opposing mounted troops, in the pursuit, &c. The effective employment of the fire action by Light Horse in such cases is dependent on knowledge of the power of the rifle, combined with a thoroug acquaintance of the advantages to be derived from rapid an concealed movement.

In such attacks long advances on foot should seldom be undertaken, but the gaining of the object in view should be largely secured rather by surprise and rapidity. Endeavous should be made to advance rapidly mounted as near as possible to the fire position, adopting such formations as will enablefull advantage to be taken of the concealment afforded by the ground. In some instances it may be found expedient to move mounted in extended order over open ground to the first fire position.

Subject to the providing of the required reserve, it will be preferable to employ the maximum available number of rifles a soon as possible, and to develop the greatest fire effect from the moment it is decided to open fire, which will usually be attained

best by rapid bursts and by concentration of fire; when favorable targets present themselves, the utmost rapidity of fire compatible with accuracy should be aimed at.

Economy of ammunition is of great importance; this should be effected, not by limiting fire when needed, but by judiciously

timing its use.

The rapidity with which Light Horse can change position, combined with the increased effect of enfilade fire, due to the long range of modern rifles, materially favours the employment of outflanking movements. Leaders should, therefore, be on the look-out for opportunities to force the enemy to give ground by unexpectedly occupying positions enfilading his line. The employment of machine guns on such occasions may be most effective.

It is necessary that the leader should possess the power of quickly breaking off the fight and resuming it, if necessary, from some more effective direction. For this reason, as well as to secure mutual support, a complete system of communication between the Commander and all his subordinates is essential, led horses, as a rule, being kept, as close as possible.

In pursuit of a demoralized force, Light Horse may, by galloping well upon the enemy's flanks or rear, and with rapid

fire action, be able to convert the pursuit into a rout.

The machine gun possesses the power of delivering a volume of concentrated rifle fire, which can be rapidly directed against any desired object. Rapid fire cannot be long sustained, owing to the expenditure of ammunition involved, and it is therefore necessary that the movements and fire action of these weapons should be regulated so as to enable them to open fire immediately a favorable opportunity arises. Surprise is an important factor in the employment of machine guns, which should be concealed, and whenever possible, provided with cover from fire.

Machine guns are best adapted for use at effective infantry ranges, but when good cover from fire and view exists, they may be usefully employed at close infantry ranges.

## INFORMATION.

# S. 314. General Principles.

- 1. Timely information regarding the enemy's dispositions and the topographical features of the theatre of operations is an essential factor of success in war. Systematic arrangements must always be made to insure that every possible source of information is fully utilized, that all information received is immediately transmitted to the proper quarter, and that it is carefully sifted before any conclusions are formed. This is the duty of the general staff.
- 2. Information in war may be obtained from maps and reports prepared in peace, by reconnaissance, by means of special agents, from statements of inhabitants, by tapping telephones or telegraphs, from newspapers, letters, telegraph files, and documents found in the area of operations, from statements of deserters, prisoners, and sick or wounded left behind by the enemy.
- 3. All documents captured from the enemy, or found in places recently occupied by the enemy, or by a hostile population, and any information obtained which may be of value, should be forwarded without delay to the nearest general staff officer. Should the captor or finder be unable to forward the documents immediately, he should make arrangements for their preservation and forward them as early as possible. The state-

nents of inhabitants, deserters, and other persons bringing inormation, should be taken down and similarly forwarded, and he persons themselves sent on as soon as possible.

- 4. Reconnaissance is the service of obtaining information with regard to :
  - i. The topographical features and resources of a country.
  - ii. The movements and dispositions of an enemy.

In the latter case it may be strategical, tactical, or protective.

5. Strategical reconnaissance is required before the opposing rmies are within striking distance of each other for the purpose of locating the hostile columns, ascertaining their strength and lirection of march, and thus affording the Commander-in-Chief information on which to base his strategical plan of operations.

Tactical reconnaissance of the enemy is required when two forces are within striking distance of each other, for the purpose of discovering the tactical dispositions of the opposing force, and thus furnishing the commander with information on which to base his tactical plan of operations.

Protective reconnaissance\* is required by every force at all stages of the operations, whether at the halt or on the move, to usure the security of the force against hostile enterprises and prevent the enemy gaining information.

Patrols whose objective is to reconnoitre the enemy, regulate their movements according to the position of the hostile forces; on the other hand, patrols, flanking detachments, piquets, cossack posts, and similar posts of observation for protective purposes, regulate their movements with reference to the force covered. It is absolutely necessary that the two systems should be kept separate, and that each patrol should know clearly for which purpose it is intended.

Protective reconnaissance is dealt with under "Protection."

6. Whatever the nature of the reconnaissance may be, touc with an enemy, when once obtained, must never be lost withou orders from superior authority.

# S. 315. Strategical Reconnaissance.

1 To obtain for the Commander-in-Chief the information h requires, is the first duty of the independent cavalry, which will push into the zone separating the two armies in the direction i which it is desired to reconnoitre. In this area the hostil cavalry will usually be operating; and until it has been dis posed of, the independent cavalry will find it difficult to obtain satisfactory information regarding the enemy's columns. the enemy's cavalry has been defeated, the independent cavalr will be free to concentrate its efforts upon breaking through th hostile covering troops and discovering the dispositions of th enemy's main forces. Other special tasks may also be assigne to the independent cavalry, such as intercepting the enemy movements, raiding his communications, and seizing important strategical points. As much cavalry as possible shoul be detailed for these strategical missions, whilst for other pur poses the number of squadrons should be reduced to what actually necessary.

2. The commander of the independent cavalry will receive from the Commander-in-Chief definite instructions as to the rôle he is to fulfil, but should be allowed complete freedom of

action in accomplishing it.

It may be advisable for the independent cavalry to avoid collision with the hostile cavalry when the latter is in superior force, provided such a course is compatible with the fulfilment of its primary duty, which is to obtain and communicate information as to the hostile main columns. In such cases the cavalry may sometimes be supported by detachments of infantry with advantage.

B. To obtain the requisite information, the independent valry commander will despatch such strategical patrols as may consider necessary towards the probable lines of the emy's advance, and towards any places where signs of the emy may be found. The number and strength of these dehments will vary with the circumstances of each case. The st suitable unit for actual reconnaissance and for maintaint touch is a patrol of from ten to twelve strong; larger unit I find it difficult to escape observation.

When reconnoiting detachments have to proceed to conerable distances, and touch has to be maintained continuously several days, it will be necessary to employ one or more stact troops or contact squadrons to provide the patrols their iefs and despatch riders. These units will also serve as vens of refuge for patrols, and as collecting stations for infortion. While the commander of a reconnoiting detachment at use every endeavour to insure the timely arrival of his ormation at head-quarters, the commanders of larger units lowing in his rear must assist him by pushing forward conting posts or other detachments as the situation demands.

- In country which is very enclosed or otherwise unfavore to the employment of cavalry, detachments composed of antry and cavalry will often give good results. The infantry ble to assist the cavalry in the actual fight, and affords the valry freedom to reconnoitre, even while its infantry is actually aged with the enemy.
- 5. To enable commanders of detachments employed on this onnaissance to distinguish between what is important and mportant, they should be given all available information arding the enemy, and be told the intentions of the superior number.

### S. 316. Tactical Reconnaissance.

- 1. Tactical reconnaissance is one of the most important dut of the protective cavalry, who when touch with the enemy gained will assume a vigorous offensive, drive in the enem advanced troops, and discover his dispositions and intentio; It may be necessary for the protective cavalry to concentry to carry out this duty, in which they will be supported by advanced guards of columns. The extent to which the in pendent cavalry will be able to co-operate with the protect cavalry in breaking through the enemy's covering troops this stage, or when the opposing armies are drawing near eq other, will depend upon the situation and the command plans. It will often be advisable to support the protect cavalry with infantry and artillery, in addition to the suppl which it is the duty of the advanced guards of columns to r der, in order to tear aside the screen with which an enemy m have surrounded himself.
- 2. While the advanced troops are engaged with the ener information may also be obtained
  - i. By personal observation on the part of a commande
  - ii. By general staff or other officers, patrols, or scouts.
  - iii. By observations from balloons.

The success of each of these forms of reconnaissance will pend to a great extent upon the thoroughness and energy which the protective cavalry and the advanced guards hacted on coming in contact with the enemy. Reliable information as to the enemy's main forces will rarely be obtained wout fighting.

Though reconnaissance has been here considered children the point of view of the cavalry, it is equally the duty

antry, when in touch with an enemy, to obtain all the inforation possible, both of an enemy and about the ground over nich it may have to act.

- S. 317. Personal Reconnaissance by a Commander.
- 1. The extent of ground occupied by a large force will often event its commander from personally reconnoiting the whole the ground on which his troops may be engaged. When this the case it may often be advisable that the personal reconissance by commanders should be limited to commanders of visions and smaller units, and that the commander of the ce should rely upon reports which have been rapidly transted from the front and prepared for him by his general staff, personal reconnaissance which can only be partial may result too much importance being attached to what has been seen the expense of what has not been seen. A motor car will en enable a commander to reconnoitre rapidly an extended nt, and a commander even of a large army should rarely lit to reconnoitre personally if it is possible for him to obtain breby data for a comprehensive review of the situation.
- 2. Time spent in reconnaissance is seldom wasted; and less the situation demands instant action, a commander of livision or of a smaller unit should never commit his troops to engagement until he has made a personal survey of the ground.

fore him.

- S. 318. Tactical Reconnaissance by Patrols.
- I. As the commander of a force will form his plan of action the result of the tactical reconnaissance, officers and scouts ployed on it must be highly trained, have considerable techal knowledge, be quick and intelligent observers, be possed of judgment and determination, and, if belonging to unted arms, be well mounted.

- 2. The increased range of modern firearms compels scouto keep further away from an enemy than formerly, thus makin it more difficult to see and reconnoitre; whilst the introduction of smokeless powder makes it difficult to locate him, even when his fire has been drawn. But if patrols have been in tour with the enemy during his march (when the number, strength and distribution of his columns can be more readily ascertained it should be possible, by comparing their reports with those of the scouts engaged in tactical reconnaissance, to form fairly accurate idea of the enemy's preliminary dispositions for battle.
- 3. General staff officers should be detailed to accompant the advanced troops, in order to assist in the tactical recornaissance, and provide the commander with such information on special points as he may require. Commanders of division artillery or their representatives should take part in this reconnaissance.
- 4. When the opposing forces are near each other, and paticularly when the country is close, infantry may often be en ployed with advantage to attract the enemy's attention a means of surprise attacks, and so enable patrols to pass through is covering troops at other points. Cavalry should be use for these patrols when the country is suitable and mobility cape turned to good account. If the conditions are unsuited the employment of cavalry, infantry patrols and scouts shoutake its place.

S. 319. Balloon Reconnaissance.

1. The technical balloon officer should be told what inform tion it is desired to obtain, and given as free a hand as possible as regards time and place of ascent. The observers should fully acquainted with the situation and provided with the bemaps and glasses procurable.

- 2. Captive balloons and kites may be employed
  - i. To obtain information of the enemy's position and of the movements of any considerable bodies of troops, when in such close touch that the cavalry can no longer make progress.

ii. To obtain targets for and direct artillery fire.

- iii. To ascertain the position of our own troops on the fieldof battle.
- iv. To ascertain the nature-of the ground to the front or to a flank.
- 3. The radius of action of a balloon under normal conditions ground and weather may be taken as from 5 to 6 miles. For tended reconnaissances a balloon should not ascend within niles of the enemy's artillery. For short observations, hower, it may even ascend close to the most advanced troops, the detachment working the balloon must always be screened on the enemy's view; and there must be cover from view for a balloon when close to or on the ground. Good observation artillery fire can usually be made at distances of 7,000 yards, further in the case of heavy artillery.
  - S. 320. Reconnaissance of a Position.
  - In reconnoitring a position with a view to attack, informain should be obtained on the following points regarding the bund:
    - i. The extent of the position.

ii. The weak parts of the position.

iii. Any point or points the capture of which will facilitate the development of a searching enfilade or reverse fire against a large extent of the position, and thus render it untenable; and to what extent such point or points have been strengthened.

- iv. The best line of attack, and the tactical points of which the possession will favour the development of a effective fire against the weak parts of the position v. Localities from which covering fire can be directed.
- 2. When it is intended to occupy a defensive position, the chief points to be noted are
  - i. The best line to be occupied by the infantry, and the means of protecting the flanks.
  - ii. The positions for the artillery.
  - iii. The positions which the enemy may endeavour to seiz in order to develop an effective fire against the postion.
  - iv. The probable positions of the enemy's artillery
    - v. Any points the possession of which might exert a decisive influence on the issue of the fight.
  - vi. The most favorable lines of attack.
  - vii. The most favorable ground for the counter attack.
  - viii. Ground to be occupied by the general reserve, by the cavalry, and by the other mounted troops.
    - ix. Positions to be occupied in case of retreat.

## S. 321. Reconnaissance during Battle.

When two forces are engaged the reconnaissance must be continued throughout the entire action, arrangements being always made for continuous observation of the enemy's movements at for the rapid transmission of reports. In addition to patroworking round his flanks and rear, to the work of infantry scourand to the cavalry action on the flanks, general staff officer acquainted with the commander's intentions, should be post-at commanding points on the field of battle to communical intelligence to head-quarters.

- S. 322. Transmission of Information.
- 1. The value of information depends to a great extent on the ngth of time that has elapsed since the events occurred to hich it relates. It is of the first importance that information ould be communicated with the least possible delay to the mmanders for whose benefit it is intended. The authority adding out reconnoiting detachments of any kind must there re see that the means of communication are so organized as insure rapid transmission of any information which those etachments may obtain.\*
- An officer of the general staff with the independent cavalry ould be specially charged with the duty of maintaining comunication, under the direction of his commander, between the dependent cavalry and Army Head-Quarters. But, to save elay, arrangements should be made to transmit all really impresent information direct from the reconnoitring detachents to Army Head-Quarters as well as through the usual namel. It will often be found convenient to arrange for lays from the divisional cavalry for the conveyance of inforation from the protective cavalry.
  - S. 323. Method of Carrying out Reconnaissance.
- 1. Reconnoiting forces consist usually of mounted troops, cept when in close proximity to the enemy, when this duty ay devolve on the Infantry. Their strength depends on the ture of their mission, due allowance being made for the ansmission of reports. Not a man or horse more than is repired should be employed. It should be remembered that a w bold men can often bring back information which a larger ody of men would find it impossible to obtain.

<sup>\*</sup> For the methods of transmitting information, see Chapter II. Field Service egulations, Part I.

- 2. The authority sending out a reconnoitring force should funish its commander with instructions on the following points:
  - (a) On what points information is specially required.
  - (b) Approximately to what distance and in what direction he has to go.
  - (c) About how long he may expect to be away.
  - (d) Where he is to send in reports, and by what means.
  - (e) What is known of the enemy.
  - (f) The probable moves of his own main body or of oth detachments.
- 3. After receiving his instructions and forming his plan action to meet them, the commander should explain the whole or as much as may be desirable, to his subordinates, so the every man will know how to carry on the duty in the event accidents. Common sense must guide the movement and conduct of a reconnoitring party. There is no fixed rule for the formation of a patrol or party for reconnaissance, but it should be arranged so as to be of the best form for obtaining information, and for avoiding capture.
- 4. Moving by night up to the neighbourhood of the enem and then observing him from a concealed position by day, we often result in successful reconnaissance, which could not otherwise be carried out. Information may be obtained by caturing enemies' scouts engaged in similar work; this may often be effected by lying out for them in likely places at night are early dawn.

