

FIELD EXERCISE,  
EVOLUTIONS OF INFANTRY,  
RIFLE EXERCISES,  
AND  
MUSKETRY INSTRUCTION;

AS REVISED

By Her Majesty's Command,

SEPTEMBER, 1870.



TORONTO :  
HUNTER, ROSE AND COMPANY,  
1871.

**HUNTER, ROSE AND COMPANY,  
PRINTERS, BOOKBINDERS, ELECTROTYPERS, ETC.**

---

---

**FIELD EXERCISE**

**AND**

**EVOLUTIONS OF INFANTRY.**

---

---

## GENERAL ORDER

---

*Horse Guards, S.W.,  
1st September, 1870.*

THE "Field Exercise and Evolutions of Infantry" having been revised, His Royal Highness the Field Marshal Commanding-in-Chief has received the Queen's commands to require of all General Officers in command of Troops the most scrupulous adherence to the system now promulgated. It is to their superintendence and vigilance that Her Majesty trusts for the enforcement of prompt and implicit obedience to all General Orders and Regulations.

His Royal Highness reminds the Officers of the Army of the responsibility they will incur by introducing any deviation from a system which has been sanctioned by Her Majesty.

By Command of His Royal Highness the  
Field Marshal Commanding-in-Chief.  
W. PAULET, A.G.

# FIELD EXERCISE AND EVOLUTIONS OF INFANTRY.

## CONTENTS.

	PAGE
DEFINITIONS - - - - -	xxvii

## PART I. RECRUIT OR SQUAD DRILL.

### GENERAL RULES.

NO.		PAGE
I.	Instruction of the Recruit - - - - -	1
II.	Duration of Drills, &c. - - - - -	1
III.	Mutual Instruction - - - - -	2
IV.	Words of Command - - - - -	2

### RECRUIT OR SQUAD DRILL, WITH INTERVALS.

Formation of Squads - - - - -	4
-------------------------------	---

#### SECTION.

1. Position of the Soldier - - - - -	4
2. Standing at Ease - - - - -	5
3. Dressing a Squad with Intervals - - - - -	9
4. Turnings - - - - -	9
5. Extension Motions - - - - -	11
6. Saluting - - - - -	14

### MARCHING.

7. Length of Pace - - - - -	17
8. Cadence - - - - -	17

## CONTENTS.

	PAGE
TON	
The Drum, Plummet, and Pace Stick - - - - -	17
Position in Marching - - - - -	18
Balance Step - - - - -	19
The Slow March - - - - -	22
The Halt - - - - -	22
Stepping Out - - - - -	22
Stepping Short - - - - -	23
Marking Time - - - - -	23
Stepping Back - - - - -	23
Changing Feet - - - - -	24
The Quick March - - - - -	24
The Double March - - - - -	24
The Side or Closing Step - - - - -	25
Turning when on the March - - - - -	26

## SQUAD DRILL, IN SINGLE RANK.

Directing and Reverse Flanks - - - - -	28
Formation of the Squad in Single Rank - - - - -	28
Dressing when Halted - - - - -	28
Turnings - - - - -	30
Marching to the Front and Rear - - - - -	30
A Single Rank, at the Halt, changing Front - - - - -	31
A Single Rank, on the March, changing Direction - - - - -	35
The Diagonal March - - - - -	35
Marching as in File - - - - -	37
Wheeling as in File - - - - -	38
Men marching as in File forming Squad - - - - -	38
The Side or Closing Step - - - - -	40
Rifle Exercises - - - - -	40
Marching with Arms - - - - -	41

## SQUAD DRILL, IN TWO RANKS.

SECTION	PAGE
37. Formation of Squad in Two Ranks - - -	41
38. Dressing - - - - -	42
39. Marching to the Front and Rear - - -	42
40. Taking Open Order. - - - - -	42
41. Rifle Exercises - - - - -	43
42. Changing Front by Wheeling, or File Formation	43
43. The Diagonal March - - - - -	43
44. File Marching, Wheeling in Files, and Files forming Squad - - - - -	44
45. The Formation of Fours - - - - -	47
46. Fours Wheeling and Forming Squad - - -	50
47. A Squad formed in Fours closing on a Flank, or on the Centre, and Re-forming Two Deep -	50
48. Breaking off Files - - - - -	51

## SKIRMISHING.

49. Extending - - - - -	53
50. Closing - - - - -	55
51. Advancing and Retiring - - - - -	55
52. Moving to a Flank - - - - -	56
53. Changing Front, or Direction - - - - -	56

## DISMISSING.

54. Dismissing a Squad - - - - -	57
----------------------------------	----

# PART II.

## COMPANY DRILL.

### GENERAL RULES.

NO.	PAGE
I. Soldiers to be formed in a Company	58
II. Sizing a Company	58
III. Soldiers to know their Places	59
IV. Formation and Telling-off of a Company	59
V. Supernumerary Rank	59
VI. Officers, &c., of a Company	60
VII. Relative Proportion of Paces to Files	60
VIII. Application of Squad Drill	60
IX. Companies to be drilled as if with the Battalion	61
X. Companies to be exercised by their own Officers	61
XI. Companies to be exercised on Rough Ground, with the Ranks changed	61
XII. Derangements to be quickly remedied	62
XIII. Assembling on Markers	62
XIV. Marching on Points and judging Distance	62
XV. Markers giving Points	63
XVI. The Captain	63

### A COMPANY IN LINE AND COLUMN.

SECTION	PAGE
1. Formation of a Company	64
2. A Company in Line taking Open Order	64
3. Marching to the Front and Rear	68



## WHEELING, OR FORMING, FROM THE HALT.

SECTION	PAGE
4. A Company Wheeling, or Forming, from the Halt, from Column into Line - - -	69
5. A Company Wheeling, from the Halt, from Line into Column - - - - -	70
6. A Company changing Front as the base Company of a Line Formation - - - - -	73

## WHEELING, OR FORMING, ON THE MARCH.

7. Wheeling, or Forming, from Column into Line ; and Wheeling from Line into Column -	74
8. A Company in Columns changing Direction -	75

## MISCELLANEOUS MOVEMENTS AND FORMATIONS.

9. Marching Past - - - - -	76
10. The Diagonal March - - - - -	80
11. File Marching and Wheeling in File - - -	80
12. The Formation of Fours - - - - -	80
13. A Company marching in Files or Fours, forming to the Front (or Rear) ; to the Right (or Left) ; or to the Right or Left about - - -	83
14. A Company formed in Fours, closing on a Flank, or on the Centre, and re-forming Two Deep -	83
15. The Side or Closing Step - - - - -	84
16. Counter-marching - - - - -	84
17. Diminishing and increasing Front, by breaking off Files, and bringing them again to the Front -	85
18. Diminishing and increasing Front by breaking into Files, or Fours, and re-forming Company	85
19. Forming Company Square - - - - -	86

## FORMATION OF HALF-COMPANIES AND SECTIONS.

SECTION	PAGE
20. Formation of Half-Companies and Sections	- 87

### SKIRMISHING.

21. Skirmishers Firing - - - - -	93
22. Relieving Skirmishers - - - - -	95
23. Reinforcing, or Prolonging a Line of Skirmishers to a Flank - - - - -	97
24. Closing on the Support - - - - -	97
25. Rallying Squares - - - - -	98
26. Attack by Cavalry - - - - -	99

### INSPECTING, PROVING, AND DISMISSING.

27. Inspecting and Proving a Company - - -	101
28. Dismissing a Company - - - - -	101

## PART III.

FORMATION AND EVOLUTIONS OF A  
BATTALION.

## GENERAL RULES.

No.		PAGE
I.	Application of Squad and Company Drill -	102
II.	Battalions to move as component Parts of a Brigade - - - - -	102
III.	Words of Command - - - - -	102
IV.	Mounted Officers - - - - -	103
V.	Giving Points - - - - -	103
VI.	Alignment and Points of Formation -	103
VII.	Degrees of March - - - - -	104
VIII.	Bayonets not to be fixed - - - - -	105
IX.	Keeping the Right Guide's place in Line -	105
X.	Making way for an Officer, or Marker, to pass through the Line - - - - -	105
XI.	The Front - - - - -	105
XII.	Companies, when they lose their Order, to be re-numbered - - - - -	106
XIII.	A Battalion firing - - - - -	106
XIV.	A Battalion dispersed, re-assembling - -	107

## A BATTALION ON PARADE.

## SECTION

1.	Formation of a Battalion on Parade in Column	108
----	--	-----

## FORMATION AND MOVEMENTS OF A BATTALION IN LINE.

### GENERAL RULES.

NO.		PAGE
I.	Formation of Lines for Attack and Defence	113
II.	Marching in Line - - - - -	113
III.	Passing over Inequalities of Ground - - - - -	113
IV.	Retiring in Line - - - - -	113
V.	Base Points and Markers - - - - -	114
VI.	Points to be kept clear - - - - -	114
VII.	Closing to correct Intervals - - - - -	115

### FORMATION AND MOVEMENTS.

#### SECTION

2.	Formation of the Battalion in Line - - -	115
3.	A Battalion in Line taking Open Order - - -	116
4.	Advancing and Retiring in Line - - -	120
5.	Charging in Line - - - - -	121
6.	Dressing a Battalion in Line - - - - -	122
7.	A Battalion in Line passing Obstacles - - -	122
8.	Battalions in Line relieving each other - - -	127

### COLUMN MOVEMENTS.

#### GENERAL RULES.

NO.		
I.	Use and Advantages of Columns - - -	128
II.	Depth of Columns - - - - -	128
III.	Application of Columns - - - - -	128
IV.	Directing Flank in Column - - - - -	129

SECTION	MOVEMENTS.	PAGE
9.	Formation of a Battalion in Half and Quarter Column - - - - -	129
10.	Forming Quarter Column from any more open Column - - - - -	130
11.	A Quarter Column opening from the Front, the Rear, or a Central Company - - - - -	131
12.	Columns increasing and diminishing their Front, and passing Obstacles - - - - -	134
13.	A Column changing Direction, and marching on an Alignment ; or changing Position by the Flank March of Fours - - - - -	135
14.	A Quarter Column Wheeling - - - - -	141
15.	A Column countermarching - - - - -	143
16.	Changing the Order of a Column - - - - -	143
17.	A Column moving to a Flank in Fours - - - - -	144
18.	A Quarter Column in Files, or formed in Fours to a Flank, wheeling to the Right or Left - - - - -	144
19.	A Column, when moving to a Flank in Fours, closing on, or opening from, any named Company - - - - -	145
20.	Application of the Flank March of Columns in Fours - - - - -	146
<b>FORMATIONS OF COLUMN FROM LINE.</b>		
21.	A Battalion in Line Wheeling into Column from the Halt - - - - -	147
22.	A Battalion in Line Wheeling into Column, on the March - - - - -	148
23.	A Battalion in Line advancing in Column, Column of Double-companies, or Columns of Half-battalions - - - - -	148
24.	A Battalion in Line retiring from one Flank in rear of the other ; or from both Flanks in Rear of the Centre, or any named Company	155

SECTION	PAGE
25. A Battalion in Line forming Column, Quarter Column, Column of Double-companies, or Columns of Half-battalions - - -	157

#### FORMATION OF LINE FROM COLUMN.

26. Wheeling, or Forming, from Column into Line	162
27. A Battalion in Column forming Line, by Companies in succession, to either Flank - -	163
28. A Battalion in Column of Double-companies forming Line to the Right or Left - -	167

#### DEPLOYMENTS.

29. A Battalion in Column, or Quarter Column, deploying into Line - - - -	168
30. A Battalion in Column of Double-companies, or Columns of Half-battalions, deploying -	174

#### MOVEMENTS AND CHANGES OF FRONT IN ECHELON.

##### GENERAL RULES.

NO.		
I.	Application of Echelon, Short Echelon, and Oblique Echelon - - - -	174
II.	Oblique Echelon - - - -	175
III.	Moving to the Rear in Oblique Echelon -	175
IV.	Changes of Front by Echelon - - -	175

#### MOVEMENTS AND CHANGES OF FRONT IN ECHELON.

SECTION		
31.	A Battalion in Line moving in Oblique Echelon and wheeling up into Line parallel to the original Alignment - - - -	176

SECTION	PAGE
32. A Battalion in Line changing Front on any named Company - - - - -	180
33. A Battalion in Line advancing or retiring in Echelon, or advancing in Short Echelon -	185
34. Forming Line from Echelon, or Short Echelon	186
35. A Battalion in Echelon forming Line in an Oblique Direction - - - - -	190

### FORMATIONS TO RESIST CAVALRY.

#### GENERAL RULES.

NO.		
I.	Various Methods - - - - -	193
II.	Receiving Cavalry in Line - - - - -	193
III.	Squares - - - - -	193

#### FORMATIONS.

SECTION		
36.	A Battalion preparing for Cavalry in Line -	193
37.	A Battalion in Line forming Square - -	194
38.	A Battalion in Column forming Square - -	197
39.	A Battalion in Column of Double-companies, or in Columns of Half-battalions, forming Square - - - - -	202
40.	A Square marching in any Direction - - -	202
41.	A Battalion in Square re-forming Column, or Column of Double-companies - - - - -	203

### SKIRMISHING.

#### GENERAL RULES.

NO.		
I.	Divisions of a Regiment when Skirmishing -	205
II.	Relative Strength of Skirmishers, Supports, and Reserves - - - - -	205

NO.	PAGE
III. Relative Duties of Skirmishers, Supports, and Reserves - - - - -	205
IV. Relative Distances of Skirmishers, Supports, and Reserves - - - - -	206
V. Time of Movements, and Cover - - - - -	207
VI. Principles of Movements to be explained - - - - -	207
VII. Points of Direction - - - - -	208
VIII. How Arms are carried - - - - -	208
IX. Officers and Supernumeraries - - - - -	208
X. Words of Command and Bugle Sounds - - - - -	217

## SECTION

42. A Battalion extending in Skirmishing Order from Quarter Column, or Line - - - - -	217
43. Relieving and Reinforcing Skirmishers - - - - -	219
44. Changes of Front - - - - -	219
45. Attack by Cavalry - - - - -	219
46. Closing on Supports - - - - -	220
47. Closing on the Reserve - - - - -	223
48. Flanking Parties - - - - -	224
49. Passing a Bridge, or short Defile in contact with an Enemy - - - - -	229
50. Formation of an Advanced and Rear Guard - - - - -	230

---

SPRING OR SETTING-UP DRILL

---



# PART IV.

## FORMATIONS AND MOVEMENTS OF A BRIGADE.

### GENERAL RULES.

NO.	PAGE
I. Application of Battalion Movements - - - - -	236
II. Division of an Army - - - - -	236
III. Formation in Line - - - - -	237
IV. Line of Quarter Columns - - - - -	237
V. Formation of Column - - - - -	237
VI. Mass of Quarter Columns - - - - -	237
VII. Points of Formation - - - - -	238
VIII. Cautions and Commands - - - - -	241
IX. Echelon Formations - - - - -	242
X. Advance and Retreat of alternate Bodies -	244
XI. Movements to be covered by Skirmishers	245
XII. Movements to be by the shortest lines -	245
XIII. Men to stand Easy - - - - -	245

### BRIGADE MOVEMENTS OF COLUMNS IN MASS, AND IN LINE.

#### SECTION

1. A Brigade in Mass of Quarter Columns wheeling into a Line of Columns - - - - -	246
2. A Brigade in Line of Quarter Columns wheeling into Mass - - - - -	249
3. A Brigade in Mass of Quarter Columns deploying into Line of Quarter Columns - - - - -	249
4. A Brigade in Line of Quarter Columns forming Mass on any named Battalion - - - - -	253

## MOVEMENTS IN LINE, OR LINE OF COLUMNS.

SECTION.	PAGE
5. A Brigade in Line of Quarter Columns changing Front - - - - -	254
6. Naming the Regulating Battalion - - - - -	257
7. A Brigade Advancing, or Retiring, in Line -	257
8. A Brigade Advancing, or Retiring, in Line of Columns - - - - -	258
9. A Brigade Advancing, or Retiring, in Line of Quarter-Columns at deploying interval -	258
10. A Brigade Advancing, or Retiring, in Line of Columns of Double-companies, at deploying interval - - - - -	259
11. A Brigade in Line advancing in Columns from the Flanks of Battalions, or Half-battalions ; or in Columns of Double-companies from the Centres of Battalions - - - - -	260
12. A Brigade retiring in Columns from one Flank of Battalions in rear of the other, or from both Flanks of Battalions in rear of their Centres - - - - -	261

## MOVEMENTS OF A BRIGADE IN DOUBLE COLUMN.

13. A Brigade advancing in Double Column from the Centre, or retiring in Double Column from both Flanks in rear of the Centre - -	261
14. A Brigade in Double Column forming Line to the Front, or to a Flank - - - - -	263

## ADVANCING OR RETIRING IN COLUMN.

15. A Brigade advancing in Column from either Flank, or retiring in Column from one Flank in rear of the other - - - - -	267
--	-----

## CHANGES OF FRONT AND POSITION.

SECTION	PAGE
16. A Brigade in Line changing Front on a named Company of a named Battalion - - - -	267
17. A Brigade in Line changing Position - - - -	268

### DEPLOYMENTS.

18. A Brigade in Line, or Mass, of Quarter Columns, deploying into Line - - - - -	271
19. A Brigade in Mass of Quarter Columns changing Position at deploying interval, and Deploying into Line - - - - -	272

### THE FLANK MARCH IN FOURS.

20. The General Application of the Flank March in Fours to the Advance of a Brigade - - - -	275
---	-----

### MOVEMENTS OF DIVISIONS, OR LARGER BODIES.

21. Application of Brigade Drill to Divisions or larger Bodies - - - - -	276
--	-----

### SECOND LINES.

#### GENERAL RULES.

NO.		PAGE
I.	Formation - - - - -	277
II.	Regulating Column - - - - -	277
III.	Distance - - - - -	277
IV.	Movements of both Lines to correspond -	277
V.	Relieving Front Line - - - - -	277

### POSITION OF ARTILLERY.

SECTION		PAGE
22.	Position of a Battery of Artillery when moving with a Brigade - - - - -	278

### FIELD MANŒUVRES.

## PART V.

## SHELTER-TRENCH AND PÍT EXERCISE.

## GENERAL RULES.

NO.	PAGE
I. Shelter for Troops - - - - -	280
II. Advantage of Cover - - - - -	280
III. When Cover should be made - - - - -	280
IV. Amount of Cover necessary - - - - -	285
V. Shelter-trenches - - - - -	285
VI. Shelter for Mounted Officers' Horses - - - - -	285
VII. Selection of positions for Shelter-trenches - - - - -	285

## SECTION

1. Issuing Tools to a Battalion - - - - -	286
2. A Battalion marching with Tools - - - - -	287
3. A Battalion forming Shelter-trenches - - - - -	288
4. A Battalion returning Tools - - - - -	301
5. Execution of Shelter-trenches for a Battalion, by a small Working Party - - - - -	302
6. Making Shelter-pits - - - - -	305
7. Filling in Trenches, &c. - - - - -	305

## PART VI.

ADVANCED AND REAR GUARDS, PIQUETS,  
AND OUTPOSTS.