When moving by night or at dawn in an enemy's country, commander must not allow his men to strike matches ar smoke.

When moving by day, every means must be taken to avoid ing seen by the enemy, or by the inhabitants. If seen, the emy should be deceived as to the commander's intentions outs should move as little as possible on the roads, because ey will be looked for on them. They should keep in the adows as much as possible by day or at night. A bright ton, and even the polished seat of a saddle, may disclose e presence of an otherwise hidden patrol. Every precaution ast-naturally be taken to prevent surprise when moving or lted. Small reconnoiting parties should not rest altogether one place, but should remain scattered, so that all will not captured at once if suddenly attacked.

i. The commander of a reconnoitring body must at all times te the necessary measures for the protection of his command linst surprise.

He should, as a rule, endeavour to mislead the inhabitants to his intentions, the direction of his march, and the purpose

his superior.

No man should carry any written instructions or private ries, or papers, such as might give information to an enemy to were captured. Bogus notes may be carried for the pure of misleading an enemy in such an event.

Any place that is likely to harbour an ambush, such as od, ravine, village, &c., if it cannot be passed by a flank move, at be approached with full precaution, that is, by sending anced scouts forward or round it before getting the whole rol within its reach. It is usually best for advanced scouts move quickly when near such a position, and to get round flanks and rear as rapidly as possible.

dvanced and flank scouts should have a free hand in carryout their work of feeling the way for a patrol, and this is best done by getting quickly from one good look-out point another, and then keeping hidden while they take a good look round to see if the ground is clear for another onward move.

- 9. If the enemy is not found where he was expected, vice versa, information to this effect should usually be so back.
- 10. Patrols are not as a rule intended to fight, unless wi the object of getting a prisoner for information, or for breaki through a weakly held point, and they must remember the such action generally draws attention to their presence, which what they should avoid. The usual course on sighting enemy's patrol would be to lie hidden and let it go by, keepi a look-out for capturing any orderlies it may send back wi messages later on.
- 11. If a patrol is cut off by the enemy, its members must ma every effort to get away, so that at least one may arrive be with the information already gained. If only threatened, to patrol should spread out and edge away until night comes on necessary breaking up and collecting again at the last haltiplace or other pre-arranged spot. For this reason, every member of a patrol, while advancing in an enemy's country, mustake notice of all landmarks and distances as he goes along, as to be able to find his way back, alone if necessary, either the last halting place or to the main body. In doing this, should not adhere actually to the road by which he came, that may lead him into ambuscades.
- 12. When scouts are sent to a long distance from th patrols, they should usually work in pairs. Scouts and patroust always be prepared to be out for several days.
- 13. Men who are accustomed in peace time, to work at nig will succeed in scouting, where others will fail or lose their live

- 18. Patrols should not return by the same route as they go ut by.
- 14. By training in peace time, officers and scouts should get be know what points to notice and what to reject in obtaining a formation.

Information may be gained by personal observation of the nemy; by questioning the inhabitants, prisoners, and others; y reading signs, such as tracks, dust, fires, deserted camprounds, uniforms; or by tapping telegraph wires, taking etters and newspapers from post-offices, &c.\_\_\_\_\_

- 15. In questioning prisoners, or hostile inhabitants, it is well a take them separately out of hearing of others, to let them uppose that you know a great deal more about the enemy than ossibly you do know, and that you are putting some of these uestions merely with a view to seeing whether they are speaking the truth or not, assuming that you know the answers.
- 16. People not accustomed to seeing large numbers of troops re very apt to exaggerate their strength, a point which a scout hould be careful to avoid. Information as to the uniforms of he enemy, number of regiment on the buttons or badges, may e of use.

A scout should know what are the usual formations of the nemy, and what are the usual strengths of his different organizatons.

17. If troops are moving along a road or defile, they may be med while passing a certain point. For each minute, the flowing numbers would approximately go past:—

- 18. Scouting cannot be learned from books, but only by the zeal, intelligence and practice of the man himself; a scout must be impressed with the feeling that, in practice as well as a service, he is implicitly trusted by his officer to carry out he work honestly; to attain success, he must combine great plud with great cunning; he must be prepared to sacrifice himself necessary, and in all cases the greatest personal credit are honour are open to him as the result of his work, whatever make his rank.
- 19. A scout must be able to find the way in a strange country first, by practical map reading; second, by memory of the map third, by knowledge of stars, sun, and compass, &c.; fourt by landmarks; fifth, by questioning natives of the country As maps may not always be available on service, scouts shou be practised in working without their aid.

It should be a habit with him to notice the general direction

taken and changes of direction subsequently made.

He should be practised in observing the same distant objetoth with and without glasses; in noting small signs or detail both far away and underfoot; distant sounds and their meatings; in making uses of the senses of smell and hearing for night work.

It should be a point of honour with a scout that nobody shabe able to draw his attention to any small detail either far

near that he has not already seen for himself.

His attention should be drawn to the great importance taking cover and of selecting a background to suit the color of his clothing, &c.; importance of remaining perfectly still concealment of horse by making him lie down or keeping head towards enemy; avoiding sky line; the use of trees selecting look-out points when on the move, and getting fro one good one to another quickly, and unseen.

A scout should know how to save his horse on a long reconaissance; how to water, feed, and rest his horse; how to letect and how to treat lameness; how to prevent and how to reat galls.

20. The following should be noticed as affording informaion:—

Clouds of dust show movements of troops, or baggage, or attle, &c. In some countries, it is customary to set fire to rass or bush so that the smoke may-hide the dust of a movement.

Fires.—In many countries, also, it is customary to light signal res to send up a flare by night, or puffs of smoke by day. This atter is done by lighting a damp fire, and alternately covering t with a blanket and uncovering it.

Such signals, when seen, naturally indicate the presence of an nemy; they may also often be used with advantage by our own pok-out posts, scouts, &c.

The enemy's bivouac fires should be located, and counted in he evening or early morning. It is a common and useful tractice to light dummy fires to deceive the enemy's scouts.

Tracks.—Tracking is an invaluable aid to scouting, and skill herein can be acquired only by constant practice.

Tracks, by the nature of the marks of the feet, hoofs, wheels, &c., give warning of enemy's patrols being about; show the ormation, direction, and speed of his force, and are an indication as to the time when the force passed by.

Sounds.—Since much of a scout's work has to be done at right, it is necessary that he should not fail to make every use of his senses of hearing, and of smell, as well as of sight.

Mirage.—Heat vapour often causes curious effects on the appearance of open country, and these are very liable to deceive a scout who is not accustomed to them; lakes appear when there is no water, trees look like mountains, cattle like cavalry and so on.

Vacated Camp Grounds.—Much information can often be gained by visiting a camp ground recently vacated by enem. The state of his troops, and commissariat, transport, &c., can be judged by what is left in the way of abandoned animals of vehicles, remains of food, fires, and signs of tents, hospital rubbish, and so on. The freshness of the camp can be judge by the droppings and ashes of the fires.

# S. 324. Reports.

- 1. In reporting on an enemy, accuracy as regards time places, the position, approximate strength, branch of the service formation, and direction of march, &c., of the troops reporte on, is of the first importance. Names should be hand printed.
- A verbal report should be given without hurry or excite ment, otherwise both hearer and speaker are liable to become confused.

Reports from strategical reconncitring detachments shoul usually be in writing; those from tactical reconncitring patro will normally be verbal.

3 It is more important that the information contained in report should be relevant and accurate, and should arrive it time to be of use, than that the report should be long of elaborate. This applies to written and to verbal reports anto sketches.

- 4. Common sense and a moderate capacity for sifting evience should prevent inaccurate or misleading information being ent.
- 5. In furnishing information, a distinction must be clearly rawn between what is certain, and what is presumed or inferred, he source of information should be given, and the reasons for irmises.
- 6. Negative information and the repetition or confirmation of formation-already sent are of importance. For a commander have positively that the enemy was not or was still in a ertain locality at a certain time may be of great value. It is ften advisable that fixed times should be laid down for rendering reports containing information of this nature.
- 7. A plan or panorama sketch is a useful adjunct to a report, and it is often possible and convenient to dispense with the latter and to convey all essential information on the former. Clearess and relevancy are required, not artistic effect. Ranges in ards to conspicuous points should as far as possible be indicated a such sketches.

A plan sketch should be drawn roughly to scale, the scale eing indicated both by drawing and in words.

Important points, e.g., width of a road or stream, whether a ailway is single or double, &c., should be described in words or igures.

The true north should always be indicated.

A table of conventional signs used in military sketches is given in the "Manual of Map Reading and Field Sketching."

The place from which such a panorama sketch is executed, and the direction in which the sketcher is looking, should be clearly indicated.

## S. 325. Details for Reports.

The following are some of the points to be noticed in furnishing reports:—

It is not intended that the reconnoiterer should be limited by these; he should add to them any further points of value.

Ambush.—Notice any likely place and describe nature of cover, i.e., whether bush, wall, rock, ditch, &c.; how near the enemy's line of approach, way out.

Bivouac.—State how sheltered or concealed, nature of ground

surrounding ground, water, fuel, defensibility, exits, &c.

Bridge.—Material, length, width, height above water, parape (and its height, material, &c.), whether capable of bearing heavy traffic, such as motor transport, &c., nearest repairing materials, nature of river (see River) approaches.

Buildings.—Height, length, material, roof, water-supply surrounding ground, fences, command of view, outhouses

thickness of walls.

Bush.—Extent, height, nature, density, paths.

Canal.—See River.

Camp Ground.—Extent of ground, whether flat or sloping water, nature of soil, fuel, defensibility, neighbouring supplies

proximity to roads, &c.

Country.—Whether flat, undulating, hilly, open or enclosed cultivated or not, thickly or thinly inhabited, soil, surface, and nature of roads, railways, telegraphs, landmarks (such as churches and windmills), whether suitable to moves of troops off the roads, villages and farms; defiles, rivers, bridges, &c.

Defile.—Nature, whether commanded by neighbouring ground, length, width, ground, on near side and beyond defile

ground for flanking parties, &c.

Enemy.—Numbers, how far off, which direction, what arm what doing, at what time seen.

Ferries.—Number of boats, how worked, how far across, approaches, facilities for loading, material for rafts, &c.

Fords.—Depth, bottom, distance across, whether straight or zig-zag, nature of banks, surrounding ground, velocity of current, leading marks.

Forest.—Extent, height, and nature of trees, paths, density.

Forts.—Extent, situation, material, how armed, height of rampart, depth and width of ditch, surrounding ground, neighbouring heights, best line of approach, water, garrison.

Hills.—Height, steepness, surface (whether rocky, grassy,

wooded), what view, whether concave or convex.

Lake.—Extent (that is, length and breadth), depth, banks, boats, surrounding ground.

Look-out Places.—Nature (whether trees, tower, hill, &c.), height, way out, what other points visible for signalling purposes, &c.

Marsh.—Extent, where passable, ways round.

Mountain.—See Hill.

Nullah.-See Ravine.

Position.—Nature (whether ridge, fort, village, wood, &c.), width and depth. Nature of ground in front and on flanks, field of fire, artillery positions, own and enemy's. Neighbouring heights, how occupied, best line of approach for attacking force, position of water, lines of retreat, facilities for counter attack, nature of soil for digging, lateral communications.

Railway.—Number of lines, gauge between the rails, sleepers (whether wood, iron, or pans), embankments, cuttings, tunnels, bridges (with their material and dimensions), means for destruction and repair, capability of transport for troops, description of stations, sidings, crossing places, &c.

Ravine.—Depth, width, nature of banks (whether bushy or rock, &c.) See also Defile.

Redoubt.—See Fort.

River.—Depth, width, current, nature of banks, nature of bottom, watering places, crossings, positions for covering crossing, boats, materials for rafts, whether navigable, liable to rise and fall of water, bridges, ferries, fords, locks, &c.

Road.—Nature (whether made or unmade), width, height above surrounding country, fences alongside, condition,

gradients, material for repairs.

Station.—See Buildings. State number of platforms, their length and width, number of entrances and sidings, forming-up places in the vicinity, amount of coal, spare rolling-stock, rails, sleepers, water tanks, telegraphs, how lit up at night.

Supplies.—Amount of food available for men, such as meat, groceries, fuel, and forage, such as oats, meals, grain, barley,

hay, grass.

Telegraph.—Number of wires, height of poles and their

material, direction in which the line runs.

Town.—Extent, that is, length and width, number of inhabitants or houses, post and telegraph offices, forges, material, &c. (see Buildings), situation (see Position), water and gas supplies, also food supplies (as above).

Transport.—Number of waggons, carts, mules, horses, camels,

oxen, trucks, boats, carriers, engines, &c.

Village.—See Town.

Water.—Whether good for drinking, flowing or stagnant, whether stream, pool, or well, size, and depth, how many horses can drink at one time, whether buckets are required.

Wells.—Depth to bottom, depth to water; width, means for

hauling water.

Woods,-See Forest.

#### PROTECTION.

# S. 326. General Principles.

- 1. Every commander is responsible for the protection of his command against surprise. A force can only be regarded as secure, when protection is furnished in every direction from which attack is possible.
- 2. The method of protecting troops is the same at all times and in all circumstances. Detachments are thrown out by the commander of the body to be protected; these detachments provide for their own safety by furnishing detachments from themselves, the same process being repeated in turn by each body that is thrown out, until eventually a series of small groups is reached.
- 3. The commander of each protecting detachment, wherever situated, must keep his command at all times ready for action.
- 4. The commander of a protecting detachment is responsible that connexion with the force protected is maintained, except in warfare in uncivilized countries. In the event of attack, he must at all risks and at any sacrifice gain time for the body he immediately protects, to prepare to meet the attack.
- 5. The fact of cavalry being in advance does not necessarily afford security to the troops in rear. If the enemy be enterprising and strong in mounted troops, he may find an opportunity of avoiding the protective cavalry and suddenly attack the columns in rear. Local protection can, therefore, never be dispensed with.
- 6. At the end of a march, the troops that have covered the march remain responsible for the protection of the main body while at rest, unless other arrangements are made by the

commander of the force; and, vice versa, when the march recommences, outposts must not be withdrawn till the troops detailed for the protection of the march are in position.

7. In the following pages, the protection of a force of all arms is chiefly considered. The principles laid down are of general application, and hold good for mounted troops or infantry, acting independently of the other arms.

### PROTECTION ON THE MARCH.

- S. 327. The First Line of Protection.
- 1. The mounted troops of an army form the chief means at the disposal of its commander for obtaining information and for protecting his advance. They are divided according to the nature of their duties, into three distinct bodies
  - i. The independent cavalry.\*
  - ii. The protective cavalry.
  - iii. The divisional cavalry.

The fundamental principle in the distribution of cavalry is that the Commander-in-Chief in order to gain full value from that arm must clearly determine what he requires of it, and group his units accordingly in a suitable manner and in sufficient strength. Circumstances may, therefore, require the reinforcement of the independent cavalry by the protective cavalry and vice versâ.

<sup>\*</sup> The independent cavalry is "independent" only in the sense that it is at the immediate disposal of the Commander-in-Chief and is not charged with the direct protection of any slower moving body of troops. It co-operates with other troops in giving effect to the will of the Commander-in-Chief, as much as any other formation.

The protection of the army against hostile enterprises is, to a certain extent, secured by the defeat of the enemy's cavalry; but in order that the independent cavalry may not be tied to the army, the duty of covering the main columns is normally entrusted to the protective cavalry, which thus furnishes the first line of protection; local protection on the march being afforded by Advanced, Rear and Flank Guards, and when at rest by Outposts.

—2.—The protective cavalry, which will usually be accompanied by mounted infantry and horse artillery, will, subject to the above principle of distribution, act under the direct orders of the commander of the army to which it belongs.

The divisional cavalry acts under the direct orders of the divisional commander. Its duty is to assist the infantry in the immediate protection of the division by supplying mounted men for patrolling in connexion with advanced guards, flank guards, rear guards, and outposts; to maintain connexion with the protective cavalry and neighbouring columns; to furnish escorts, orderlies, despatch riders, and facilitate inter-communication generally.

- 3. When the opposing forces are at a distance the duties of the protective cavalry are
  - i. To afford the commander of the force it may be covering timely information regarding the enemy's approach.
  - ii. To furnish information regarding tactical features, resources, and roads of the country in advance of the main body.
  - iii. To oppose hostile enterprises and prevent the enemy obtaining information regarding the movement of the columns in rear.

The protective cavalry may also be employed to seize and hold positions in front of the slower moving infantry and deny their occupation to the enemy until the main body arrives.

- 4. These functions of the protective cavalry will entail principally defensive action, and will necessitate extension over a considerable front, but the commander must dispose his force in sufficient depth to enable it, with the assistance of the advanced guards of the columns in rear, to check any attempt to break through and surprise the main body.
- 5. When the opposing forces are within striking distance of each other, it becomes the duty of the cavalry to clear up the tactical situation. This will usually involve offensive action and be the work of the protective cavalry, assisted by the independent cavalry and other advanced troops as the general situation permits. The protective cavalry best assures the safety of the force it covers by keeping the enemy continuously under observation when contact with him has once been gained.
- 6. The protective cavalry is normally organized into mounted brigades. When it is desired to strengthen the first line of protection, for example, in order to cover the advance of a number of columns through difficult country, one or more mounted brigades may be attached to a division, or a mounted brigade may be temporarily strengthened by the addition of field artillery and infantry. The body so formed is called a strategic advanced guard; a commander for it is appointed, and its composition and duties are determined by the authority who orders its formation. A strategic advanced guard is normally formed for a specific purpose, and its composition is not changed daily as is usually the case with a tactical advanced guard.

#### THE TACTICAL ADVANCED GUARD.

- 5. 328. Composition, and Strength of an Advanced Guard to a Force Advancing.
- 1. Every body of troops advancing through a country in which it is possible that an enemy may be encountered, will be preceded by a tactical advanced guard. When at a distance from the enemy, a force may for facility of subsistence and for the eomfort of the troops be divided into a number of columns and march on a broad front. It is then convenient for each column to provide for its own protection. When approaching the enemy, unity of action becomes important, the force moves on a narrower front, and a single advanced guard detailed from a complete unit is then usually preferable for the protection of the larger units (divisions, &c.).

2. The strength of the advanced guard will be proportionate to the strength of the main body. It may vary from a fourth to an eighth of the whole force, but it should be sufficient to

enable the advanced guard to carry out its duties.

3. An advanced guard is divided into a van guard and a main guard. As it has to reconnoitre and fight, it will usually be composed of all arms. The proportion of each arm will depend chiefly on the character of the country. In an open country, the proportion of mounted troops and guns may be much greater than in a close or mountainous country.

4. The special duty of the van guard is reconnaissance. It will, therefore, generally be composed of the advanced guard mounted troops, with or without a body of infantry as a support. By day, when the country is open and the advanced guard is strong in mounted troops, infantry will not as a rule form part of the van guard. Field artillery will seldom accompany it, but a party of engineers should usually be added.

The main guard comprises the troops of the advanced guard not allotted to the van guard.

### S. 329. Advanced Guard Commander.

- 1. The advanced guard commander, on taking over his duties, should be informed of what is known of the enemy, of the strength and composition of the advanced guard, and of the intentions of the commander. He should receive clear instructions as to engaging the enemy, if he is met in any force.
- 2. On receipt of his instructions, the advanced guard commander will issue his orders. In these he will explain the general situation, the route to be followed, the composition of the vanguard and main guard, the order of march, and the hour of starting.
- 3. He will take steps to insure that connexion is maintained between the different parts of the advanced guard, and also with the main body.
  - S. 330. Action of an Advanced Guard to a Force Advancing.
- 1. The advanced guard must protect the main body from the moment the march of the latter begins. The advanced guard commander will therefore decide the hour at which the advanced guard will clear the starting point and the distance at which it will precede the main body. This distance will vary with the nature of the country and the tactical situation. It should be sufficient to enable the main body to deploy should the enemy be met in force, and to admit of minor opposition being brushed aside without checking the main column.
- 2. It is most important that when an enemy is met the commander of the force should have information on which to base his plans and time to put them into execution when they are

formed: The first troops to be met will be the enemy's advanced troops and until these have been brushed aside nothing definite can be known. It is the duty of advanced guards to assist the mounted troops, when necessary, in driving in the enemy's covering troops.

If the commander of the force has decided on offensive action the advanced guard commander should secure any tactical points which may assist the development of the attack of the main body. To effect this it is justifiable for him to deploy on a broader front than would be advisable for a force of the same size entering on a decisive action, for every moment brings the main body closer. It is important that the advanced guard artillery position should be chosen with a view to the subsequent action of the artillery of the main body. Should the commander of the force wish to avoid being drawn into a decisive engagement, the advanced guard commander will use all means at his disposal, short of committing the main body, to delay and hamper the enemy and to discover his dispositions. If the advanced guard commander is in any doubt as to the intentions of the commander of the force, he must act on his own initiative, remembering that by driving in the enemy's advanced troops at once he will usually assist the commander of the force in coming to a decision and that this will rarely interfere with the latter's liberty of action, while hesitation and delay may do so by allowing the enemy to seize the initiative.

3. The van guard is responsible for protecting the main guard against surprise. In open country mounted patrols should seldom be less than 4 or 5 miles in front of the main body. In any case all ground within effective field artillery range must be searched. The advanced guard mounted troops should always keep in communication with the protective cavalry, and with columns moving on parallel roads. If constant connexion

between two columns is difficult to maintain, arrangements should be made between them for communicating at stated places or intervals of time during the march.

### S. 331. Advanced Guard in a Retreat.

- 1. 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. But it should observe all precautions against surprise, and should be invariably accompanied by some mounted men for scouting purposes. A party of engineers should be attached for the removal of obstacles, or the preparation of bridges, &c., for demolition after the rear guard has passed.
- 2. Should it be possible for the enemy to intercept the head of the retreating column, a strong advanced guard of all arms will be required.

#### THE FLANK GUARD.

# S. 332. General Principles.

- 1. If there is any possibility of a column on the march being attacked in flank, flank guards should be detailed. They will usually be furnished by the main body, but may sometimes be dropped by the advanced guard.
- 2. The strength, composition, and dispositions of a flank guard and its distance from the main body are governed by the principles which apply to all protecting detachments. The flank guard may either move parallel to the main body, or take up a position on the threatened flank. A flank guard may be required to hold its own without support until the main body and transport have passed.

3. Should the main body change direction so that the march becomes a flank march (i.e., a march across the enemy's front), it will generally be advisable to use the old advanced guard as a flank guard, and to form a new advanced guard from the main body.

### THE REAR GUARD.

- 1. The first requirement of a defeated force is to be relievedfrom the pressure of pursuit. This is effected by detaching a portion of the force, the strength of which will depend on the situation, as a rear guard to impede the enemy's advance. The remainder of the force is thus enabled to move in comparative safety, and to recover order and morale.
- 2. A rear guard to a force retreating is essentially a fighting force of all arms. It will usually be very strong in artillery and mounted troops. Artillery, by reason of its long range, is able to force the enemy to deploy at a distance, whilst mounted troops, on account of their mobility, can hold a position considerably longer than infantry, and prevent the flanks from being turned. A rear guard should be lightly equipped, and should usually be accompanied by a strong detachment of engineers provided with demolition equipment. The troops detailed for the rear guard will, as a rule, be those which have been least severely engaged.
- 3. The commander of a rear guard is appointed by the commander of the force to be protected. He should receive instructions as to what extent he is at liberty to break down bridges, burn villages, and destroy railways, with a view to impeding the enemy's progress.

- 4. When the pursuit is not close, the disposition of a rear guard on the line of march will resemble that of an advanced guard reversed; a rear party, usually composed of mounted men, having been formed, the remainder of the troops, when not engaged, generally move as a main guard, in the order in which they can most readily come into action.
  - S. 334. Action of a Rear Guard to a Retreating Force.
- 1. The conduct of a rear guard, more perhaps than any other operation in war, depends for its success on the skill and energy of the commander.
- 2. A rear guard carries out its mission best by compelling the enemy's troops to halt and deploy for attack as frequently, and at as great a distance, as possible. It can usually effect this by taking up a succession of defensive positions which the enemy must attack or turn. When the enemy's dispositions are nearly complete, the rear guard moves off by successive retirements, each party as it falls back covering the retirement of the next by its fire. This action is repeated on the next favorable ground. All this consumes time, and time is what is most needed by a retreating force. A rear guard may also effectively check an enemy by attacking his advanced troops as they emerge from a defile or from difficult country.
- 3. In occupying rear guard positions it is important— (i.) to show as strong a front as possible to the enemy; (ii.) to make sure of good lines of retreat.
- 4. The manner of occupying a rear guard position differs from that of occupying a position meant to be resolutely defended, in that the greater part of the force should be in the fighting line from the outset, a proportionately small part being retained in reserve, and as great a display of force as possible being made.

5. Mounted troops should usually be employed wide on the lanks, so as to watch the country by which the enemy might dvance, and to be able to forestall any attempt to pass between the rear guard and the main body.

6. The first consideration in selecting a position for the artilery is, that it shall be able to open fire on an enemy at long ange, and thus compel his infantry to assume an extended formation at the greatest possible distance. The second is that

t should be possible to withdraw without difficulty.

\_7. A point of great importance to the commander of a rear guard is to judge accurately the proper time to retire. He must constantly bear in mind the difficulty of withdrawing infantry that has once become engaged. If he retires too soon he is only partly carrying out the work required from the rear guard; on the other hand if he falls into the error of trying to dispute every inch of ground he may become seriously involved and run the risk of being cut off from the main body, or oblige the latter to halt and reinforce him.

8. 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; in regulating the distance of the main guard from the main body the chance of the enemy interposing between the two must be considered.

The distance, however, must be sufficient to prevent the main body being shelled by the enemy. This is especially important

during the passage of a defile.

The commander of the main body should periodically keep the commander of the rear guard informed of his progress, and vice versa.

9. It is always advisable to send an officer to the rear to note the next favorable position for defence on the line of retreat. The lines of retirement from position to position should not converge.

The positions should be sufficiently far apart to induce the enemy, after seizing one, to reform column of route before advancing against the next.

- 10. Before withdrawing from a position, arrangement should be made to cover the retirement of the portion of the rear guard which is still engaged, by the disposition of the troops that have already retired.
  - S. 335. Expedients for Delaying an Enemy's Advance.
- 1. With a view to delaying the enemy's advance, the following expedients may be resorted to:
  - i. Narrow roads, &c., can be blocked by locking together several waggons and removing one or more of the wheels, or by felling trees across them.
  - ii. Fords may be rendered impassable by throwing in ploughs, harrows, &c.
  - iii. Boats may be removed to the side of the river further from the enemy and sunk or burnt.
  - iv. Villages, woods, heather, scrub, &c., if the circumstances demand it, may be set on fire by the rear party, so as to conceal the movements of the rear guard and impede the enemy's advance.
- 2. Skilfully laid ambushes will cause the enemy to move with caution in pursuit.
  - S. 336. Rear Guard to a Force Advancing.
- 1. If there is any chance of the rear of an advancing column being exposed to the enemy's attacks, the rear guard may be composed of all arms and must be sufficiently strong to meet all emergencies.

If it is to be employed only in collecting stragglers and keeping off marauders, it is usually composed of infantry with sometimes a few mounted troops added for watching the flanks.

- 2. If the main body, second line transport, and transport and supply columns march without any considerable distance between them, one rear guard will usually suffice for the whole; but if for any reason there is a considerable distance, the rear guard will follow the main body, and special arrangements will be made-for-the-protection of the transport.
- S. 337. To Tell off a Squadron as an Advanced Guard.

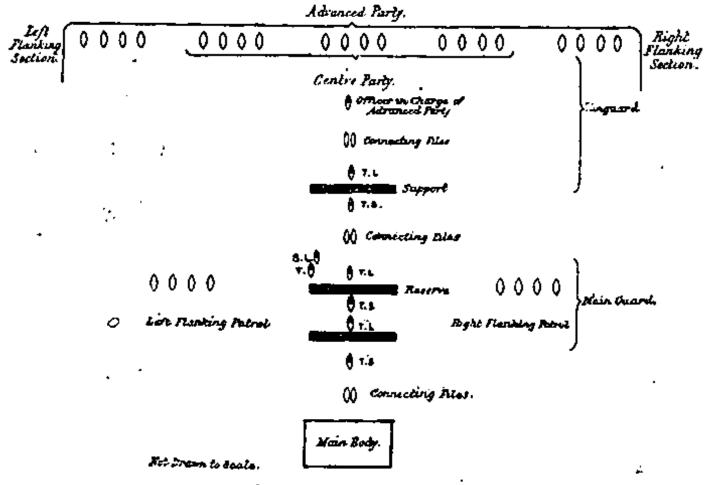
(For Instructional Purposes only.)

After the squadron is told off, the troop leader detailed as "Advanced party" will tell off his flanking sections as follows:—
"Right section—Prove." "Right flank section—As you were." "Left section—Prove." "Left flank section—As you were." "Centre sections (or centre section)—Prove." "Centre party—As you were." "Nos. — and — — Prove." "Connecting file with support—As you were."

The troop leader detailed as "Support" will tell off a connecting file thus:—"Nos. — and — Prove." "Connecting file with reserve—As you were."

The officer commanding the reserve will then detail flanking patrols thus:—"Right section of 3rd Troop—Prove." "RIGHT FLANKING PATROL—As you were." "Left section of 4th Troop—Prove." "LEFT FLANKING PATROL—As you were."

DIACRAM SHOWING A FORM OF ADVANCED CUARD IN OPEN COUNTRY.



A Rear guard and Flants guard are similarly disposed to the above.

In close country the Support and Reserve would probably be compelled to move in Column of Route, and the Sections of the Advanced Party and the Flanking Patrols would be more effective and less likely to be surprised if in "Diamond Formation" (see following diagram), opened out as far as possible consistent with their keeping touch.

#### DIAMOND FORMATION.

No. 2

Ð

No. 4 0

0 No. 1

0 No. 3

### PROTECTION-WHEN\_AT\_REST.

## Outposts.

S. 338. General Principles and Rules.

1. Every body of troops when halted will be protected by tposts, in order that it may rest undisturbed.

- 2. If the enemy is close at hand and battle imminent, or if the ttle ceases only at nightfall to be renewed next day, the whole the troops must be in complete readiness for action. There ay not even be room for outposts, and the troops will have bivouac in their battle positions, protected only by patrols d sentries. In such cases, the firing line practically takes the ace of the outposts.
- 3. It will often occur, under these conditions, that no orders n be issued as to measures of protection by superior authority; d, in any case, nothing can relieve the commanders of the vanced battalions and companies of the responsibility of turing themselves from surprise, and, unless circumstances bid, of keeping touch with the enemy by means of patrols.
- 4. The duties of the outposts are:
  - i. To provide protection against surprise.
  - ii. In case of attack, to gain time for the commander of the force to put his plan of action into execution.

C.11182.