## SECTION

1. Advanced Guards - - - - -	306
2. Rear Guards - - - - -	310
3. Piquets and their Sentries - - - - -	314

## PART VII.

## MISCELLANEOUS SUBJECTS.

## INSPECTIONS OR REVIEWS.

SECTION	PAGE
1. Inspection or Review of a Battalion - - -	323
2. Review of Two or more Battalions - - -	329

## ROUTE MARCHING.

3. The Order of March - - - - -	337
4. Places of Officers - - - - -	338
5. Marching off, Marching at Ease, and passing Words of Command - - - - -	339
6. Halting when on the March - - - - -	340
7. Defiling, and increasing and diminishing Front	340
8. Regulations concerning Stragglers - - -	341
9. Hurry and Stepping-out to be prevented -	342

## SINGLE RANK AND SKELETON DRILL.

10. Battalion Drill in Single Rank - - - -	343
11. Skeleton Drill - - - - -	343

## GUARDS.

12. Guard mounting, and Trooping the Colour -	344
13. Relieving Guard - - - - -	352
14. Marching Reliefs - - - - -	354
15. Relieving, or Posting Sentries - - - -	354
16. Sentries paying Compliments - - - -	355
17. Sentries Challenging - - - - -	356
18. Instruction of Recruits as Sentries - -	357
19. Guards Turning out. - - - - -	357

## FUNERALS.

## SECTION

	PAGE
20. Funeral Parties - - - - -	359

## PRESENTATION OF COLOURS.

21. Presentation of Colours - - - - -	362
---------------------------------------	-----





















---

BUGLE SOUNDS.





## KEY TO PLATES.








xxiii

*Regimental Officers, Non-commissioned Officers, &c.*

LIEUTENANT-COLONEL . . . . .		MARKER . . . . .	
MAJOR . . . . .		SERJEANT : . . . . .	
ADJUTANT . . . . .		STAFF SERJEANT. . . . .	
CAPTAIN . . . . .		PRIVATE, FRONT-RANK. . . . .	
RIGHT GUIDE . . . . .		PRIVATE, REAR-RANK . . . . .	
LEFT GUIDE . . . . .		PIONEER . . . . .	
STAFF OFFICER . . . . .		BAND SERJEANT. . . . .	
QUEEN'S COLOUR. . . . .		BANDSMAN. . . . .	
REGIMENTAL COLOUR . . . . .		DRUM-MAJOR . . . . .	
SERJEANT-MAJOR. . . . .		DRUMMER OR BUGLER. . . . .	

*Brigade and Division Officers.*

ASSISTANT ADJUTANT-GENERAL. . . . .	
ASSISTANT QUARTERMASTER-GENERAL. . . . .	
BRIGADE MAJOR . . . . .	
MOUNTED OFFICER, OR CAVALRY SOLDIER . . . . .	

ORIGINAL FORMATION . . . . .	{	Front Rank . . . . .	
	{	Rear Rank . . . . .	
INTERMEDIATE FORMATION . . . . .	{	Front Rank . . . . .	
	{	Rear Rank . . . . .	
FINAL FORMATION . . . . .	{	Front Rank . . . . .	
	{	Rear Rank . . . . .	
DIRECTION OF MOVEMENTS . . . . .			

Col. D. Lysons, delt.





## EXPLANATION OF PLATES.

---

1. In the Plates of Part II., the positions of all ranks are shown throughout.

2. In Part III., Plates X. and XI. give the positions of all ranks in line and column. In the Plates of the various evolutions, it has been considered sufficient to show the mounted officers, the directing guides, and all points in line formations. In order that the figures might be drawn on as large a scale as possible, the battalions are represented as having only six companies.

3. In the Plates of skirmishing movements in Part III. and in Part IV., on account of the reduced scale, ranks, and, in several instances, companies and battalions, have been represented by single lines without detail.

---



## DEFINITIONS.

## GENERAL DEFINITIONS.

- Alignment.* An imaginary straight line lying between two points, or the prolongation of that line, upon which troops are to form, or march.
- Appui, Point of.* French, *appui*, "a support." The point of formation.
- Base Company, or Battalion.* The company, or battalion, from which a formation is regulated.
- Base Points.* The points given by markers as a base for forming line in prolongation of that base.
- Battalion.* Four, or more, companies, under the command of a field officer, told off into half-battalions.
- Brigade.* A brigade is composed of two, or more battalions.
- Column.* A succession of companies (or parts of companies), from front to rear, parallel to each other.
- Company.* A certain number of files, under the command of a captain, divided into half companies and sections.
- Defile.* From the French *défilé*; a narrow pass.
- Deploy.* From the French *déployer*, to "display, unfold;" *i. e.*, to unfold companies from column into line.

- Diagonal March.* A march by which troops move to a flank at an angle of  $45^{\circ}$  with their front.
- Distance.* The depth between men or corps, from front to rear.
- Division.* Two, or more, brigades.
- Double Column.* Two single columns of different battalions, abreast of each other.
- Double—Company.* Two companies of the same battalion, abreast of each other.
- Dress.* From the French *dresser*, “to straighten.” The word given to men to correct their alignment.
- Drill.* From an obsolete French word *drille*, “a soldier.” The instruction and practice of military exercises.
- Echelon.* Echelon is when the line is broken into several parts, moving direct to the front or rear in succession. Oblique echelon is when the divisions of a line wheel, less than the quarter circle, so as to be oblique to the former front and parallel with each other. Short echelon is formed by the two centre companies advancing, and the remaining companies of half battalions following, in succession, at six paces distance.
- Evolution.* A movement by which troops change their position for attack or defence. By tactics, as distinguished from strategy, is meant the art of handling troops, *i.e.*, of applying in the presence of an

enemy the evolutions learnt at drill. Strategy is the science of conducting the great operations of war,—movements that take place out of sight of the enemy.

*File.* Two men ; a front-rank man, and his rear-rank man.

*Flank, Inner.* That nearest to the point of appui.

“ *Directing.* That by which companies march.

“ *Outer.* That opposite to the Inner Flank.

“ *Reverse.* That opposite to the Directing Flank.

*Front.* The front, with reference to an alignment, is the direction of the supposed enemy : see Part III., Gen. Rule XI. Used as a general term, the word signifies the direction in which soldiers face when occupying the same relative positions as when last told off.

*Front, Change of.* Taking up a new alignment on a base at an angle to, and either touching or intersecting, the former alignment.

*Interval.* The lateral space between men or corps.

*Line.* A battalion is said to be in line when its companies are deployed on the same alignment to their full extent, *i.e.*, in two ranks. Columns are said to be in line when their fronts are on the same alignment.

*Manceuvre.* See *Evolution.*

*Pivot.* The flank man on whom, or the point on which, a wheel is made.

- Position, Change of.* As a general term, moving off the ground occupied by troops, and taking up a fresh alignment which neither touches nor intersects the former alignment, but may be either parallel, or at an angle to it, and towards any front. For drill purposes, a change of position generally implies a change of front off the old alignment, on a base given by detached points.
- Rank.* A line of men side by side.
- Section.* The fourth part of a company.
- Skirmishing.* Fighting in extended order.
- Squad.* A division of a company for purposes of interior economy. Also, a small number of men formed for drill, or for work.
- Supernumeraries.* The officers, and non-commissioned officers, composing the third rank.
- Wings.* The divisions, or brigades, on the right and left of the centre of an army.
- 

#### DEFINITIONS OF TERMS IN SHELTER-TRENCH EXERCISE.

- Berm.* French, *berme*. A space left clear of earth between the foot of the slope of a parapet, and the excavation from which the earth was taken to form the parapet.
- Breastworks.* Low parapets are sometimes called breastworks.

- Cross Section.* A representation of the surface that would be exposed if the object were cut vertically across.
- Cutting line.* The line along a man's front which marks the length of his task.
- Ditch.* An excavation made *in front* of a parapet, either as an obstacle, or simply for obtaining earth for the parapet.
- Intrench.* To increase the power of defence of a position by the use of field-works, defensible posts, or even shelter-trenches.
- Longitudinal Section.* A representation of the surface that would be exposed if the object were cut vertically along its length.
- Parapet.* From the Italian *para petto*, "guard the breast." A mass of earth, or other materials, raised to screen or protect the defenders from the missiles of the enemy.
- Plan.* A drawing of an object as seen from above on a horizontal surface, which is represented by the drawing paper. The word 'plan' in engineering is also applied to a representation of the surface that would be exposed if the object were cut horizontally at any level.
- Profile.* From the French *profil*. The outline of the cross section of a work.
- Ramp.* From the French *rampe*. Sloping roads to enable horses or wagons to pass up and down to different parts of works.
- Reverse of a Trench.* The solid ground immediately in rear of a trench.