- 5. If an enemy is so continuously watched that he can make no movement without being observed, surprise will be impossible. The first duty, therefore, of the outposts is reconnais sance.
- 6. All partial attacks must be warded off, and the enemy troops must be prevented from approaching within effective field artillery range of the ground on which the main body wideploy if attacked. The second duty, therefore, is resistance.

7. Outpost duty is most exhausting. Not a man nor hors more than is absolutely needed should be employed.\*

- 8. To see without being seen is one of the first principles outpost duty. All troops on outpost must, therefore, be carefully concealed.
- No compliments will be paid and no bugle or trumpet ca is to be sounded.
- 10. Detachments in close proximity to the enemy must be careful to avoid useless collisions. 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 reprisals, and tend to disturb the main body.
- 11. All bodies of troops on outpost must observe the rules lated down for the sanitation of camps and bivouacs. Latrines an refuse pits must be prepared. The extent of the sanitar arrangements will depend on the time the outpost position likely to be occupied.
- S. 339. Definition of terms used on Outpost Duty (Mount, Troops.)

A Cossack Post.—A single sentry and his relief, i.e., three modern on sentry, two in relief), under a leader.

If more than one-sixth of the force is employed, the efficiency of the troops will sul

A Piquet.—A body of men generally a troop, formed of the con-commissioned officers and men not required for the Cossack osts. It furnishes a dismounted "look out sentry" who will ratch the line of Cossack posts, and report signals to the fficer commanding the piquet; also connecting sentries, if ecessary.

Supports and Reserves.—Stronger bodies in rear of line of ossack\_posts and piquets to assist them to resist attack.

A Standing Patrol.—Consists of a small party sent beyond ie outposts, usually by night, which conceals itself near a proable line of approach to give warning of an enemy's advance.

A Reconnoitring Patrol.—Consists of a section under its leader, a small body under an officer, which is sent beyond the line of ossack posts, to patrol in the direction of the enemy, and connoitre the ground, and gain information of the enemy.

A Detached Post.—Consists of one or two sections under a nonmmissioned officer, generally placed on the flank of the line outposts to protect the flank, or to hold any point of especial ctical importance.

N.B.—Piquets are numbered from the right of their respective uadrons, and Cossack posts from the right of their respective quets:

S. 340. Position of the Outposts.

- When there is any possibility of a force coming in conflict
  th an enemy, its commander should, when halting for the
  ght, first decide on his dispositions in case of attack, and then
  range the quartering of his command and the position of
  e outposts accordingly.
- 2. It is an advantage if an outpost position includes comanding ground from which a wide extent of country can, in

clear weather, be kept under observation by day. Facilitie for observation, however, are of less importance than facilitie for protracted resistance, provided the ground in front be we patrolled. The distance of the outpost position from the mai body is regulated by the time which the main body requires t prepare for action, and by the necessity of preventing the enemy's artillery from interfering with the freedom of movement of the main body. Commanding ground is advantageous but by no means essential.

- 3. Command, co-operation, and intercommunication will be facilitated by placing the advanced troops along well define natural features, such as ridges, streams, the outer edges woods, &c., or in the vicinity of roads, but this must not be allowed to outweigh the necessity for making the best tactic dispositions possible.
  - 4. In enclosed country and at night, the movements of troop are generally confined to the roads and tracks, which should be carefully watched.
  - 5. If the outpost position is extensive, it may be divided in sections, each section being allotted to a certain number of companies, sections being numbered from the right. The extension of a section depends upon the amount of ground which can be supervised conveniently by one commander.

The extent of frontage to be allotted to each company we depend on the defensive capabilities of the outpost position and, where they exist, on the number of approaches to guarded.

6. The outpost position will invariably be strengthened at communications improved where necessary. Piquets and su ports will do this without waiting for definite orders.

S. 341. Composition of the Outposts.

1. In the case of large forces, or when a force is scattered, the stposts are usually furnished from each division or brigade in e front line. The commander of the force divides the ground be covered between his subordinate commanders, who detail a commander of the outposts and the outpost troops for their ortion. Under other circumstances the commander of the ree may decide to detail the whole of the outpost troops, in hich case he will also detail the commander of the outposts.

2. The outposts of a force of all arms consist of Outpost-ounted Troops, Outpost Companies, and, when necessary, The serve. Machine guns will generally be included and some-

nes artillery.

Outpost mounted troops are usually provided by the divisional valry, and may be attached to sections of the outposts or to tpost companies for reconnoitring purposes, and to keep touch the protective cavalry by day; but economy must be exersed in employing mounted troops for outpost duties.

3. When stationary, the duty of local protection by night will almost entirely on the infantry, most of the outpost mounted pops being withdrawn, their place in this case being with the serve, if there be one. In certain cases, however, standing

bunted patrols may be left out at night with advantage.

4. Artillery may be usefully employed with outposts if they cupy the ground which the main body is to hold in case of tack; if there is limited ground over which the enemy must ss; or if it is important to prevent the enemy from occupying tillery positions within close field artillery range of the outsts. Except when the outposts occupy the battle position ore guns should not be employed than can be easily and rapidly thdrawn. Artillery will be withdrawn at night, except when the reserve.

Machine guns with outposts may be employed to swe approaches, and to cover ground which an enemy in advanci may be compelled to pass or occupy.

5. When a force is on the march the troops for outpost du

should be detailed before the march is completed.

# S. 342. Commander of the Outposts.

- 1. The commander of the outposts should be told, before t force has halted, what is known of the enemy, and of oth bodies of our own troops; the intentions of the commander, w appoints him, if the enemy attacks; where the force to covered will halt; the general position to be occupied by t outposts; whether there are other outpost troops on his flank the composition of the outposts, and the hour at which they v be relieved.
- 2. As soon as he has received his instructions he will give d either verbally or in writing such orders as are immediate necessary for the occupation of the outpost line. He will supp ment these by detailed orders on the following points as soon possible:
  - i. Information of the enemy and of our own troops so as they affect the outposts.

ii. Ground to be occupied by main body in case of atta-

- iii. General positions to be occupied by the outpost division into sections, if necessary; frontage, number of roads, allotted to each outpost compar or to each section; and situation of the reserve.
- iv. Disposition of the outpost mounted troops 346).
- v. Dispositions in case of attack. Generally the line resistance, and the degree of resistance to be offer

vi. Special arrangements by night.

vii. Smoking, lighting fires, and cooking.

viii. The hour at which the outposts will be relieved.

ix. His own position.

B. As soon as the outposts are in position he will inform the mmander who appointed him, and furnish him with a rough etch showing his dispositions.

## S. 343. Distribution-of-the\_Outposts.

- 1. The commander of the outposts will assign a definite part the outpost position to each outpost company.\* Should it necessary to divide the outpost position into sections, the nmander of the outposts will appoint commanders of sections, o will, in that case, divide their sections among their outpost npanies. The limits of ground allotted to sections of the outsts or to outpost companies should be marked by some disctive feature, such as trees, cottages, streams, &c. Each npany should know what roads it is expected to guard, and exact limits of the ground it is to patrol. Outpost compies provide piquets or detached posts and their supports.
- 2. The commander of an outpost company, having received orders, will move his command with the usual precautions to ground allotted to it, where the company will be halted der cover, the covering troops holding a line a short distance advance of the most suitable position for the piquets.

He will then examine the ground, decide on the number and sition of the piquets, and on the position of the support, which uld, as far as possible, be composed of a complete command,

In the following sections, companies only are referred to. The principles are ally applicable to outpost squadrons, if squadrons have to do the work laid down outpost companies, as would happen with mounted troops acting independently, mployed in front of the main outpost position.

e.g., a half-company, or section. These will then be moved in their allotted positions, and the necessary groups and sentriposted and patrols sent out, after which the covering troops who withdrawn.

A single sentry will be posted over the support.

He will give instructions to the commanders of piquets as detached posts, and will make arrangements for a protract resistance by selecting a good defensive position which should, possible, correspond with the piquet line; it should support, as be supported by, the companies on either hand.

He will send out patrols to examine the country in front, as will communicate with the companies on the flanks of his potion. He must ascertain the dispositions of those companies as to insure no ground being unprotected.

He will satisfy himself that his company is acting with divigilance during its tour of duty, visiting the various parthereof to ensure this, but should limit as much as possible a movement in the line of sentries which might be visible to at enemy.

As soon as he has made his dispositions he will send in a repoaccompanied by a rough sketch, to the commander of the or posts, or if the outpost line is divided into sections, then to t commander of the section in which his company is, which so tion commander will send in a similar report concerning his so tion to the commander of the outposts.

### S. 344. The Reserve.

A reserve will be used only when the outpost force is larger or when the outposts hold the ground to be occupied by the methody in case of attack.

2. If required, it will be detailed by the commander who points the outpost commander, and should always be formed a complete unit, with mounted troops and generally some guns tached.

It may often be advisable to divide the reserve into two or en more parts, when, for instance, the outpost position is very tensive or the country intersected or difficult.

4. If no reserve is specially detailed, an inlying piquet of the cessary strength will be found by the command which mished the outpost troops.

# S. 345. Piquets.

- I. As soon as a piquet commander has received his orders he lexplain them to his piquet, and will satisfy himself that ery man knows the direction of the enemy, the position of the kt piquets and of the support, what he is to do in case of ack by day or by night, whether there is any cavalry in front; I that sentries know in addition the position of the sentries their right and left, the position of the piquet and of any tached posts in the neighbourhood; the ground they have to tch; how they are to deal with persons approaching their sts; the names of all villages, rivers, &c., in view, and the ces to which roads and railways lead.
  - Sentries in the front line are posted in groups,\* which conof from three to six men, under a non-commissioned officer the oldest soldier, and should be relieved every eight or twelve ars. In open country one man is posted as a sentry, while

If it is desired to retain more men with the piquet, sentries may be posted in s, the men of each pair being close to or within speaking distance of each other, ording to the ground. There should be three reliefs for each double sentry, one on y while the other two are with the piquet. This system has the disadvantage of sing more movement in the line of sentries, and of entailing more fatigue on the

the remainder lie down close at hand; but if the country is cloor special precautions are necessary, the sentry post may doubled. A sentry post, as a general rule, should not be mothan about a quarter-of-a-mile from the piquet. Sentre should be placed so as to gain a clear view over the ground their front, whilst concealed from the enemy's view.

3. A sentry will immediately warn his group of the approas of any person or party. When the nearest person is with speaking distance the sentry will call out "Halt," covering he with his rifle. The group commander will then deal with the person or party according to the instructions received by his Any person not obeying the sentry, or attempting to make after being challenged, will be fired upon without hesitation A single sentry will be posted over each piquet.

S. 346. Mounted Piquets and Sentries.

In addition to the principles laid down in s, 342 the folling apply to mounted troops:—

- i. Cossack posts are equivalent to sentry groups. Sentry, as a rule, dismounts, his horse being k with the other horses of the post. The reliefs of sentry always dismount, and remain as close to sentry as practicable.
- ii. By night the sentry should be doubled and the princreased accordingly.
- iii. Cossack posts never off-saddle; the horses must never unbridled, and everything must be ready for instaction.
- iv. Cossack posts are relieved every 6, 12, or 24 ho according to weather, shelter, water, &c.

- v. Feeding and watering are to be carried out by one-third of a piquet or detached post at a time. Horses that are to be fed must be taken a short distance away from the others.
- vi. The horses of a piquet or detached post are never to be unsaddled or unbridled at night. During the day, when matters seem quiet, girths should be loosened, and saddles shifted, one-third at a time.

# S. 347. Detached Posts.

- Detached posts from an outpost company are sometimes avoidable; but as there is always the danger of their being t off, they should not be employed except in case of necessity.
- 2. They usually consist of from six to twelve men under a nonnmissioned officer or officer, but may be stronger. Such sts may be placed in front of or in rear of the extreme flank of coutpost position, to watch some particular place or road by ich the flank might be turned, or they may be placed in vance of the sentry line to watch some spot where the emy might collect preparatory to an attack, or which he might cupy for purposes of observation.
- B. They should act in the same manner as laid down for uets.

# S. 348. Traffic through the Outposts.

1. No one other than troops on duty, prisoners, deserters, and go of truce will be allowed to pass through the outposts either m within or from without, except under the authority of the nmander, who details the outposts, or of the commander-inef.

- 2. No one is allowed to speak, otherwise than as directed section 345 (3), to persons presenting themselves at the outpoline except the commanders of the nearest piquet and outpocompany, who should confine their conversation to what is essetial, and the commander of the outposts. Prisoners, and deseters, will be sent at once, under escort, through the command of the outpost company, to the commander of the outposts.
- 3. In civilized countries, where, for tactical reasons, no pique is posted on a main line of traffic, a detached post should be posted specially to deal with traffic through the outposts. Such detached posts will be detailed by the commander of the outpost company in whose section the main line of traffic lies.

# S. 349. Flags of Truce.

- 1. On approach of a flag of truce, one sentry, or more, if hand, will advance and halt it at such distance as to prevent as of the party who compose it overlooking the posts; he we detain the flag of truce until instructions are received from the commander of the outpost company.
- 2. If permission is given for it to pass the outposts, the individuals bearing it must first be blindfolded, and then led und escort to the commander of the outposts. No conversation except by his permission is to be allowed on any subject, und any pretence, with the persons bearing the flag of truce.
- 3. If the flag of truce is merely the bearer of a letter or parc the commander of the outpost company must receive it, as instantly forward it to head-quarters. The flag of truce havi taken a receipt, will be required forthwith to depart, and no o must be allowed to hold any conversation with the party.

## S. 350. Intercommunication.

Communication must be maintained at all times between all parts of an outpost position, and between the outposts and the nain body. Communication may be by signal or by orderly.

The commander of the outposts is responsible for communication with the main body; supports will keep up communication with their piquets, with the supports on either flank, and with he-reserve. Piquets or detached posts will maintain communication with the piquets or posts on either flank. -- Commanders of piquets will satisfy themselves that sentries are alert and understand their duties, but should limit, as much as possible, any movements in the line of sentries which might be visible to in enemy.

In close country it may be advisable to post from a support a communicating sentry between it and the piquets, and also one between a piquet and its Cossack posts.

## S. 351. Readiness for Action.

- 1. The commander of the outposts will decide whether the eserve is to occupy quarters or to bivouac, and whether the supports or reserves may take off accoutrements, off-saddle, inhook and unharness teams, &c.
- 2. Piquets will invariably be ready for action. The men nust never lay aside their accourrements. Mounted men ttached to an infantry piquet should, whenever possible, off-saddle; but one man should always be ready for instant ction.

- 3. Not more than a few men should be allowed to leave the piquet for any purpose at one time. They should never be allowed to move about, in or front of the sentry line when seeking water, fuel, forage, &c.
- 4. The outposts will stand to arms one hour before sunrise, and remain under arms until the patrols, which should be sent out at that time, report that there is no sign of an immediate attack. Care should be taken that these patrols remain out till after daybreak. When the outposts are relieved in the morning, the relief should reach the outposts half-an-hour before sunrise. The troops relieved will not return to camp until the patrols report all clear.

## S. 352. Reconnoiting Patrols.

- 1. Reconnoiting patrols are sent out from the outposts with the object of scarching the country in front of the outpost position, or of watching the enemy if the opposing forces are in close touch. Their strength may be from two to eight men, under a non-commissioned officer. They may consist of mounted mencyclists, or infantry.
- 2. When mounted patrols are employed they should move out before daylight and patrol all approaches which an enemy might use, within distant field artillery range of the position. When the oppoising forces are in close touch, mounted patrols should maintain constant touch with the hostile force. When ordered to remain out in observation in front of the outposts they become standing patrols.
- 3. In a country where the roads are good, cyclists may replace mounted patrols, and by night they are especially suited for this work.