- Reverse Slope.* From the French *revers*, "back." The slope at the rear of a trench.
- Revet.* To make a revetment.
- Revetment.* From the French *revêtement*. A support of any kind, constructed with the object of retaining earth at a slope steeper than it would stand by itself.
- Rifle-pits.* Excavations for the use of marksmen at sieges.
- Shelter-pit.* A shallow excavation for the use of a single skirmisher, for a short period of time.
- Shelter-trench.* A shallow trench sufficient with its parapet to cover troops in line, kneeling or lying.
- Task.* The amount required to be done by one man (or a squad) in one period of work.
- Trench.* From the French *tranchée*. An excavation made *in rear* of a parapet, to enable shelter to be more readily obtained.
-



# PART I.

---

## RECRUIT OR SQUAD DRILL.

---

### GENERAL RULES.

#### I.

*Instruction of the Recruit.*—1. The Instructors must be clear, firm, and concise in giving their directions. They must allow for the different capacities of the recruits, and be patient where endeavour and good-will are apparent.

2. Recruits should fully comprehend one part of their drill before they proceed to another. When first taught their positions, they should be properly placed by the Instructor: when more advanced, they should not be touched, but taught to correct themselves when admonished. They should not be kept too long at any one part of their exercise. Marching without arms should be intermixed with the rifle instruction.

#### II.

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

## III.

*Mutual Instruction.*—A system of mutual instruction will be practised amongst recruits; it gives the young soldier additional interest in his drill, and prepares him for the duties of a non-commissioned officer. Recruits should, in turn, be called out to put their squad through the exercises which have been practised, and encouraged to correct any error they may observe. Lists of those who show talent for imparting instruction should be kept, for reference, by the captains, and in the orderly room.

## IV.

*Words of Command.*—1. Every command must be loud, and distinctly pronounced, so as to be heard by all concerned.

2. Every command that consists of one word must be preceded by a caution: the caution, or cautionary part of a command, must be given slowly and distinctly; the last or executive part, which, in general, should consist of only one word or syllable, must be given sharply and quickly; as *Company—Halt: Half Right—Turn*. A pause of slow time will invariably be made between the caution, or cautionary part of a command, and the executive word.

3. The words given in the *Extension Motions* and *Balance Step* (Ss. 5, 11) must be given sharply, or slowly and smoothly, as the nature of the motion may require.

4. When the last word of a caution is the signal for any preparatory movement, it will be given as an executive word, and separated from the rest of the command by a pause of slow time; thus, *Right—Form. Quick—March*, as though there were two separate commands, each with its caution and executive word.

5. When the men are in motion, executive words must be completed as they are commencing the pace which will

**GENERAL RULES.****3**

bring them to the spot on which the command has to be executed. The cautionary part of the word must, therefore, be commenced accordingly.

6. Officers, and non-commissioned officers, should frequently be practised in giving words of command. It will be found a good plan to practise several officers, or non-commissioned officers, together in giving words of command, first in succession, then simultaneously; the time and pitch being first given by the instructor.

---

## RECRUIT OR SQUAD DRILL, WITH INTERVALS.

---

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

2. If necessary, the squad may consist of two such lines of men; in which case the men in the second line will cover the intervals between the men in the first, so that in marching they may take their own points, as directed in S. 10.

3. Recruits should in the first instance be placed by the instructor without any dressing; when they have learned to dress, as directed in S. 3, they should 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. 22, they may fall in in single rank, and then, if required to drill with intervals, be moved as directed in S. 24.

---

Recruits will, if possible, be instructed singly as far as S. 22.

---

### *S. 1. Position of the Soldier.*

The exact squareness of the shoulders and body to the front is the first and great principle of the position of a soldier. The heels must be in line and close; the knees straight; the toes turned out, so that the feet may form an angle of 45 degrees; the arms hanging easily from the shoulder, the hand open, thumb to the front and close to the forefinger, fingers lightly touching the thigh: the hips rather drawn back, and the breast advanced, but without

constraint; the body straight and inclining forward, so that the weight of it may bear principally on the fore part of the feet; the head erect, but not thrown back, the chin slightly drawn in, and the eyes looking straight to the front.

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

---

N.B.—The words in the margin printed in *italics*, are the commands to be given by the instructor.

---

### *S. 2. Standing at Ease.*

Soldiers will first be taught the motions of standing at ease by Numbers, then judging the Time.

#### *1. By Numbers.*

Caution,—*Stand at Ease, by Numbers.*

*One.* { On the word *One*, raise the arms from the elbows, left hand in front of the centre of the body, as high as the waist, palm upwards; the right hand as high as the right breast, palm to the left front; both thumbs separated from the fingers, and the elbows close to the sides.

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

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

*Squad-Attention.* } On the word *Attention*, spring up to the position described in S. 1.

## 2. Judging the Time.

Caution,—*Stand at Ease, judging the Time.*

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

*Squad-Attention.* } As before.

If the command *Stand at-Ease* is followed by the word *Stand Easy*, the men will be permitted to move their arms, but without quitting their ground, so that on coming to *Attention* no one shall have materially lost his dressing in line. If men are required to keep their dressing accurately, they should be cautioned not to move their left feet.

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

**WITH INTERVALS.**

2010MM004

PLATE I.—TURNINGS.

Fig. 1. RIGHT-TURN. TWO.

Fig. 2. TWO. LEFT-TURN.

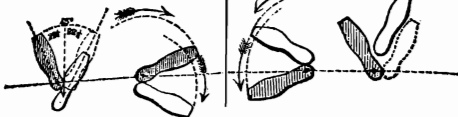


Fig. 3. RIGHT ABOUT-TURN. TWO. THREE.

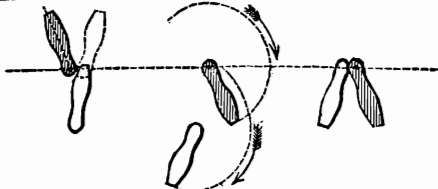


Fig. 4. HALF RIGHT-TURN. TWO.

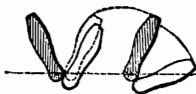


Fig. 5. TWO. HALF LEFT-TURN.

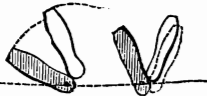
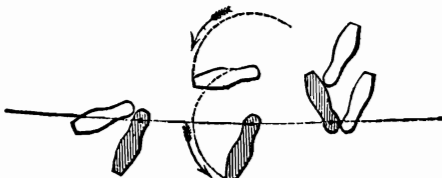


Fig. 6. THREE. TWO. THREE QUARTERS. LEFT ABOUT-TURN.





### S. 3. *Dressing a Squad with Intervals.*

*Eyes Right.* { On the words *Eyes-Right*, the eyes will be directed to the right, the head being slightly turned in that direction.

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

*Eyes Front.* { On the words *Eyes-Front*, the head and eyes will be turned to the front, the arm dropped, and the position of the soldier, as described in S. 1, resumed.

Dressing by the left will be practised in like manner.

---

### S. 4. *Turnings.*—PLATE I.

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

In the first of all the following motions, the foot is to be carried back, or brought forward, without a jerk, the move-

ment being from the hip ; so that the body may be kept perfectly steady until it commences to turn.

- |                                   |   |  |
|-----------------------------------|---|--|
| <i>Right Turn.</i>                | { | On the word <i>Turn</i> , place the hollow of the right foot smartly against the left heel, keeping the shoulders square to the front. |
| <i>Two.</i>                       |   | On the word <i>Two</i> , raise the toes, and turn a quarter circle to the right on both heels, which must be pressed together.         |
| <i>Left-Turn.</i>                 | { | On the word <i>Turn</i> , place the right heel against the hollow of the left foot, keeping the shoulders square to the front.         |
| <i>Two.</i>                       |   | On the word <i>Two</i> , raise the toes, and turn a quarter circle to the left on both heels, which must be pressed together.          |
| <i>Right about-Turn.</i>          | { | On the word <i>Turn</i> , place the ball of the right toe against the left heel, keeping the shoulders square to the front.            |
| <i>Two.</i>                       |   | On the word <i>Two</i> , raise the toes, and turn to the right about on both heels.  |
| <i>Three.</i>                     |   | On the word <i>Three</i> , bring the right foot smartly back in a line with the left.  |
| <i>Left about-Turn.</i>           | { | On the word <i>Turn</i> , place the right heel against the ball of the left toe, keeping the shoulders square to the front.            |
| <i>Two.</i>                       |   | On the word <i>Two</i> , raise the toes, and turn to the left about on both heels.   |
| <i>Three.</i>                     |   | On the word <i>Three</i> , bring up the right foot smartly in a line with the left.  |
| <i>Half-Right (or Left)-Turn.</i> | { | On the word <i>Turn</i> , draw back (or advance) the right foot one inch.  |
| <i>Two.</i>                       |   | On the word <i>Two</i> , raise the toes and turn half right, (or left) on both heels.  |

- Three-quarters-Right (or Left) about-Turn.*  
*Two.*  
*Three.* } **Make a three-quarters turn in the given direction in the same manner as in turning about.**
- Squad-Front.* } **After any of the foregoing turnings, the word *Front* may be given, on which the whole will turn, as accurately as possible, to their former front.**  
**When the soldier has previously turned about, he will always front by the right about. But if he has turned to the three-quarters right about, he will front by the three-quarters left about; and vice versa.**

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

---

### S. 5. *Extension Motions.*

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

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

Caution,—*First Practice.*

On the word *One*, bring the hands, at the full extent of the arms, to the front, close to the body, knuckles downwards, till the fingers meet at the points; then raise them in a circular direction over the

*One.*

head, the ends of the fingers still touching and pointing downwards so as to touch the forage cap, thumbs pointing to the rear, elbows pressed back, shoulders kept down.