- 4. As reconnoitring patrols are not intended to fight, but to liscover the approach of an enemy, vigilance, silence, and prulence are to be strictly enjoined. Their duties are to see without being seen.
- 5. When touch of the enemy is obtained, or anything suspicious observed, the leader of the patrol will send back a man to report; but before doing so he should get as much information as possible.
- 6. All woods, ravines, or broken ground in the neighbourhood——
  of the outposts, where troops could collect without being
  observed, or scouts or spies find concealment, should be
  requently visited by patrols.
- 7. If mounted troops from the outpost line are patrolling to the front, it should seldom be necessary to send out infantry patrols by day, unless the country is very thick or the weather nisty. At night the duty of patrolling will, as a rule, fall on the nfantry. Such patrols should move along tracks or roads in the direction of the enemy for about a mile, and should search all ground where the enemy's scouts might conceal themselves. It may occasionally be advisable to leave out standing infantry patrols to watch certain points in front of theout post position, instead of sending out patrols at stated periods.
- 8. An outpost patrol, when going out, informs the nearest sentry of the direction it is taking. In the event of a patrol not returning when expected, another should be immediately sent out. If a force halts for more than a day in one place, the hours at which the patrols go out (except those before sunrise), and also the direction of their route, should be changed daily.

## S. 353. Standing Patrols.

Standing patrols are formed by two to eight mounted men of cyclists under a non-commissioned officer sent well in advance to watch either the principal approaches, or some particular points where the enemy could concentrate unseen. Their positions are fixed, and they remain out for several hours. They are of the utmost value, especially at night, and spare the horses as they are not constantly in movement. The rules for Cossacl posts regarding off-saddling apply to standing patrols. Occasionally standing patrols are employed by infantry.

The commander of the outposts will issue orders as to the employment of standing patrols.

## S. 354. To tell off a Squadron for Outpost Duty.

(For Instructional Purposes only.)

"1st Troop—Prove." "To furnish No. 1 Pique 2 Cossack Posts, and a Reconnoitring Patrol, and Sentry over Piquet, under Lieut. ———." "As you were."

"2nd Troop—Prove." "To furnish No. 2 Pique with 2 Cossack Posts, and a Reconnoiting Patrol and Sentry over Piquet, under Lieut. —." "A you were."

"3rd and 4th Troops—Prove." "To furnish Sup port under Lieut. ——; Sentry over Support, and also to strengthen Piquets when required." "As you were."\*

"Piquet Commanders and Officers commanding support tell off your parties."

Squadron Leader's Orders.

<sup>•</sup> Detached posts when required will be furnished from the support.

#### MARCHING.

### S. 355. General Remarks.

The first and most important consideration is a good and properly fitted saddle. The weight which the soldier has necessarily to carry cannot be distributed or carried without detriment to the horse unless upon a specially-constructed saddle; without such a saddle it may be taken for granted that it is practically impossible to maintain any mounted troops efficient upon active service in the field.

The greatest care should be taken before a march that the saddlery is in proper order so far as circumstances admit.

Horses should invariably be walked in going up or down hill

Columns should, when circumstances admit, be in half-section each man upon the outside of the road (i.e., "Divide the Road")

The important points to note are—

- (1) That each man sits square and steady on his horse.
- (2) That no buckle, strap, or portion of the rolled blanket or cloak touches the backbone of the horse behind and that the front of the saddle is well above the crest and withers in front, and that no strap or article which may chafe or injure be allowed to get under the saddle.
- (3) That the saddle is properly girthed up.
- (4) Horses are to be ridden on all four reins, and made to "ride" up to their bits, either at a walk or trot.

Men whose horses require to be re-shod, or who, for any cause are compelled to fall out, will rejoin at a steady pace.

S. 356. Instructions for Long Distance and Forced Marches.

The following routine is given as a guide for instructional purposes:—

(a) FIRST HOUR.

Walk 5
Trot 10
Walk 5
Trot 10

Walk 5
Trot 10

Short halt 5

Tarch on foot 10 Tighten girths, look over saddles, shoes, &c.
Trot 15 30 minutes—21 miles.

(b) SECOND HOUR.

Walk 10
Trot 5
Short halt 5
Short halt 5
Trot 10
Trot 10
Walk 5
Trot 15
Trot 15

Long halt for half-an-hour and small feed.

The variations of the marching must be adapted to circumtances, such as state of the roads, the physical nature of the ountry, and the condition of the horses; but the general principles indicated in the above routine for marching will be invariably observed.

The steadiness and regularity of pace is an all-essential factor n a successful march. In turning corners, or in passing obtacles, the pace of the front of a column must be slackened to revent the rear having to close up at a quickened pace. The

trot is the pace at which mounted troops can move at a quickened rate with the least detriment to the horse's condition, and with least chance of causing saddle galls.

At a slow trot, if properly carried out, the horseman should support the whole weight of his body upon the inside of his thighs, and the soles of his feet resting in the stirrups. He should never allow the body during the trot to touch the actual seat of his saddle; leaning forward, he will in this manner relieve his horse's back of the weight of his body, except so far as it is evenly distributed over the side bars of the saddle resting upon the ribs.

By careful attention to the principles above indicated, and by [constant care, forced marches of from 40 to 50 miles may be made for short periods, without serious detriment to the efficiency of horses or men.

In general, it may be calculated that mounted troops should march at the rate of about 5 miles an hour, including short halts

The last 2 miles or so of a day's march should always be traversed at a walk, so as to bring the horses in cool.

### S. 357. Rules to be Observed.

It will be noted that by the routine laid down the horse is relieved of the weight of the man and his arms for a quarter of an hour in each hour, and the free circulation of the blood is thus allowed into the skin of the back under the saddle—one of the surest preventatives of sore backs.

There should be a half-hour's halt, the "long halt," after every two hours' marching. In a prolonged march after four hours the horses should be fed.

Every opportunity should be taken during a march of allowing horses to graze or nibble grass during halts.

Upon approaching the proposed watering-place, an officer should be sent forward to ascertain the most suitable means for watering, and the formation best adapted to the approaches to, or situation of, the watering-place.

If a watering-place is available on the road, the horses should be watered a mile or two from their destination.

In tropical climates, or hot weather, the nostrils and mouth should be wiped and moistened.

5. Special Duties and Discipline on Line of March.—There is no occasion on which the discipline of a regiment is more tried, nor on which the attention and vigilance of every officer in maintaining order and regularity are more especially requisite, than upon the line of march. Officers must be careful to preserve the compact order of a column of route by not allowing irregular distances, straggling, or falling out, except during the periodical halts.

In the case of ordinary marches, unless under exceptional circumstances, or in very hot weather, it is not advisable that mounted troops should march at a very early hour. It is always desirable that time should be given for the men to breakfast, and the horses to feed well before starting.

All parties of mounted troops should invariably march off at Attention. The commanding officer will afterwards use his discretion in allowing the party to march at ease. But before arrival at the destination, and always in passing through towns, the party must be called to attention.

The ordinary length of a day's march for mounted troops may be reckoned at from 15 to 20 miles, but of course on active service, or even in cases of emergency in time of peace, this distance may often have to be considerably increased. Provided the pace

is not unduly hurried, the more quickly a march is completed, under ordinary circumstances, the better it will be both for man and horse.

- 6. Billeting.—If billeted in a town, the time at which the saddles are to be taken off should be announced and an alarm post fixed by the officer in command of the party before the men are dismissed to their billets. No officer should leave the parade until the men are told off to their billets and the alarm post notified.
- 7. Inspection of Horses.—The squadron officers must visit the whole of the stables in which their horses are billeted. Troop parades also will be arranged by them when necessary.

If a swelling or heat is noticed on a horse's back and no skin is broken, the most simple remedy to adopt is to put over it a cloth wetted with salt and water, the cloth being kept on by the surcingle and a pad of straw. The mixture should not be made too strong in salt. If the skin is broken cold water only should be used. In bad cases of sore backs veterinary advice should, if possible, be obtained. The panels must be carefully brushed and dried; saddle blankets, numnahs, should be beaten lightly and also dried.

8. Arms.—In billets, when on the march, all arms should be removed from the stables and taken with the men to their rooms.

### S. 358. TRANSPORT BY RAIL.

### General.

Instructions with regard to the transport by rail of personnel, horses, guns, stores, &c., are contained in "The Service Regulations Part I. Operations 1909." These are to be carefully

studied, and, in so far as they apply to any particular case, and are not varied herein, followed.

The following detail, and words of command are intended to afford a general idea of the system, and of the drill, to be adopted in carrying out this work.

The actual method must, of course, vary according to circumstances, such as the size and position of the station, platform, train, &c. The absolute necessity for the quiet, expeditious systematic and careful performance of the operations must, however, be fully realized by officers, and impressed upon their subordinates. Irrevelant talking must not be allowed, though in this duty it will be necessary for men, at times, to speak to each other in order to facilitate the handling of horses. Each separate step should be conducted under the supervision of, and by distinct words of command from, the responsible officers.

The entrainment or detrainment of horses (including officers' chargers), guns, waggons and stores should, as far as practicable, be conducted simultaneously. All animals, vehicles and material should be loaded before the entrainment of men is commenced.

Men must be kept well in hand during the work, and smoking prohibited.

Entraining and Detraining of Personnel and Horses.

For short journeys horses should usually remain saddled or harnessed. For journeys occupying over six hours horses should be (unless an attack is anticipated) unsaddled or unharnessed, and the saddlery or harness packed in vans. On arrival at the entraining station, units will be formed up in the positions indicated by the Entraining Officer, and the men dismounted. The procedure then will be on the following lines:—

Even Numbers Lay Down Arms.—The odd numbers hold the horses while the even numbers deposit their rifles, &c., 3 yards in rear of the horses, or at other selected spot, in the order in which they stand in the ranks.

Odd Numbers Lay Down Arms.—The even numbers hold the horses while the odd numbers similarly deposit their arms, &c.

Adjust Stirrups.—This will be done by running up the stirrups to the top of the leathers, and then securing them by passing the ends of the leathers through them. If the saddles are to be removed, this command will be followed by the command "Off Saddle." The even numbers will unsaddle first and then the odd numbers, and the saddles will be placed with the rifles.

From the Right Tell Off by Twelves (or by some other number according to the number of horses to be conveyed in each truck). This command will be given if the trucks are of uniform size.

From the Right (or Left) Number Off Twelves.—The right hand man of each twelve will tell off the number of his twelve, according to the position it holds in the ranks.

To Your Trucks by Single Files from the Right of Twelves, Walk-March.—The twelves file off, and number 1 of each twelve leads his horse into the truck bearing the number of his twelve; the remainder of his twelve following in succession. One man should be left in charge of rifles, saddles, &c. Halters will be left on horses, and (if horses have been unsaddled) the bridles removed and retained by the men during the journey.

The following is the best and safest method of putting a troublesome horse into a truck:—One man leads horse at full extent of halter, two men hook hands well down behind the horse's buttocks. Hands are hooked by each man bending the second joints of the fingers of one hand thus making a hook of the hand, then interlocking his hand with the hooked hand of the other man. At the same time as hands are hooked these two men will place their other hands on the sides of the horse, then lifting the horse's hindquarters, shove it into the truck. Assistance should be given by extra men pushing at the horse's rump and on his sides. One of the men with hooked hands should give the word to shove.

If the trucks are not uniform in size it will not be practicable to tell off by truck sections of any uniform number, and the leader must in this case use his initiative in securing expedition; so far as is practicable, the loading of all trucks should be carried out simultaneously.

Also during peace training, in proceeding to camps, &c., troop trains will frequently pick up detachments at different stations, and this will necessitate a variation of the procedure.

Further, when returning from camps, &c., in the case where detachments are dropped at different stations, squadrons should march out with the horses for each respective station together, those for the first reached station being in rear, and so on in succession to the front. In this case trucks should be marked with the names of stations instead of numbers, the last truck being for the station first reached, and so on in succession towards the front of the train.

Horses should be placed in the trucks with heads and tails alternately in opposite directions, .

When a truck is not filled with horses, they should be closely packed up, and a stout rope stretched taunt from side to side of the truck along the side of the last loaded horse, so as to support it, and thereby support the other horses.

Fall in on Your Arms.—The men fall in at attention, in rear of, or as near as possible to their arms.

Take Up Arms.—If saddles have been removed, the command will be "Take Up Saddles and Arms," and men will then be marched to the saddle van where saddles will be deposited, the men filing out and being then formed up opposite the carriages. N.C. Officers falling in in line with their troops.

From the Right Tell Off by Eights (or by any number corresponding to the number of men to be conveyed in each compartment).

Flanks of Eights Prove.

As You Were.

Right (or left) Turn, File to Your Carriages, Quick March.— The leading eight files into the compartment nearest the end of the train towards which the men have been turned, the remainder filing into their respective compartments in succession.

In detraining horses, men will be formed up facing the trucks in which their horses are, and ordered to "Sling Arms."

Untruck Horses.—Horses will be led out of each truck (trucks being unloaded simultaneously where practicable) by two men, each man receiving his own horse as it comes out of the truck. On receiving his horse each man will lead it off the platform (at once, if practicable), and fall in at the place indicated.

If horses have been unsaddled, then when the men detrain, a party under a N.C. Officer, should be immediately told off (a

uniform number being taken from each troop) to unload saddlery. Saddles will be laid out on the platform with as much spread as possible. when the men with led horses have fallen in, odd numbers will be ordered to get their saddles, and when they have done so, the even numbers will get theirs.

Once entrained, no man is to leave his carriage without the permission of an officer.

Officers will not entrain until all the men have entrained.

Absolute quietness is to be maintained as the train moves off.

On arrival at destination, officers will at once detrain, troop leaders proceeding at once to the carriages in which their men are. On a pre-arranged signal (whistle sound or one "G") men will detrain.

A travelling horse piquet will invariably be furnished. It should be so detailed as to be composed of soldiers occupying the same compartment. Its duty will be to take charge of the horses en route, and to attend to them in case of mishaps, such as a horse getting down, &c. Two men at least will be on duty during each relief. They will visit all the horse trucks and boxes at all stopping places, as far as practicable. Should it appear necessary to have the train delayed in starting from any station, in order that anything amiss with the horses may be attended to, the N.C.O. in charge of the piquet will be informed at once, and he will, in turn, immediately inform the officer in command of the troops. The men of a relief must remain awake during their tour of duty, and after dark be provided with a lantern.

At all entrainings and detrainings a medical and a veterinary officer should be present, if practicable.

#### S. 359. TRANSPORT BY SEA.

Detailed instructions as regards the embarkation, disembarkation, and the duties on board ship should be carefully studied by the staff and squadron officers.

Standing orders—printed, if possible—should be drawn up beforehand and published, so that all ranks may thoroughly understand the routine of embarkation and the duties on board ship.

### S. 360, CROSSING RIVERS.

1. Fording.—The selection of a ford and the crossing of rivers with mounted troops are operations requiring experience and care.

If the fords are deep and dangerous, the bits should be removed from the horses' mouths, and the men warned to disengage their feet from the stirrups, being at the same time reminded of the principles necessary if required to swim. It may sometimes be advisable to station a few expert swimmers and a rope at or below the ford.

The following depths are fordable:-

For infantry, 3 feet.

For cavalry, 4 feet.

Waggons containing ammunition, 2 feet 4 inches.

Gravelly bottoms are best, sandy bottoms are bad, as the sand gets stirred up, and increases the depth.

The depth of a river is generally most uniform in straight parts; at bends the depth will generally be greater at the concave bank, and less at the convex.