*Two.*

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

*Three.*

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

*Four.*

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

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

Caution,—*Second Practice.*

*One.*

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

## WITH INTERVALS.

- Two.* { On the word *Two*, separate the hands smartly, throwing them well back, slanting downwards; at the same time raise the body on the fore part of the feet.
- One.* { On the word *One*, bring the arms forward to the position above described, and so on.
- Two.* {
- Three.* { On the word *Three*, smartly resume the position of attention.

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

|Caution,—*Third Practice.*

The squad will make a second half turn to the right before commencing the third practice.

- One.* { On the word *One*, raise the hands, with the fists clenched, in front of the body, at the full extent of the arms, and in line with the mouth, thumbs upwards, fingers touching.
- Two.* { On the word *Two*, separate the hands smartly, throwing the arms back in line with the shoulders, back of the hand downwards.
- Three.* { On the word *Three*, swing the arms round as quickly as possible from front to rear.
- Steady.* { On the word *Steady*, resume the second position.

*Four.* } On the word *Four*, let the arms fall  
 smartly to the position of attention.  
 This practice should also be performed with clubs.

S. 6. *Saluting.*—PLATE II.

Soldiers will be practised in saluting, first by Numbers, then judging the Time; being turned to the right for the right-hand salute, to the left for the left-hand salute.

Caution,—*Right-hand Salute, by Numbers.*

*One.* } On the word *One*, bring the right hand  
 smartly, but with a circular motion, to  
 the head, palm to the front, point of the  
 forefinger one inch above the right eye,  
 thumb close to the forefinger; elbow in  
 line, and nearly square, with the should-  
 er; at the same time, slightly turn the  
 head to the left.

*Two.* } On the word *Two*, let the arm fall  
 to the side, and turn the head to the  
 front.

Caution,—*Right-hand Salute, judging the Time.*

*Right-hand-  
 Salute.* } On the word *Salute*, go through the  
 two motions described in *One* and *Two*.

Soldiers will be taught to salute with the left hand in like manner.

Soldiers, if standing still when an officer passes, will turn towards him, come to attention, and salute; if sitting, they will rise, stand at attention, and salute. When a soldier addresses an officer, he will salute, and halt two paces from him. When walking, soldiers will salute an officer as they pass him, commencing their salute four paces before they come up to him; they should therefore be practised in marching, two or three together, round the

WITH INTERVALS.

15

## PLATE II.



SALUTING.

**PART I.—SQUAD DRILL.**



drill ground, saluting points placed on either side of them, care being taken that they always salute with the hand furthest from the point saluted: when several men are together, the man nearest to that point will give the time.

Soldiers will invariably salute anybody they know to be an officer, whether he is in uniform or not.

---

## MARCHING.

### *S. 7. Length of Pace.*

In slow or quick time the length of a pace is 30 inches, except in "stepping out," when it is 33 inches, and in "stepping short," when it is 21.

In "double time" the length of a pace is 33 inches.

The length of the side step is 12 inches.

N.B.—When a soldier takes a side pace to clear or cover another, as in forming four deep, which will be hereafter described, the pace will be 24 inches.

---

### *S. 8. Cadence.*

In slow time, 75 paces are taken in a minute. In quick time, 116 paces, making 96 yards 2 feet in a minute and 3 miles 520 yards in an hour. In double time, 165 paces, making 151 yards 9 inches in a minute and 5 miles 275 yards in an hour.

---

### *S. 9. The Drum, Plummet, and Pace Stick.*

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

The drum will first beat the time in which the men are to march, when the squad is halted; then, from time to time,

when it is in motion. While the drum is beating at the halt, the men will give their whole attention to the cadence; when it ceases, the instructor will at once put the squads in motion.

In order to ascertain whether the time is beaten correctly, a pendulum or a "Plummet" must be used. A variety of pendulums have been constructed for this purpose. When no pendulum is at hand, a plummet can readily be made by suspending a spherical ball of metal by a string, the length of which, measured from the point of suspension to the centre of the ball, must be as follows for the different degrees of march.

	Inches.	Hundredths.
Slow time - - - -	24	96
Quick - - - -	10	15
Double - - - -	5	18

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

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

---

#### *S. 10. Position in Marching.*

In marching, the soldier must maintain the position of the head and body as directed in S. 1. He must be well balanced on his limbs. His arms and hands must be kept steady by his sides; care being taken that the hand does not partake of the movement of the leg. The movement of the leg must spring from the haunch, and be free and natural.

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

Although several men may be drilled together in a squad with intervals, they must act independently and precisely as if they were being instructed singly. Each soldier must be taught to march in a straight line, and to take a correct pace, both as regards length and cadence, without reference to the other men of the squad.

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

---

### S. 11. *Balance Step.*

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

## PART I.—SQUAD DRILL,

1. *Without advancing.*

Caution,—*Balance Step, commencing with the Left Foot.*

*Front.* { On the word *Front*, the left foot will be raised from the ground by a slight bend of the knee, and carried gently to the front, without a jerk, the knee being gradually straightened as the foot is carried forward; the foot to be turned out at the same angle as when halted, the sole parallel to and clear of the ground, the heel just in advance of the line of the right toe.

*Rear.* { On the word *Rear*, given when the body is steady, the left foot will be brought gently back without a jerk, till the toe is in line with the right heel, clear of the ground; the left knee to be a little bent.

*Front.*  
*Rear.* { When steady, the words *Front*, and *Rear* will be repeated several times, and the motions performed as above described.

*Halt.* { On the word *Halt*, which should always be given when the moving foot is in rear, that foot will be brought to the ground in a line with the other.

The instructor will afterwards make the soldier balance upon the left foot, carrying the right foot forward and backward.

Standing on one leg and swinging the other backward and forward without constraint, is an excellent practice.

2. *Advancing.*

Caution,—*Balance Step, advancing on the word*  
 “*Forward.*”

*Front.* { On the word *Front*, the left foot will be  
 carried to the front, as described in No. 1.

*Forward.* { As soon as the men are steady in the  
 above position, the word *Forward* will  
 be given, on which the left foot will be  
 brought to the ground at 30 inches dis-  
 tance from heel to heel, toes turned out  
 at the same angle as when halted; and the  
 right foot will be immediately raised and  
 held extended to the rear, toe in line with  
 the left heel, the right knee to be slightly  
 bent. Great care must be taken that the  
 toes remain throughout at the proper  
 angle; that the body accompanies the leg,  
 and that the inside of the heel is placed on  
 the imaginary straight line that passes  
 through the points on which the soldier  
 is marching; that the body remains  
 straight, but inclining forward; that the  
 head is erect, and turned neither to the  
 right nor left.

*Front.* { On the word *Front*, the right foot will  
 be brought forward; and so on, alter-  
 nately.

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

S. 12. *The Slow March.*

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

*Slow-March.* { The time having been given on the drum, on the word *March*, the left foot will be carried 30 inches to the front, as directed in S. 10 ; the right foot will then be carried forward in like manner, and so on, alternately.

The soldier must be thoroughly instructed in this step, as an essential preparation for arriving at accuracy in the paces of greater celerity.

S. 13. *The Halt.*

*Squad-Halt.* { On the word *Halt*, the moving foot will complete its pace, and the rear foot be brought up in line with it.

It is a general rule that after the word *Halt*, the men, whatever their position, will stand perfectly steady, unless ordered to *Dress*.

S. 14. *Stepping Out.*

*Step-Out.* { When marching in slow time, on the words *Step-Out*, the soldier will lengthen his pace to 33 inches by leaning forward a little but without altering the cadence.

This step is used when a slight increase of speed, without an alteration of cadence, is required ; on the words *Slow-Step*, the pace of 30 inches will be resumed.

S. 15. *Stepping Short.**Step-Short.*

On the words *Step-Short*, the foot advancing will finish its pace, and afterwards each soldier will take paces of 21 inches until the word *Forward* is given, when the usual pace of 30 inches will be resumed.

This step is used when a slight check is required.

---

S. 16. *Marking Time.**Mark-Time.*

On the words *Mark-Time*, the foot then advancing will complete its pace, after which the cadence will be continued, without advancing, by raising each foot alternately about three inches from the ground, keeping the body steady; on the word *Forward*, the usual pace of 30 inches will be resumed.

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

---

S. 17. *Stepping Back.**Step Back  
Slow-March.**Halt.*

In stepping back, the pace will be 30 inches. Soldiers must be taught to move straight to the rear, preserving their shoulders square to the front and their bodies erect. On the word *Halt*, the foot in front will be brought back square with the other.

A few paces only of the step back can be necessary at a time.

---

*S. 18. Changing Feet.**Change-Feet.*

To change feet in marching, the advancing foot will complete its pace, and the ball of the rear foot will be brought up quickly to the heel of the advanced one, which will instantly make another step forward, so that the cadence will not be lost, in fact two successive steps will be taken with the same foot.

This may be required when any part of a battalion, or a single soldier, is stepping with a different foot from the rest.

*S. 19. The Quick March.*

The cadence of the slow march having become perfectly familiar to the soldier, he will be taught to march in quick time.

*Quick-March.*

The time having been given on the drum, on the word *March* the squad will step off together, with the left foot, observing the rules given in S. 10.

When a soldier is perfectly grounded in marching in quick time, all the alterations of step, and the marking time, and changing feet, laid down for the slow march will be practised in quick time.

*S. 20. The Double March.**Double-March.*

The time having been given on the drum, on the word *March*, the men will step off together with the left foot; at the same time raising their hands as high as the waist, carrying back the elbows and clenching the fists, the flat part of the arm to the side; the head to



be kept erect, and the shoulders square to the front ; the knees being more bent, and the body more advanced, than in the other marches. The instructor will be careful to habituate the soldier to the pace of 33 inches.

*Squad-Halt.* As in S. 13, at the same time dropping the hands and extending the fingers.

The soldier will be taught to mark time in the double cadence in the same manner as in the slow and quick.

### S. 21. *The Side or Closing Step.*

Soldiers will first be taught the side step by Numbers, then judging the Time.

#### 1. *By Numbers.*

**Caution,**—*Right Close, by Numbers.*

*One.* { On the word *One*, the right foot will be carried 12 inches to the right, the shoulders and face being kept perfectly square to the front, and the knees straight.

*Two.* { On the word *Two*, the left foot will be closed smartly to the right foot, heels touching.

*One.* { The word *One* being repeated, the right foot will be carried on 12 inches as before described, and so on.

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

## 2. Judging the Time.

Caution,—*Right Close, judging the Time.**Right Close,  
Quick-March.*

On the word *March*, each man will carry his right foot 12 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 square, knees not bent, unless on rough or broken ground. The direction must be kept in a straight line to the flank, neither inclining to the front nor rear.

*Squad-Halt.*

On the word *Halt*, the men will complete the pace they are taking, and remain steady.

Soldiers will be practised in closing to the left by Numbers, and judging the Time, in like manner.

Soldiers will also be practised in taking any given number of paces to either flank, and then halting without word of command; the command to be given thus, *Three paces Right Close, Quick-March.*

S. 22. *Turning when on the March.*

Soldiers will be practised in turning to the right or left, in making a half turn to the right or left, and in turning to the right or left about, on the march.

*Right-Turn.*

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

- Front-Turn.* { On the word *Turn*, which should be given as the right foot is coming to the ground, each soldier will turn again to the front, and move on without checking his pace.
- Left--Turn.* { 2. *Turning to the Left and then to the Front.*—Soldiers will turn to the left in like manner, the word *Turn* being given as the right foot is coming to the ground ; after which they will turn to the front, the word *Turn* being given as the left foot is coming to the ground.
- Front-Turn.* }

A soldier will always turn to the right on the left foot ; and to the left on the right foot. If the word *Turn* is not given as the proper foot is coming to the ground, the soldier will move on one pace more and then turn.

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

4. *Turning to the Right, or Left, about.*—Soldiers will also be taught to turn about on the march, which must be done by each man on his own ground, in three paces, without losing the cadence. Having completed the turn about, the soldier will at once move forward, the fourth pace being a full pace as before.

PART I. SQUAD DRILL,  
SQUAD DRILL, IN SINGLE RANK.

---

*S. 23. Directing and Reverse Flanks.*

As explained in the *Definitions*.

---

*S. 24. Formation of the Squad in Single Rank,*

At this stage of the drill, a few soldiers will be formed in single rank without intervals, that is, nearly touching each other. Each man is allowed a space of 24 inches.

The right-hand or left-hand man being first placed, the remainder will fall in in line one after the other, closing lightly towards him, turning the elbow slightly outwards. Soldiers must be carefully instructed in "The Touch," as, in this formation, it is the principal guide when marching. Each man when properly in line, should be able to feel his right or left hand man at the elbow; the body must be preserved in the position described in S. 1.

---

When a squad in single rank is required to drill with intervals, the instructor will direct the odd numbers to take one pace forward, the even numbers step back one pace.

---

*S. 25. Dressing when Halted.*

Soldiers will first be taught to dress man by man, then together.

In dressing, each soldier will glance towards the flank to which he is ordered to dress, with a slight turn of the head, as directed in S. 3: he must carry his body backward or forward with the feet, moving to his dressing with short quick steps; bending backward or forward must be avoided; his shoulders must be kept perfectly square, and the position of the soldier, as described in the preceding Section, retained throughout.

Two Men on the right and one on the left, a pace and a half to the Front.

*Slow-March.*

*Man by Man, by the Right—  
Dress up.*

*Eyes-Front.*

1. *Dressing Man by Man.*—Preparatory to teaching a squad to dress by the right, the instructor will order the two men on the right, and one on the left, to take a pace and a half to the front; having completed his pace and a half, the right-hand man will take four side paces to his right; and the three points thus placed will raise their right arms from the elbow, at right angles to their bodies.

The instructor, having ascertained that the points are in line, will order his squad to dress up man by man. The third man from the right will take one pace to his front with the left foot, and shuffle up into line in the manner already described: as soon as he is steady, the next man will proceed in like manner, and so on to the left. The faces of the men, not their breasts or feet, are the line of dressing. Each man is to be able just to distinguish the lower part of the face of the second man beyond him.

When the instructor is satisfied that the line is correct, he will give the words *Eyes-Front*, on which the men will turn their heads and eyes to the front, the three points will drop their hands, and the right-hand man will close on the squad.

In like manner the squad must be taught to dress up, man by man, by the left; also to dress back, man by man, by the right and left.

2. *Dressing together.*—The men must next be taught to dress forward and backward, taking the pace together, but shuffling up or back in succession, the same points being

given as in dressing man by man. The words of command will be *Squad, By the Right (or Left)—Dress Up, or By the Right (or Left)—Dress Back.*

3. *Dressing without Points.*—When soldiers are on the alignment they have to occupy, and their dressing is simply to be corrected, the words *Right (or Left)—Dress*, or after the word *Halt*, the word *Dress* only, will be given, on which they will shuffle up or back to their places successively, commencing with the man on the flank from which they are dressed.

When no man is placed for that purpose, the instructor should invariably fix upon some casual object on which to dress his line.

It will be found most useful to accustom men to dress on an alignment not parallel or perpendicular, but oblique, to any well-defined adjacent line, such as the side of a square parade ground.

#### S. 26. *Turnings.*

The soldier will next practise in single rank, judging the Time, the turnings he has been taught by numbers.

Men are never unnecessarily to stand turned to the rear.

#### S. 27. *Marching to the Front and Rear.*

The soldier will next practise in single rank the different marches and varieties of step which he has learned singly, or in squad with intervals; the same general rules being observed.

Before a squad is ordered to march, the directing flank must be indicated by the caution, *By the Right*, or *By the Left*.

During the march, care must be taken that neither the head nor the eyes are ever turned towards either flank; that the dressing is kept by the touch; and that the shoulders are kept perfectly square, and the body steady.

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

The soldier will be practised in changing the pace, without halting, from slow to quick, and from quick to slow time ; also from quick to double, and from double to quick : in the case last mentioned, on the word *Quick*, the arms will be dropped and the fingers extended. In changing the pace, the executive word *Slow*, *Quick*, or *Double* will be preceded by the caution *Break into Slow (Quick, or Double)*—*Time*.

The instructor should occasionally remain halted in rear of the man on the directing flank ; and, by fixing his eyes on some distant object, ascertain if the squad is marching straight to its front.

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

*S. 28. A Single Rank at the Halt, changing Front.*

*Right-Wheel.*  
*Slow-March.*

1. *By Wheeling.*—On the word *March*, the right-handed man, called the pivot man, will mark time, turning gradually with the squad, to the new front ; the remainder will step off, the whole turning their eyes to the left (the wheeling flank), except the left-hand man, who will look inwards, and step the usual pace of 30 inches, the other men regulating their length of pace according to their distance from the pivot flank. During the wheel,

each man must touch lightly, as explained in S. 27, towards the pivot flank, keeping his shoulders square in line; crowding must be carefully avoided; each man must yield to any pressure that may come from the pivot flank, and resist all pressure coming from the outer flank.

*Squad-Halt.*  
*Dress.*

On the word *Halt*, which may be given at any period of the wheel, the men will halt and turn their eyes to the front; on the word *Dress*, they will take up their dressing by the right, as described in S. 25, No. 3.

*Eyes-Front*

On the word *Front*, the men will turn their heads and eyes to the front.

A squad will wheel to the left in like manner.

Nothing will sooner tend to enable the recruit to acquire the length of step proportioned to his distance from the pivot, than continuing the wheel without halting for several revolutions of the circle.

When men are required to wheel to the rear of the alignment they occupy, they will be turned about, and then wheeled as above directed, receiving the words *Halt, Front-Dress*, followed by *Eyes-Front*, when in position.

After wheeling has been taught in slow time, it will be practised in quick and double time.

*Right-Form.*  
*Quick-March.*

2. *By File formation.*—On the word *Form*, the right-hand man will turn to the right; the remainder will make a half-turn to the right. On the word *March*, all, except the right-hand man, will step off; each man, glancing to the right, will move, at the usual length of pace, by the shortest line, to his place in the new front, and take up his dressing by the right.



IN SINGLE RANK.

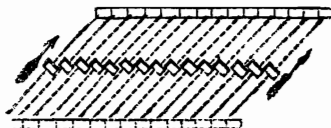
2010MM004

**33**

### PLATE III.

Fig. 1.

THE DIAGONAL MARCH.  
 HALF RIGHT-TURN. QUICK-MARCH. HALT-FRONT.



### FILES FORMING SQUAD.

Fig. 2.—ON THE MARCH,  
 FRONT FORM-SQUAD.



Fig. 3.—RIGHT ABOUT-  
 FORM-SQUAD.

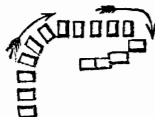
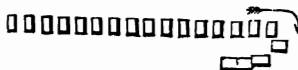


Fig. 4.

RIGHT FORM-SQUAD.