For this reason a river which is not anywhere fordable straight cross may be found passable in a slanting direction between two bends.

A raft capable of carrying 13 horses can be constructed of our piers, each consisting of seven (100-gallon) casks, bearing a platform 30 feet long and 10 feet wide, provided with a rail emovable at the two ends, but firmly fixed at the sides.

The horses-should be ridden on to the raft along a roadway supported if necessary by piers) which need not be wider than i feet in the clear, but must be long enough to reach from the shore to water of sufficient depth to float the raft.

As each horse is placed in its position across the raft, the rider will dismount and stand to his horse's head

The raft should be guided by a cable stretched from shore to shore, led through two snatch-blocks attached to the raft and can be hauled across by men or horses.

On reaching the further side, the horses should be led ashore.

4. Rules to be observed by Troops in passing over Pontoon Bridges.—Columns of infantry, artillery, waggons, and mounted troops should not be mixed together in passing a bridge.

Mounted troops will, as a rule, cross in single file or half sections, but never at a faster pace than the walk. All horses should be dismounted, when crossing the bridge, and led across, except those ridden by drivers, who should remain mounted.

Wheel carriages of all kinds with trained horses, are to cross fully horsed; with unsteady horses, carriages must be passed over by hand.

Halting on a bridge is to be avoided. If it be absolutely necessary to halt on a pontoon bridge, gun wheels must rest as nearly as possible midway between two boats. Artillery should cross at increased distances. If the bridge sways so as to become very unsteady, the column must be halted and not allowed to resume its movement until the swaying has ceased.

These rules apply to all suspension, military, spar, and floating

bridges.

Officers will incur grave responsibility if they cross a bridge otherwise than in the way recommended by the engineer officer in charge.

### S. 361. PITCHING AND STRIKING OF TENTS.

- 1. Pitching and Striking a Circular Tent with Six Men.
- 1. Tent parties will consist of one N.C.O. and six men.
- 2. The pole men having been paraded, and the tents brought up, the following procedure will be carried out:---

### Firstly—

- No. 1 the pole man drives a peg into the ground where the pole will rest.
- No. 2 joins the two pieces of pole together, and hands them to No. 1.

No. 3 and 4 distribute the tent pegs.

No. 5 and 6 unpack the tent, door uppermost, facing the front. The fly is fastened.

### Secondly—

No. I takes the pole, placing the end between his heels.

No. 2 drives cap on the pole.

Nos. 3, 4, 5, and 6 hold the four ropes to secure the tent when raised.

### Thirdly--

Nos. 1 and 2, when the bugle sounds one "G," or at "Raise tents," will raise the pole, No. 1 getting inside to hold it steady and straight.

Nos. 3, 4, 5, and 6 drive the pegs, commencing with the

angle ropes.

If the tent has storm guys, they will be fixed, and ends placed ver four pegs-driven at right angles to one another, 5 yards rom the pole, making four corners. If the tent-has no storm uys the four red runners will be held, each by a man, the N.C.O. eeing that the door points the proper way, and that the fly is astened.

3. Striking a Circular Tent.—On the command "Prepare to trike tents," No. 1 gets inside the tent; No. 2 closes the door, and keeps it closed until the tent is struck.

Nos. 3, 4, 5, 6 will pull out and place in the bag all the pegs, recept the four angle ones, which they will afterwards draw, and sold on to the ropes, Nos. 3 and 4 the front ones, Nos. 5 and 6 he rear ones.

On the bugle sounding the one "G," or on command "Strike ents," No. 1 will lower the tent towards the rear. No. 2 will eparate the pole into two pieces, and tie them together.

Nos. 3, 4, 5, 6 will spread out the tent neatly, the ropes being rolled up round the sides, and then placed so that they do not appear when the tent is folded up.

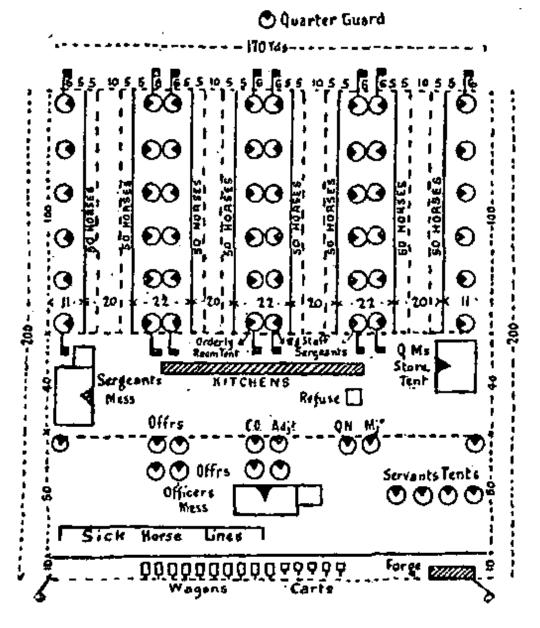
The sides will then be folded to the centre until the breadth

required for the depth of the tent bag is arrived at.

The head will then be folded down to the front about half-way, after which Nos. 5 and 6 will both proceed to roll from lead to bottom, placing their knees on the tent as they roll it.

When rolled up tightly, No. 6 will hold the bag, No. 5 will lift one end of the roll until it is got into the mouth of the valise, when it will be got into a perpendicular position, and both men holding the mouth of the valise will shake the tent into it.

The peg bag, &c., will be put inside, and the whole secured at the top.



Rear Guard

Scale 80 Yds. to 1 Inch

#### APPENDIX I.

### INSTRUCTION IN THE USE OF THE SWORD.

(For Practice in connexion with Tournaments, Skill-at-Arms Competitions, &c.)

S. 362. General Principles.

- 1. In teaching mounted swordsmanship,—the\_following\_principles will be kept in view:—
  - (a) The paramount importance of the point or thrust.
  - (b) To attack rather than to await an attack, and to deliver it with dash, vigour, and determination.
  - (c) After parrying an attack, to immediately return with the point.
  - (d) To make every possible use of the horse.

In teaching swordsmanship on these lines no set "sword exercise" is allowed. Inspections will take the form of tests for skill in pointing at dummies, balls, &c.; dismounted assault, and mounted combat; the whole attention being directed towards teaching men to fight.

Notwithstanding the supreme importance attached to the point, it is not intended that the cut should be entirely ignored.

The recruit must not be allowed to cut until he has become so accustomed to thrust that his impulse in a *mélée* will be to attack with the "point."

2. A recruit will first be instructed in the use of the sword on foot.

If a man can fight on foot, instruction in mounted fighting (assuming he is a good horseman) is a comparatively simple matter.

3. "Laying" for points and cuts is prohibited.

4. For instructional purposes "Swords, Practice Gymnasia" should always be used; the single stick never.

5. The main stages to be followed in teaching Mounted Swordsmanship are as follows:-

## 1st Stage.

Fighting on foot.

Eliminating the intricacies of the art as much as possible, also anything that is not applicable to mounted work.

# 2nd Stage.

The various points and parries in any direction; from the mounted position on foot, or (preferably) on low dummy horses

# 3rd Stage.

Practical cuts. Position as in 2nd Stage.

### 4th Stage.

The use of the sword mounted is taught: First, by pointing at the instructor, dummies, &c., together with the parries and "feints"; then, by using the horse in mounted swordsmanship and, finally, by practising the actual mounted combat, when cuts may be allowed, but only in "return," and at th adversary's neck or cheek.

6. Swordsmanship cannot be taught without individua instruction. The best way to give this is by the method of "instructor and pupil," followed by two pupils opposing on

another under the instructor's supervision.

In order to obtain satisfactory results, three or four pupils are he most an instructor can take at a time, and the same anstructor should, if possible, take the same pupils through the complete course of instruction.

7. Great importance is attached to the "assaulting lessons," is by their means men are given a combative spirit and are nabled to see, step by step, the fighting application of each letail which they have been taught. These exercises also elieve the dulness of routine work, encourage the spirit of mulation, and give, from quite an early stage of instruction, ome idea of actual fighting.

## S. 363. Parts of the Sword.

The sword, a weapon for thrusting and occasionally for utting, is made up of two parts, viz., hilt and blade.

The HILT serves to protect the hand, and also to assist in urning an attack. It is made up of the "guard" (or shell) and the "handle" (or grip).

The blade, from hilt to point, is divided into forte, feeble, and viddle. The "forte" is that part of the blade nearest the hilt; he "feeble" the part nearest the point; and the "middle" is he part between the forte and feeble.

## S. 364. 1st Stage...

i.) Details of Positions and Movements used in Dismounted

### Fighting.

The instructions in the details of the various positions and hovements have been abbreviated as much as possible, as atreme accuracy in them is not required. The positions and novements must, however, be learned from a specially trained

instructor, who will carefully avoid any idea of drill, and devote himself to practical individual instruction in the us of the sword for fighting purposes. Time should not, there fore, be wasted over the detail, but the instructor will push the men on to the practical lessons of "Instructor and Pupil," taking care to observe the order of lessons as laid down for the Dismounted Fighting, and to gradually improve the pupil' execution of the movements as he progresses from lesson to lesson.

Method of grasping the Practice Sword.

Grasp the handle of the sword with the right hand, and phalanx of the forefinger touching the front of the inside of the steel shell, thumb of the back of the handle, which should be pressed by the fingers against the heel of the hand.

N.B.—In using the sword the wrist is only to be bent later ally, and never flexed.

" First Position."

Heels together, feet at right angles to on another, right foot pointing straight to the from with the left heel immediately behind the right Body erect with the right side, head and eye turned in the direction of the adversary. Swor and arm in one straight line, edge of the swor to the right front, and the point about 8 inche from the ground.

" Sword in Line." From the "First Position," keeping the swor and arm in one straight line, raise the swor with the arm fully extended to the level of the shoulder, the edge to the right and incline slightly upwards.

"-Engage."\_

From the position of "Sword in Line" advance the right foot in the direction of the adversary about 2½-ft. lengths, well bending the knees in doing so. In this position, the right leg below the knee should be perpendicular, and the left knee bent perpendicularly over the instep; body erect, its weight evenly balanced between each leg, head and eyes looking towards the adversary; forearm and blade in one line, pointing-in-the-direction of the adversary, edge of the blade to the right and arm slightly bent at the elbow, which should be free from the body; left shoulder well back and left arm akimbo, wrist bent There should be nothing stiff downwards. about this position and the direction of the weapon should vary according to the position of the adversary.

" Lunge or Point." From the position of "Engage," and keeping the left foot flat on the ground, straighten the right arm and force the body forward to the fullest extent, at the same time straightening the left leg with the utmost rapidity; the right foot, raised not more than 1 inch, must be advanced at least 1 foot's length in the direction of the adversary, and placed sharply and firmly on the ground. The weight of the body thus inclined forward, must rest principally on the right leg, the left hip being neither raised nor depressed.

The pupil should come to rest from any position the easiest way.

" Rest."

The parries are here described as if they were made from the "engage" position for the sake of convenience of description; they should, however, be executed from any position; e.g., any one parry should be executed from the fina position of any other parry, or from the lunge, &c. It should also be noted that a parry is a movement of defence and not a fixed position, and that it is made with the object of taking off the adversary's attacking blade with the edge of The edge of the sword is used on accoun the sword. of the extra strength obtained. In making a parry the adversary's blade should be met with the "forte," and no with the "feeble" of one's own blade. If the parries ar correctly made as above described, the adversary's blade should not only be met with the edge and forte of the blade, bu should finally be brought to rest by contact with the hilt It should also be noted that the height at which the parrie are made should vary according to the height of the adversary' attack; in this way it will be seen that most of the parrie practically merge into one another, and that as long as the body is protected, it does not so much matter which parry i used, or whether it is made higher or lower than as described It is always advisable to parry an attacking blade as far it front of the body as possible; and this is best effected b giving a slight forward movement to the parry.

All parries are equally effective against a point or cut.

" Right Parry." Straighten the right arm so as to meet the attack, directing the point as far as possible towards the adversary, high or low as required edge of the blade to the right, and turned slightly upwards.

" Left Parry." Carry the sword across the body to the left to meet the adversary's attack, arm slightly bent, the blade high or low as required, edge to the left, without allowing the point to go too far from the central line.

" Head Parry." Carry the sword upwards, straightening the arm, the hand in line with the head, the point about 6 inches higher than the hand and directed over the head of the adversary, the edge turned upward, eyes looking under the forte of the blade.

When two adversaries are engaged with their blades in contact in one line, and one of them carries his blade into another line, he is said to "disengage." The blades cannot be in contact in one line and the line closed (i.e., the body protected on that side) without an opening being left for attack in another line. An attack can therefore be made at such opening by a "Point with disengage" made as follows:—

" Disengage."

By a quick and close movement of the whole arm detach the blade from the adversary's, carry it with a spiral motion, passing close to his hilt and arm (over or under his blade according to the position of his sword) and deliver the point at the opening aimed at. The whole movement to be executed with great rapidity combined with steadiness.

When an opponent keeps the point of his sword persistently directed towards your own body, it is impossible for you to attack him without running on his point, unless you first remove his blade from its threatening position. His blade may be removed by a "deviation" executed as follows:—

" Deviation."

Forming any one of the parries described above with a slight forward movement, press smoothly but quickly with the "forte" of your own blade against the "feeble" of the adversary's until it is sufficiently removed, taking at the end of the motion the final position of the particular parry used—then immediately execute an attack with a direct point or a point with disengage, as required.

A "feint" is a false or pretended attack made

by a movement of the sword and body with the intention of causing the adversary to believe that a determined attack is about to be delivered, while in reality it is not so. The object of making a feint is to compel the adversary to form a parry to protect the line threatened and so uncover some other part of his body thereby making an opening for the real attack. The feint should be made by inclining the body slightly but energetically forward and straightening the arm (if it be not already straight) so as to simulate an attack with a

direct point. If the feint is made really

" Fcints."

"Feints".—

well, the adversary will at once form a parry, and it is while he is forming this parry that a disengage and point should be made at the part of his body that he uncovers in trying to parry the feint. In attacking with a feint it is very important not to dwell on the feint, but (anticipating the parry that the adversary will form) to disengage immediately, so that you may hit him while he is making the parry. A feint, to be of any use. must be made with such decision that it conveys to the adversary's mind a firm conviction that it is a real attack, and so compels him to form the necessary parry to meet it. A feint can be made with a cut in a similar manner, but the subsequent attack should always be with the point.

"Direct ut" (at head or at either cheek).

Bend the arm a little, turning the edge in the required direction (downwards for the head, to the right for the right cheek, to the left for the left cheek), and extend it immediately, delivering a blow sharply at the head or cheek as the case may be.

" Circling
Cut" (at
right or
left cheek).

This is delivered in one movement at the adversary's right or left cheek as the case may be, edge leading. It is executed as far as the movement of the sword and arm are concerned in the same way as the "Exercising Cuts," No. 2 and No. 3 respectively, but the circle described should be smaller.

Keeping the forearm and sword in one line bend the arm and raise the sword, so as to clear the adversary's blade by sliding the sword up it, and deliver the cut sharply downwards
"Cut Over." edge leading, as soon as the point of the adver
sary's sword is cleared. This cut is used when
both blades are in contact, and is especially use both blades are in contact, and is especially use ful when the adversary exerts a slight pressur against the blade.

## (ii.) Dismounted Fighting.

The following lessons are progressive, and will be taugh in the order in which they are given below, repeating wheneve necessary; a reasonable degree of proficiency will be attained at each step before proceeding with the next.

#### Lesson i.

Lunging with the Point. "First position." "Sword in line." "Engage." "Lunge" (i.e., with direct point). "Rest."