*Eye-Front.* { On the word *Front*, the men will turn their heads and eyes to the front.

A squad will form to the left in like manner.

This formation will be practised in double as well as in sick time.

---

**S. 29. A Single Rank, on the March, changing Direction.**

*Right-Wheel.* { On the word *Wheel*, the men will wheel to the right as explained in S. 28, No. 1; the pivot man turning gradually with the squad.

*Forward.* { On the word *Forward*, the whole will turn their eyes to the front and step off at a full pace.

The instructor will give his word *Forward* when he sees that the men are commencing the pace that will bring the front of the squad perpendicular to the direction in which he intends it to move: this may be done at any degree of the circle.

In like manner, the squad will be taught to change direction to the left.

---

**S. 30. The Diagonal March.—PLATE III., Fig. 1.**

This march will first be taught commencing from the front, after which the soldiers when marching in line will be practised in moving diagonally to either flank, by making a half turn in the direction required.

1. *From the Halt.*—On the word *Turn* the men will make a half turn to the right, and on the word *March*, each man

*Half Right-Turn.*  
*Slow-March.*

will step off and move correctly in the diagonal direction, no longer keeping the touch. The right-hand man will direct, and must therefore pay particular attention to his direction and pace. Each of the other men will glance towards the right, and will retain his relative position, keeping his right shoulder behind the left shoulder of the next man on that side.

*Squad,*  
*Halt-Front.*

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

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

*Half Right-Turn.*

*Front-Turn.*

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

In like manner, the diagonal march will be practised to the left, from the halt and on the march.

The diagonal march will also be practised in quick and double time.

S. 31. *Marching as in File.*

Soldiers will first be taught to commence marching as in file, from the halt; after which they must be taught, when marching in line, to turn to either flank, as in file.

*Right (or  
Left)-Turn.*

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

The strictest observance of all the rules for marching is particularly necessary when marching as in file.

*Slow-March.*

On the word *March*, the whole will step off together, at a full pace, and will so continue to step without increasing or diminishing the distance between each other. No looking down, nor leaning back is to be allowed. The leader is to be directed to march straight forward on some distant objects, the remainder of the men covering correctly during the march.

*Squad,  
Ha't-Front.*

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

*Right-Turn.*

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

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

In like manner soldiers will be taught to turn to the left from line and march as in file, and, when marching as in file, to turn again to the front.

The rules laid down in S. 22, No. 2, regarding the foot on which the soldier is to turn, must be strictly observed in a squad in single rank.

Marching as in file will also be practised in quick time, but never in double time.

S. 32. *Wheeling as in File.*

*Right (or Left)-Wheel,*  
or  
*Right-about (or Left-about) Wheel.* { The squad, when marching as in file, will be taught to change its direction, by wheeling to the right or to the left, or to the right (or left) about. The leading man will move round a quarter, or half, of the circumference of a circle having a radius of four feet; the other men following on his footsteps in succession, without increasing or diminishing their distances from each other or altering the cadence, but lengthening the pace a little with the outer foot, as they wheel.

S. 33. *Men marching as in File forming Squad —*

PLATE III., Figs. 2, 3, and 4.

*At the Halt.* { 1. *Forming to the Front, at the Halt.*—When the squad, marching as in file to the right, is ordered to form to the front at the halt, the leading man will at once halt; the remainder will make a half

- Front Form-Squad.* { turn to the left, and form upon him as directed in S. 28, No. 2.
- Eyes-Front.* { Heads and eyes will be turned to the front.
- Front Form-Squad.* { 2. *Forming to the Front, in Quick Time.*—When a squad, marching as in file to the right, is ordered to form to the front, the leading man will mark time; the remainder will make a half turn to the left, and form upon him, marking time, and taking up the dressing, as they arrive at their places.
- Forward.* { As soon as the squad is formed, the word *Forward* will be given.
- On the March, Front Form-Squad.* { 3. *Forming to the Front, in Double Time.*—When a squad, marching as in file to the right, is ordered to form to the front on the march, the leading man will continue moving on; the remainder will make a half turn to the left, double up to their places, and take up the quick time as they successively arrive in line with the leading man.
- Rear Form-Squad.* { 4. *Forming to the Rear, in Quick, or Double, Time.*—The movement will proceed as described in No. 2 or No. 3; except that the men will make a half turn to the right, and form on the right of the leading man.
- Forward.* {
- or {
- On the March, Rear Form-Squad.* { 5. *Forming to the Right.*—When marching as in file to the right, and ordered to form to the right, the leading man will wheel to the right, take two paces to his front, and halt; the remainder will form in succession on his
- Right Form-Squad.* {

<i>Eyes-Front.</i>	}	left, and be dressed as they get into their places. The word <i>Eyes-Front</i> will be given when the squad is formed.
<i>Right-about Form-Squad.</i>		6. <i>Forming to the Right-about.</i> —When a squad, marching as in file to the right, is ordered to form to the right-about, the leading man will wheel to the right-about, take two paces to his front, and halt; the remainder will march on as in file, wheeling to the right on the spot where the leading man has wheeled, and forming successively on his left, looking to the flank of formation for their dressing. The words <i>Eyes-Front</i> will be given when the squad is formed.
<i>Eyes-Front.</i>		

When marching as in file to the left, a squad will be formed to the front, or rear, or to the left, or left-about, on the same principle as it is formed to the front, or rear, or to the right, or right about, when the right is leading.

A squad marching as in file will resume its original front by the words *Halt-Front*, or *Front-Turn*.

#### S. 34. *The Side or Closing Step.*

The side or closing step will now be practised, the men judging the time, as laid down in S. 21, No. 2. Care must be taken that the shoulders are kept square, and the paces made in a direct line to the flank.

#### S. 35. *Rifle Exercises.*

Recruits having been thoroughly instructed in the preliminary drills explained in the foregoing Sections, will next be taught the rifle drill as detailed in the *Rifle Exercises*. A part of each drill with arms will be devoted to the practice of marching, as directed in the following Section.



*S. 36. Marching with Arms.*

Squads with arms will be practised in the different marches, and variations of step, described in the foregoing Sections ; when marching in double time at "The Trail," the arm that does not carry the rifle will not be raised as directed in S. 20. During these practices, great attention must be paid to the position of the recruit.

When men parade with arms, they will invariably fall in at "The Order "

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

---

**SQUAD DRILL, IN TWO RANKS.**  

---

*S. 27. Formation of Squad in Two Ranks.*

The squad will now be formed for drill in two ranks, sized as explained in Part II., Gen. Rule II. The men will take their places in succession, commencing from the flank on which they are ordered to form ; each rear-rank man, will be placed one pace of 30 inches from his front-rank man, measuring from heel to heel, and will cover him correctly, the two men thus placed forming "a File." When the squad consists of an uneven number of men, the third man from the left of the front rank will be a "Blank " (or incomplete) " File." The file on the left of the right half squad will always be the centre of the squad.

The squad should be drilled, at first, without arms.

---

*S. 38. Dressing.*

The front rank will dress as described in S. 25. The rear-rank men will continue looking to their front, and will cover and correct their distances as the front-rank men take up their dressing.

---

*S. 39. Marching to the Front and Rear.*

A squad in two ranks will be practised in the marches, and variations of step, which have been taught in single rank.

1. *Touch*.—The front rank will touch as directed in S. 24.

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

3. *Blank File while retiring*.—When the squad turns to the rear, a blank file, after turning about, will step up and occupy the vacant space in the rear rank. On turning to the front, he will resume his original place.

---

*S. 40. Taking Open Order.*

<i>Open-Order.</i>	{	On the word <i>Order</i> , the flank men of the rear rank will step back two paces in slow time, and turn to the right.
<i>March.</i>	{	On the word <i>March</i> , the flank men will front and raise the disengaged arm horizontally from the elbow, and the rear rank will step back two paces.

*Rear Rank-Dress.* } On the word *Dress*, the rear rank will dress by the right. Care must be taken not to move the flank men when dressing the rear rank.

*Eyes-Front.* } On the word *Front*, the rear rank men will turn their eyes to the front, and the flank men will drop their arms.

*Close-Order, March.* } On the word *March*, the rear rank will take two paces to the front in slow time.

The squad, if drilling with arms, will always be ordered to shoulder before taking open order.

---

S. 41. *Rifle Exercises.*

These exercises will now be practised.

---

S. 42. *Changing Front by Wheeling, or File formation.*

The front rank of the squad will wheel, or form (forward), from the halt, or wheel on the march, according to the instructions laid down in S. 28 or S. 29. The rear-rank men, in wheeling, will follow their front rank men, keeping their proper distances, and covering; in forming, they will preserve their diagonal position.

---

S. 43. *The Diagonal March.*

The Diagonal march will be practised in two ranks, in the manner described in S. 30. In addition to the instructions there given, the rear-rank men must be cautioned to preserve their relative positions with their front-rank men, in order that they may be found to cover correctly when they are halted and fronted,

S. 44. *File Marching, Wheeling in Files, and Files forming Squad.*

1. *File Marching.*—File marching will be practised as laid down in S. 31, care being taken that the rear-rank men dress correctly by their respective front-rank men.

2. *Wheeling in Files.*—Wheeling in files will be performed as laid down in S. 32; the outer rank must step rather longer during the wheel, especially with the outer foot.

If a squad is halted, or ordered to mark time, when only some of the files have wheeled into the new direction, the remainder should be taught to cover off, if required, by the diagonal march on the words *Rear files, Cover*: if the word *Front* is to follow the word *Halt*, the rear files need not be ordered to cover, but will move to their places on the word *Dress*.