The above will at first be taught without a sword, and after wards with sword in hand, the men being taught how to hold the sword while resting between the various movements.

#### Lesson ii.

Parries. { "Right parry." "Left parry." "Head parry."

In teaching the parries the instructor will at first illustrate them with the aid of an assistant who knows them. He wil then take each pupil separately and, holding his own sword in

the required position, will show him a threatening attack and make him parry it, indicating the part to be defended rather than the name of the parry. By this means the pupil will be nade to realize from the beginning exactly what he has to parry, and the necessity for it.

### Lesson iii.

Lunge with point at "Wall Pad."

-This-is-a-useful\_and important lesson adopted in order to each men to aim at and hit something with the point, to judge their distance properly, and to increase their reach, speed, and energy.

### Lesson iv.

Direct Attack. | Instructor shows opening.

Direct Attack. | Pupil lunges with point and hits instructor.

Repeat this from different openings till pupil attacks well with the point.

#### Lesson v.

Instructor threatens pupil with point or cut. Parry and Pupil parries instructor's attack ar Return. "returns" with the point, hitting instructor. Repeat in different lines.

#### Lesson vi.

Instructor shows opening. Combination | Pupil attacks with point;
Instructor parries and returns at pupil;
Of iv. and v. | Pupil parries and returns with the point,
hitting instructor. Repeat in different lines.

#### Lesson vii.

Two pupils, on guard, facing each other at lunging distance.

"One" attacks direct with point and tries

to hit his opponent.

"Other" endeavours to parry the attack, and, if he succeeds, to return with the point immediately.

In these assaulting lessons the attacker chooses his own time to make the attack, and must make it with great speed and determination. No words of command will be given.

All subsequent instruction will finish with a few minutes of this assaulting lesson, until Lesson xi. is reached, when either may be used to conclude the day's instruction.

### Lesson viii.

"Disengage." Teach (iv.), (v.), (vi.), and (vii.), commencing with a "Disengage."

#### Lesson ix.

"Deviation." Teach (iv.), (v.), (vi.), and (vii.), commencing with a "Deviation."

#### Lesson x.

Teach (iv.), (v.), (vi.), and (vii.), commencing with one feint.

Instructor shows opening.

Pupil feints with the point at the opening and (as instructor parries) disengages and hits with the point.

Assaulting
Lesson
(direct).

" Feints."

### Lesson xi.

Two pupils, on guard, as in Lesson vii.

"One" attacks either direct or with "feint"

trying to hit with the point.

Assaulting "Other" parries and returns with the point Lesson (i.e., acts according to which of the two ways (direct or with "feint.") he is attacked) trying his best to hit with the point in his return if he is able to parry successfully.

This is a most important lesson, as it gives scope for developing the true fighting instinct in teaching the men to make either a good direct attack, or a good feint, which will really deceive the adversary (see also note to Lesson vii.).

#### Lesson xii.

The assault on foot, first of all with the The Assault. instructor and afterwards with other pupils under the supervision of the instructor.

Backward pupils will be given additional lessons of the above as required, either at once or later on. Teaching of the 2nd stage should not, however, be delayed when pupils arrive at this point, even though they may not be thoroughly proficient.

### 2nd Stage.

The pupil will be placed on the low dummy horse or in the mounted position on foot.

It will be noticed that there are some differences in the positions and movements recommended for use mounted and those used in dismounted fighting. The difference is, however, very slight, and is to a certain extent inevitable, owing to the differents points of view of a man fighting on foot and on a horse.

The principles are nevertheless the same. The great object of all these lessons, mounted and dismounted, is to give the man control of his sword, which will enable him to adopt methods suitable to the occasion, and thus render a good account of himself in an actual fight.

" Engage."

Forearm and blade in one line, pointing in the direction of the adversary, edge of the blade to the right and arm slightly bent at the elbow which should be free from the body. There should be nothing stiff about this position, and the direction of the weapon should vary according to the position of the adversary.

When charging, the arm should be straight back of the hand up, edge of the blade to the right and turned slightly upwards, body beny well forward, the direction of the point being controlled from the shoulder without bending the clow or wrist.

The instructor will place himself in the position of the opponent, and then move round the pupil, making him follow him with his sword, as though he were engaged with an enemy

The point will be delivered with the utmost promptitude, horizontal or low, a cavalry or infantry, in any required direction as follows:—

" Point."

Keeping the sword and forearm in line with one another, direct the point of the sword at the object, and straighten the arm vigorously, a the same time bending the body forward togain extra reach.

Without in any way checking the speed with which the oint is delivered, the instructor must be careful to insure hat it is made with steadiness and accuracy, so as to prevent ny vibration of the sword.

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"Right Parry."  
As before described.

"Left Ditto.

Parry."  
Ditto.

Parry."  
Ditto.
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The best way, when mounted, of dealing with an adversary on he left rear is to manœuvre by means of good horsemanship for ome better position, therefore no parry against any such attack necessary.

In all the instruction in this stage the instructor will have round the pupil as required, the pupil following him bund with his sword at the "Engage," as described above. The instructor will then (from any direction) show an opening or the pupil to attack, or he will threaten the pupil to make im parry correctly as the case may be. All the hits and arries will thus be made with reference to the instructor's novements whenever possible, but with an advanced pupil; is useful, with a view to quickening his movements, to lace two, three, or even four men round him to attack him a turn, or for him to attack them in a similar manner.

It is good practice if dummies, balls, &c., be held or placed various positions, and the pupil made to point at them uickly.

## 3rd Stage.

(Position as in 1st Stage.)

Teach pupil to hit instructor with:-

" Direct Cut." At head and at either cheek.

"Circling \ At right and left cheek.

" Cut Over."

It will be pointed out that on account of the clothing bandoliers, &c., it is useless to attempt to cut at a man's body and that the only places where a cut is likely to do any damagare the checks and neck.

4th Stage.

In this stage the lessons in the 2nd Stage will be practise mounted, and at the same time the pupil will be taught the principles of making use of his horse for gaining the position he wishes with regard to the adversary, and for obtaining additional power at the moment of delivering the blow. It order to make such use of the horse as will enable the rider deal more effectually with an opponent in mounted combat, the horse should be trained to collect itself on its hocks and his quarters and then to spring forward from its hocks at the right moment. The actual points and parries will be made at the instructor as explained, and the practice at dummies execute in the same way, only with the horse at speed. It should explained to the pupil that when mounted, his horse and the movement of the body take the place of the lunge on foot.

Mounted Assaulting Lessons are carried out at first with the instructor and afterwards with other pupils on the principle indicated in the 1st Stage. The attacker will be taught make his attacks with his horse on the move at a reasonab

speed, and, whether he hits or is parried, to keep his horse moving and thus avoid his opponent's return, and so manœuvre for another attack. The pupil will then try an actual assault with the instructor, who must regulate his play according to the capacity of the pupil, taking care to give him opportunities and not to discourage him by hitting him too frequently.

# S. 365. Mounted Combat with other Pupils.

Mounted-combats will always be carried out under the supervision of the instructor, who should watch the play carefully and endeavour to correct faults and encourage a dashing style of attack. The men will be instructed to practise fighting on the move as much as possible, and not from a stationary position.

## S. 366. Principles of Mounted Combat.

The first object (except at practice) in attacking an enemy is to charge straight at him, and to throw him down; the second is to drive the point into him in doing so.

If an attack be delivered with the point well to the fore, he is bound to try and ward it off before he can do anything else. Should he avoid you, and leave you space for choosing the point of attack, you should endeavour to take advantage of it; at all events avoid the attack being made on your left rear, when a change of position can alone bring you upon an equality with your opponent; this may be done either by making a sudden halt, so as to allow him to pass, and then pressing upon his left rear; or by turning quickly to the left about, and thereby having your right also opposed to his. Should you be prevented doing this, and he still keeps on your left, you must get as close as possible to him, for in his situation, by keeping at a proper distance from you, his attack will reach when yours will not, and you will be reduced to the defence alone.

In meeting your opponent on the left front, swing your horse sharply to the left, which will immediately bring you with your sword-arm free, at liberty to act upon his left. In meeting him upon the right front, press your horse quickly on, and by a sharp turn to the right, gain his left rear. If pursued, endeavour to keep your adversary on the right rear. When attacked by more than one, you will naturally endeavour to keep them both either to the right or left; but where they have been enabled to place themselves on both sides, press close upon the left opponent, and endeavour to keep the right one at a distance.

The attack or defence against the lance must depend greatly upon the rider; for if the lancer is equally well-mounted, and skilful in the management of his horse, he will endeavour to keep at such distance as to be out of your reach, whilst he can easily make good his thrust, from the length of his lance; and he will very frequently succeed in directing his point at your horse, which, becoming unruly, will leave you exposed to the attack of your opponent. You must, therefore, invariably endeavour to gain his right rear, where he is less able to attack or defend; whereas if the attack is made upon his left rear, he has the advantage of resting his lance upon his bridle arm, and can lengthen or shorten his thrust with facility and quickness. If engaged on his left, the object must be to keep just out of distance of his lance; watching the opportunity to close either by having previously formed a defence, or by bearing the lance out of the line.

S. 367. Competitions for Skill-at-Arms.

Two combatants should be sent at each other from a long distance apart, on varied ground, accompanied by umpires.

After engaging, half a minute will be allowed them to fight, at the end of which the umpires will decide which man had the better of the encounter.

If neither makes a decisive point, both lose the heat.

In troop competitions, the aim will be to find the worst swordsman in the troop. Second heats are therefore arranged for the losers of the first heats; in this way the worst man gets the most practice.

Instructors should bear in mind the importance of the horse in the mounted combat, and should not award marks entirely

to\_the\_sword.

- i. A preliminary examination in "Skill-at-arms" will be held by troops with a fixed standard of marks, which, if not attained, disqualify the man to compete further.
- ii. As the result of (i.) the eight best men in each troop (as determined by the number of marks obtained) will each in turn compete against one another, and the two best of eight compete for the best and second best swordsmen of the squadron.

### EXERCISES FOR STRENGTHENING THE ARM, ETC.

The following exercises will be practised from time to time, and are designed for making the body supple and strong, and also for strengthening the arm and giving control over the sword. These movements are also of value as general physical exercises.

S. 368. Body Exercises.

(i.) Trunk Bending Forward.

Starting position—"Hips firm," i.e., hands on hips.

" Trunk
ForwardBend."

Bend the trunk slowly forward from the hips, keeping the back straight, the chest advanced, and the head at the same relative position as at "Attention."

" Upward-Stretch."

Slowly resume the starting position.

(ii.) Trunk Bending Backward.

Starting position—" Hips firm."

" Trunk Backward-Bend."

Keeping the knees straight, bend the upper part of the trunk slowly backwards, the head commencing the movement and kept well back with the chin drawn in. The bend should not be made from the waist alone, but the whole \spine should be arched.

"Upward-Stretch."

By reversing the movement, raise the trunk to the starting position.

(iii.) Trunk Bending Sideways.

Starting position—"Hips firm."

Left (Right)-Bend."

" Trunk to the, Without altering the relative position of the head, shoulders, or arms, bend the Isteadily as far as possible to the left (right).

" Upward-Stretch."

Raise the trunk slowly to the upright posil tion.

## S. 369. Exercising Cuts.

The "Exercising Cuts" are performed purely as an exercise, and are invaluable as a means of developing the power and elasticity of the sword arm, giving control of the sword and suppleness to the body, and also insuring cutting with an absolutely true edge. They should be executed from the position of "Sword in line," or from the "engage" position with the right foot advanced a few more inches than usual. They should at first be performed by numbers for a few times, then in one large, rapid, easy, swinging movement,

afterwards the size of the circles should be reduced little by little until they finally approach the practical form of cut required.

When executed from the "Sword in line" position, the movements of the arm and sword are as described below, but the

body is kept upright and the legs straight.

# (i.) Exercising Cut No. 1.

By a movement of the forearm, and without bending the wrist, turn the back of the hand to the left, edge of the sword upwards. Bend the arm sharply, draw the body well back by straightening the right leg and bending the left, drop the point of the sword and swing it to the rear, making it pass close to the body with an easy pendulum-like movement. The blade must pass to a diagonal position, edge to the rear, point the height of the flank and directed downwards to the rear, hand as high as the left temple and about 4 inches from it, elbow well raised, eyes looking underneath the arm. In this motion the forearm must never cross the line of vision, but must always be above it.

" One."

" Two."

Using the elbow as a pivot and without allowing it to drop, bring the arm and sword upward and forward with force and freedom, edge of the blade leading, the point of the sword describing the arc of a large circle; instantaneously on the completion of the cut, straighten the left leg, thrust the body well forward and bend the right knee.

## (ii.) Exercising Cut No. 2.

Without bending the wrist or lowering the elbow, bend the right arm at the elbow, raise the forearm and sword vertically and describe a circular movement with the point of the sword (keeping the elbow as a pivot) upwards, backwards, and then downwards to the left as far as the shoulder, the forearm and sword being in one line, edge to the left, at the same time bending the left knee and the body well back as previously described.

Straighten the arm at the elbow and deliver the cut, edge leading, with a horizontal sweet to the left, the body and legs assisting the

completion of the cut as above.

(iii.) Exercising Cut No. 3.

Bend the right arm at the elbow, and with out bending the wrist or lowering the elboy raise the forcarm and sword vertically, and describe a circular movement with the point of the sword (keeping the elbow as a upwards, backwards, and then downwards to horizontal position to the right of the head the forearm and sword being in one line, edg to the right, at the same time bending the left knee and body well back as previously described.

Straighten the arm at the elbow and delive the cut, edge leading, with a horizontal sweet to the right, the body and legs assisting a before.

``One."

" One."

" Two."

#### APPENDIX II.

### INSTRUCTIONS IN THE USE OF THE LANCE.

For practice in connexion with tournaments, skill at arms competitions, &c., and not to be practised as a drill exercise.)

S. 370. Preparation for Lance Practice.

(Dismounted.)

The squad will fall in, in single rank standing at ease—butt of the lance on the ground—holding the pole in the right hand n any convenient position.

Attention."

Come to attention holding the lance between the thumb and fingers of the right hand at the full extent of the arm, thumb inside the pole, fingers outside, back of the hand to the right, butt close to the ball of the right foot. (This is the position of the "Order.")

" Form
for
Lance
Practice."

Bring the lance to the shoulder by raising the arm from the elbow still holding the lance as at the Order, right elbow close to the hip, hand in front and in line with elbow, lance sloping backwards and resting on the right shoulder. (This is the position in which the lance is carried when marching on foot.)

The men file from the right of sections. The centre man of the line marches straight forward, the other right hand men of sections move to the front and extend until each man has an interval of four paces from the man on his flank nearest to the centre of the line; the remainder of each section follow in succession at a distance of four paces; dressing by the centre.

' Quick March.'' "Halt."—The lance is lowered to the Order.

Raise the hand with the back to the front and "Carry grasp the pole, thumb inside the sling and level with Lance." ) the top of the shoulder, back of the hand to the front, elbow down.

Let the hand slide smartly down the pole to the full extent of the sling, thumb inside it, lance upright; raise the butt 6 inches from the ground and lower the point direct to the front till the " Engage." (lance is horizontal, catching the pole under the closed arm; as the lance is being lowered carry the right foot out to the right 20 inches, feet pointing straight to the front, bridle hand in the mounted position.

In executing the lance practice, dismounted, when acting on the right side (which should be drawn in) the weight of the body should be chiefly on the left leg, the knees bent and pressed well apart, the reverse position will be adopted when acting on the left side.

Carry the lance under the arm round to the "Right Prove | right and slowly extend the arm, back of the Interval." hand to the front, arm, point, and butt in lind with shoulder, pole outside the arm.

" Engage."—As above.

"  $Front\ Prove \ Distance." \begin{cases} Extend the arm to the front, and as described in <math>Right\ Prove\ Interval, \ body\ inclined\ a\ little \ forward. \end{cases}$ 

" Engage."—As above.

"Carry of Come to the position of Attention and carry lance Lance." \as described above.

### S. 371. Lance Practice.

(Dismounted.)

Lances being at the carry—

"Engage."—As before.

"Point." Solver the point with force to the full extent of the arm direct to the front in line with the shoulder, back of the hand to the left, pole outside the arm.

"Engage."—As before.

"Right front wave and point." Carry the lance round to the right front, and, keeping the pole under the arm as at the Engage, wave the point first to the right and then to the left through an arc of about 20 degrees; then without pause deliver the point to the right front to the full extent of the right arm.

' Engage."—As before.

'Parry."

`Right

rear

point."

Bring the lance perpendicular to the right side, hand on a line with and about 6 inches from the right shoulder, which will be thrown back, elbow raised to the height of the hand; then deliver a strong parry to the front to the full extent of the arm, keeping the lance perpendicular.

Lower the point to the right rear (raising the butt

so as to clear the horse's head when mounted), draw

the right hand into the left, back of the hand down, pole resting on the bridle hand, upper part of the body turned to the right rear. Then deliver the point with force, to the full extent of the arm to the right rear, back of the hand down; point butt and arm in line with the shoulder, leaning

butt and arm in line with the shoulder, leaning the body well over, and throwing back the right shoulder. Having delivered the point, withdraw

the lance to the position as before delivering the point.

" Left rearpoint."

Raise the lance horizontally over the head by straightening the arm circling the point smartly to the left rear, and lower the lance till it rests horizontally on the bridle hand, the right hand drawn back about 18 inches from the left elbow well raised, at the same time change the weight of the body from the left to the right leg, the body well turned on the hips to the left.

Then deliver the point with force to the left rear

catching the butt firmly under the arm.

Having delivered the point, at once withdraw the lance to the Engage, but with the point directed to the left front.

" Left front ( Make the wave short and quick to the left and right as before directed, and at once deliver the and point." \point with force, catching the butt firmly unde the arm.

- " Engage."—As before.
- "Carry Lance."—As before.

Ranks."

The men make a half turn inwards toward the centre, and on the command Quick March "Reform the man who is centre of the line moves up fou paces and halts, the rights of fours move up witl him, correcting their interval, and the remainde form on them.

The lance practice should be carried out against infantry in doing so the points, waves, and parries will be directed downwards.

.The sequence of the practice should be varied by word d command, so as to accustom the men to rapidly deliver a attack in any direction.

## S. 372. Practical Instruction in the Use of the Lance.

### (Mounted.)

1. To use the lance to the best advantage against an opponent in the charge, the *mélée*, or in the pursuit, demands horsemanship, complete control of the weapon, skill and determination. The pace of the horse is also an important factor.

The Lancer should avoid engaging an adversary at a slow pace, which invariably results in both opponents circling round each other. The moral effect of the lance will thus be lost, and the greater reach of the lance over the sword will be of less advantage.

The aim of the Lancer should be to strike his opponent with the point and at speed. Against a horseman armed with a sword he will have the advantage of reach; against a disnounted man the advantage of both momentum and reach; and against a mounted Lancer he will not be at a disadvantage.

If he fails to get his point home when moving at speed, the pace will carry him for the moment out of reach of a counter attack. He can then either select another opponent or renew the attack on the original one. Apart from horsemanship, deternination and skill in handling his weapon, his success must therefore be looked for in the suddenness of attack and pace, and in not permitting an adversary to force him into single combat.

For instructional purposes, fighting lance versus lance, or ance versus sword should, therefore, but rarely be ordered, and then only for giving the Lancer the necessary degree of practice in fighting at close quarters in situations into which he may unavoidably fall.

For the latter purpose the "thrust" may be practised to the right and left fronts as follows:—

"Right front front by the left to the rear, arm extended to the thrust." rear; then deliver the thrust to the full extent of the arm and withdraw to the Engage.

"Left front direct to the left front; then deliver the thurst to the thrust." Circle the point round by the rear, bringing the butt direct to the left front; then deliver the thurst to the thrust."

- 2. The aim of the practical instruction must be to teach the man—
  - (a To drive the point of the lance home with determination through an object which will offer sufficient resistance to resemble the human body.
  - (b) To retain a firm grip of his lance.
  - (c) To withdraw the lance with ease from the object into which it has been driven.
  - (d) To return the lance rapidly to a position of readiness so as to be again prepared to deliver a fresh attack on either side.
  - (e) To ward off an attack with a parry or wave.
  - (f) To rapidly change his direction so as to deliver a fresh attack to either flank or to the rear.
  - (g) To carry out the above exercises at the gallop.
- 3. Instruction on the following general lines will be found useful:—

Dummies representing men, both mounted and dismounted, should be set up in the open. These should not be arranged in any set sequence, but should be frequently moved, so as to insure as much variety as possible from day to day.

In the early exercises, one dummy for each man will suffice; at subsequent lessons two should be used, which should be in the same line, and on the same hand.

After which dummies may be set up on the same line of advance, but one on either hand. They should then be set up in conjunction with jumps, which may be placed either before or behind them.

As individual skill develops, the dummies should be closer together, and in positions demanding rapid change of direction, but they should never be so close as to render it impossible for the man to deliver his attack with effect before having to turn his attention to another one.

Men should be taught to deliver their points at the centre of the dummy, which should therefore be marked for the purpose.

Practical instruction in pointing cannot be given unless the lances are sharp, and special care will be given to this.

The dummies should be arranged at heights to correspond to those of men both mounted and on foot.

Men should be taught to use the wave with effect by assigning one or more of the dummies or posts to be knocked over by this form of attack. Its use to disconcert an opponent either by striking his horse over the head or by using it against him when unavoidably brought to close quarters and at slow pace will be explained, as also its usefulness in parrying a point and of sweeping the lance from an opponent's hand.

The best form of dummies for teaching the point are those made of wet clay, but when this form cannot be provided sacks filled with chopped hay or straw make fairly good substitutes. They should vary in size from that of a man's body to a head only.

Any suitable contrivance which will give a sufficient degree of resistance will suffice for practising the wave and the parry.

Tent-pegging should also form part of the instruction, but in this, as in the other practical instruction, a large number of runs must not be demanded from any horse in one day; three will usually suffice.

A sufficiency of instruction must therefore be obtained by practice during the intervals when other individual instruction is being given.

In order to prevent horses becoming excited and out of hand, they will all be walked quietly down the track at the end of the practice. If a horse shows any signs of becoming unsteady, he must only be walked down the runs for a few days.

### APPENDIX III.

### S. 373. FIRST AID TO MAN.

Always notify the Medical Officers at once, if possible.

Wound with Bleeding.—Make a pad of a clean handkerchief or other material, as follows:—Fold in the corners towards the centre and continue this until the requisite sized pad is formed; apply to wound, and keep in position with handkerchief, bandage, puttee, &c. If the bleeding is severe and continues, put a small stick through the bandage and twist up. With another handkerchief the stick can be prevented from untwisting.

Wound without Bleeding.—Apply a clean rag to wound and keep it in position by means of a handkerchief.

Broken Bones.—If a limb bone be broken, some rigid body, such as a piece of wood, a bundle of twigs or rushes, a folded gaiter, &c., may be applied as a splint to the part to give rest to the broken bone. The splint must be long enough to extend beyond the extremities of the broken bone. If the bone has come through the skin, place a piece of clean rag over the wound and then apply the splint.

It is better to apply the splint over the clothing.

Broken Jaw.—Tie the jaws together by means of a handkerchief or puttee round the head and chin.

Broken Collar-bone.—Rest the fore-arm in a sling, with the hand pointing towards the opposite shoulder, then bandage the fore-arm and arm to the side by means of a puttee, &c.

Broken Thigh.—A long splint to reach from the ankle to the arm-pit should be used. A rifle makes a fair splint. See that it is unloaded, likewise the magazine. Place the rifle flat to the outside of the broken thigh, butt up, and the muzzle towards the ankle. Fix the end of the barrel to the foot and ankle, bandage the butt to the side, and then bandage the rifle to the thigh, to the knee, and to the middle of the leg; when finished, tie the two limbs firmly together.

Shoulder Out.—Put the arm in a sling. Do not attempt anything further.

Sprained Joint or Muscles .- Use horse oils, well rubbed in.

Suspended Animation.—Make use of artificial respiration as follows:—The patient is placed face downwards on the ground, the patient's arm is bent and placed under his forehead, thus keeping the nose and mouth clear from the ground. The

operator kneels astride or at one side of the patient near the hips, and places his open hands flat over the small ribs with the thumbs touching over the spine. He puts his weight on to his hands, squeezing down the ribs, expelling the air. He then releases the pressure by slowly sitting back on his heels, causing air to be sucked in. These movements are repeated slowly about fifteen times a minute. Apply friction by rubbing the limbs upward towards the body. Promote warmth of the body as soon as possible by applying covered hot-water bottles, between the thighs and to the armpits. If the power of swallowing has returned, small quantities of hot coffee, hot tea, brandy, or wine should be administered.

Snake-bite.—(1) Tie something tightly round the limb, on the heart side and about a hand's breadth from the bite. The bite is generally denoted by two little punctures. (2) Pick up the skin where the bites are and cut it off. (3) Suck the wound. (4) Give the patient stimulants if collapsed. (5) Prevent his going to sleep, by walking him up and down and smacking his back.

For Stings of Insects, apply ammonia or blue-bag, or washing soda.

Burns or Scalds.—Cover injured part with a piece of rag soaked in oil or vaseline. If clothing adheres, cut it away.

Insensibility.—1. In all cases loosen all clothing about neck and chest, and give as much fresh air as possible.

- 2. Lay patient on his back.
- 3. If face is flushed, raise the head, if pale, lower it.
- 4. Never give anything by the mouth.
- 5. Apply cold to the head and warmth to his feet.

In fits with convulsions do as above and control the limbs and head so that the patient will not hurt himself, and place handkerchief knot between his teeth so that he will not bite is tongue.

Sunstroke or Heat-stroke.—Remove to a cool shady spot, button all tight clothing, and dash cold water over the head d back.

Frost-bite.—Keep away from fire, and rub parts with snow, or

Where a person has taken poisoned food, encourage vomiting giving mustard and salt and warm water in repeated doses.

Sore Feet.—Bathe the feet at night in tepid water, with salt

alum in it.

Blisters.—Prick the edge with a needle that has been made d-hot with a match, keep clean and prevent surface from ing rubbed.

### APPENDIX IV.

### S. 374. FIRST AID TO HORSE.

The following Notes are for the instruction of mounted solers, to enable them to render first aid; but it is expressly laid wn that when in camp, or on the march, all cases must be ported to the nearest veterinary officer as soon as possible.

Colic (Spasmodic).—Pain is not continuous, animal violent at tervals, looks round at sides, sweats, hurried breathing, lining eye a bright red, mouth dry. If there is constipation, give 1 nce of carbonate of ammonia ball; or 6 ounces of whisky in

water; copious injections of cold water, and apply mustain or hot water packs to belly. Later give an aloes ba Should there be diarrhoea, give 1 to 2 ounces of each laudanuand sweet spirits of nitre.

Colic (Flatulent or Windy).—Pain is continuous; belly if flated from gases generated from fermentation of food. Girls and a concess of decarbonate of soda.

Exhaustion.—From fatigue after heavy and fast work. As mal lies down, no inclination to feed, but generally very thirst cold sweats appear. Rub body briskly, then clothe warml give 1 ounce carbonate of ammonia ball or 6 to 8 ounces whisky in water.

Coughs and Colds.—Pay general attention to comfort, stea the head, using bucket with straw at bottom, paint the thro with tincture of iodine or rub with liniment, damp dry food, b give green fodder for preference, change drinking water ofte give chlorate of potash 1 dram. and Epsom salts 2 dram morning and night, in either food or water.

Strangles.—Always isolate horse as soon as symptoms a parent, general treatment as in colds, abscess to be open when it "points," and well drained, destroy discharges, a treat as an ordinary wound.

Wounds.—Clean thoroughly with warm water, using a disinfectant in a weak solution, dress with powdered borac acid, and, where practicable, bandage, otherwise cover wi cotton wool, afterwards avoid using water as much as possib

Broken Knees.—At once wash well with warm water and d infectant, so as to thoroughly cleanse the wound, afterwar use cold water, by means of hose, if available, and dress wiboracic acid.

Bleeding from Wounds.—Where practicable apply pressure, y placing pad over wound and bandaging tightly, otherwise ut large pin through both lips of wound, and tie horsehair round in figure 8.

Sore Backs.—Every sore, every injury, every abrasion on a orse's back is due to a certain definite cause, which, if removed, roduces no further effect. Sore backs are generally brought bout either by friction or pressure, or a combination of the vo... Therefore, find out cause and remove it. Wash the sore ith warm disinfectant once; and afterwards use cold water. pply a lotion consisting of sulphate of zinc and acetate of lead -2 drams. of each to a pint of water three or four times daily.

Punctures in Feet.—Pare horn around wound, and place foot bucket of hot water, then thoroughly disinfect by syringing with carbolic acid for preference), and cover with tar.

" Don'ts."—Don't give feed to a horse hot from work, withit allowing him a small drink of cold water.

When drenching, don't pinch the throat, to make horse swalw the liquid.

Don't pour liquid down the nostrils.

Don't drench if throat very sore, but give medicine as a ball.

Don't burn the "Lampas" from a horse's mouth, as it is unccessary, and very cruel.

Don't use hot water continuously on broken knees.

Don't, when bandaging, draw one portion of the bandage ther than another, nor tie the strings tighter than the bandage put on.





### PLATE I.—DIVISIONS OF THE HORSE'S BODY.

#### THE HEAD.

- 1. Nape of the neck or Poll.
- 2. Forelock.
- 3. Ears.
- 4. Forchead.
- 5. Face.
- 6. Nostril.
- 7. Upper lip.
- 8. Under lip.
- 9. Place for the curbchain.
- 10. Lower jaw.
- 11. Zygomatic ridge.
- 12. Hollow above the eye.
- 13. Maxillary joint.

#### THE NECK.

- 14. Mane or crest.
- 15. Lower part of neck or throat.

#### THE TRUNK.

- Withers.
- 17. Back.
- 18. Loins.
- 19. Side of chest.
- 20. Breast.
- 21. Floor of chest.
- 22. Abdomen.
- 23. Flanks.
- 24. Sheath or prepuce.

### THE FORE LIMBS.

- Shoulder.
- 26. Point of shoulder.
- 27. Arm.
- 28. Elbow.

- 29. Fore-arm.
- 30. Knee.
- 31. Shank or canonbone.
- 32. Fetlock-joint.
- 33. Pastern.
- 94.—Goronet,—and\_heels,\_
- 35. Hoof.
- 36. Chestnut.

### THE CROUP AND HIND LIMBS.

- 37. Haunch.
- 38. Croup.
- 39. Hip-joint.
- 40. Upper thigh. 41. Stiffe.
- 42. Lower thigh.
- 43. Hock.
- 44. Chestnut.

The description from the book downwards are the same as in the forelimbs.

#### THE TAIL.

- 45. The root of the tail or dock.
- 46. The hair of the tail.

REMARK.—The plate shows a bright-chestnut English thoroughbred stailion, with a star on the forehead, a white sock on the off fore-leg, a white heel on near foreleg, and a white stocking on the near hind-leg.

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