3. *Files forming to the Front or Rear.*—The front-rank men of a squad marching in files will form to the front, or rear as laid down in S. 33. When forming to the front, the rear-rank man of the leading file will move into his place as soon as there is room for him; the other rear-rank men will preserve their relative positions with their front-rank men.

4. *Files forming to the Right, or Left, or to the Right or Left about.*—In these formations, the rear rank will form as described in S. 33; the front-rank men will move round their respective rear-rank men, and form successively in front of them.

A squad marching in files will resume its original front by the word *Halt-Front, or Front-Turn*.



## PLATE IV.

## FORMATION OF FOURS.

Fig. 1.—SQUAD WITH AN ODD FILE.  
TELLING OFF. FOURS—DEEP.

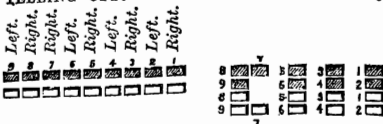


Fig. 2.—SQUAD WITH A BLANK ODD FILE.  
TELLING OFF. FOURS—DEEP.



Fig. 3.—SQUAD WITH A BLANK FILE.  
TELLING OFF. FOURS—DEEP.

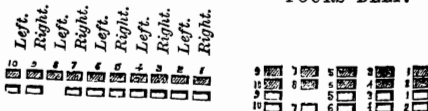
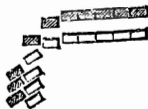


Fig. 4.—TWO FILES ON THE LEFT,  
RIGHT-TURN, LEFT-WHEEL.



Fig. 5.  
FILES TO THE FRONT.



S. 45. *The Formation of Fours.*—PLATE IV.,

Figs. 1, 2, and 3.

The squad should now be made up to eight or nine files, and numbered from right to left; and it must be explained to the men that odd numbers are right files, and even numbers left files. But in order that the left four may always be complete, when there happens to be an odd number on the left of the squad, the left file but one, although an even number, will be a right file, and the left file of the squad, though an odd number, will act as a left file; in this case the third file from the left, being a right file without a left file, will be called an "Odd File," whether it is complete or blank.

The four men composing a right and left file will be considered as comrades in the field, and will act together, not only in forming fours, but on other occasions; they should therefore take notice of each other when they are told off.

- |                     |   |   |
|---------------------|---|---|
| <i>Fours-</i>       | { | 1. <i>At the Halt.</i> —On the word <i>Fours</i> , the rear rank will step back one pace of 18 inches.  |
| <i>Deep.</i>        |   | On the word <i>Deep</i> , the left files will take a pace of 24 inches to the rear with their left feet, and a pace of 24 inches to the right with their right feet.  |
| <i>Squad-Front.</i> |   | On the word <i>Front</i> , the left files will move up in line with the right files, by taking a pace of 24 inches to the left with their left feet, and a pace of 24 inches to the front with their right feet; the rear-rank men will then close up to their proper distances from the front rank, by taking a pace of 18 inches to the front with their left feet. |

## PART I.—SQUAD DRILL,

3

- Fours-* As already described.
- About.* { On the word *About*, the squad will turn to the right about, and the left files will form on the right files, by taking a pace of 24 inches forward, with their right feet, and a pace of 24 inches to the left with their left feet.
- Squad-Front.* { On the word *Front*, the squad will turn to the right about, and reform two deep as already described.
- Fours-* As already described.
- Right.* { On the word *Right*, the squad will turn to the right, and the left files will form on the right of the right files, by taking one pace of 24 inches to the right with their right feet, and one pace of 24 inches to the front with their left feet.
- Squad-Front.* { On the word *Front*, the squad will turn to the left, and re-form two deep as already described.
- Fours-* As already described.
- Left.* { On the word *Left*, the squad will turn to the left, and the left files will form on the left of the right files, by taking one pace of 24 inches to the left with their left feet, and one pace of 24 inches to the rear with their right feet.
- Squad-Front.* { On the word *Front*, the squad will turn to the right, and reform two deep as already described.



2. *On the March.*—A squad on the march will be taught to form fours on the words *Fours-Deep*, *Fours-Right*, and *Fours-Left*; in these formations the left files will move precisely as when forming from the halt, the right files marking time two paces to enable them to do so.

On the word *Fours*, the rank in rear will step short two paces; if the word *Deep* follows, the right files will mark time two paces, while the left files move to their places in fours; if the word *Right*, or *Left*, follows, the squad will first turn in the direction ordered, after which the right files will mark time two paces while the left files move to their places.

When moving to a flank in fours, on the words *Half Right* (or *Left*)—*Turn*, each man will make a half turn to the ordered flank, as in the diagonal march. When moving, diagonally or direct, to a flank in fours, on the words *Front* (or *Rear*)—*Turn*, the men will turn, as ordered, and then form two deep without further word of command, by the right files marking time two paces, while the left files get into their places, and the rank in rear regains its distance.

A squad moving to the front or rear, or to a flank in fours, may be ordered to *Form Two-Deep*, on which the left files will fall back, or step up, into their places in file, and the rear rank will close on the front rank, the right files marking time two paces.

A squad moving to a flank in file may be ordered to form *Fours-deep*. On the word *Fours*, the rear rank will incline from the front rank by a lengthened step in the diagonal direction, and on the word *Deep*, the left files will move to their places in fours, the right files marking time two paces.

A squad moving to a flank by the diagonal march may be ordered to form fours to that flank; the men will at once turn into file, and then proceed as above described.

On the order to form fours while marking time, the rank in rear will step back a pace of 18 inches, on the word *Fours*.

S. 46. *Fours Wheeling, and Forming Squad.*

1. *Wheeling*.—A squad moving to a flank in fours will wheel to the right or left, or to the right (or left) about, in the same manner as it wheels in files; each four wheeling successively round the same point. When the word *Forward* is given during a wheel, the leading four will march straight forward in the direction in which it is then turned; the remainder following. If the squad is halted, or ordered to mark time, when only some of the fours have wheeled, the remainder will move as directed in S. 44, on the words *Rear Fours, Cover*.

2. *Forming to the Front or Rear, to the Right, (or Left,) or to the Right (or Left) about*.—When a squad moving in fours to a flank is ordered to form to the front or rear, to the right (or left), or to the right (or left) about, it will at once form two deep, and then proceed as described in Ss. 44 and 33.

S. 47. *A Squad formed in Fours closing on a Flank, or on the Centre, and Re-forming Two Deep.*

For the following practices 10 or 12 files are required.

<p><i>On the Right (Left, or Centre), Close. Quick-March.</i></p>	{	<p>A squad having formed four deep, will be taught to close on the right, left, or centre; the four men on the named flank, or in the centre, standing fast, the remainder closing on them by the side step.</p>
---	---	--

*From the Right*  
*(Left, or*  
*Centre),*  
*Re-form Two*  
*Deep.*  
*Quick-March.*

In re-forming two deep, on the word *March*, the four men on the named flank, or in the centre, will stand fast, the remainder will open out from them by the side step, and the left files will move up to their places in line in succession as the intervals are opened for them ; the rear-rank men will step up to their proper distances at the same time.

These formations will also be practised on the march. On the words *On the Right (Left or Centre) Close*, the files on the named flank, or in the centre, will move steadily forward at the stepping short pace, the remainder will close on them by the diagonal march ; when all are closed, on the word *Forward* the squad will move on with a full pace.

On the words *From the Right (Left, or Centre), Re-form Two Deep*, the files on the named flank, or in the centre, will move steadily forward at the stepping short pace ; the remainder will incline outwards by the diagonal march, and the left files will move up into the intervals, in succession, as they are opened for them, the rear-rank men regaining their proper distances at the same time : when completely formed in two deep, on the word *Forward*, the squad will move on with a full pace.

#### S. 48. *Breaking off Files.*

A squad will be taught to reduce its front by breaking off files ; files will, as a general rule, be broken off from the directing flank. A certain number of files (suppose three) will be broken off, as follows :

*Three Files on*  
*the Left,*  
*Right-Turn.*  
*Left-Wheel.*

On the word *Turn*, the named files will turn to the right, and on the word *Wheel*, they will wheel to the left, following the left flank of the remainder of the squad.

The front of the squad may be further reduced by any number of files (suppose two), as follows :

*Two Files on the Left, Right-Turn. Left-Wheel.* { On the word *Turn*, two more files will turn to the right, and on the word *Wheel*, will wheel to the left, following the left flank of the remainder of the squad ; the three files already in rear will mark time, then incline to their right by the diagonal march, and follow close in rear of the two files last broken off. Plate IV., Fig 4.

Any number of files (suppose three) that have been broken off may be again ordered to the front, as follows:—

*Three Files to the-Front.* { On the word *Front*, the named files will make a half turn, and double up into their places in line ; the remaining files in the rear will incline to the left by the diagonal march, and step out till they cover the two files on the flank.

*Two Files to the-Front.* { On the word *Front*, the two remaining files will make a half turn to the left, and double up into line.

All the files may be brought to the front at once, by the words *Files to the Front*. Plate IV., Fig. 5.

Files that are broken off must lock up well, that they may not interfere with others who may be following them.

#### SKIRMISHING.

The recruits having been thoroughly instructed in the movements described in the foregoing Sections, will next be taught the principles and practice of skirmishing. It should

be clearly explained to them that the object of moving in extended order is to enable the soldier to take advantage of cover, and thus inflict the greatest loss upon the enemy with the least amount of danger to himself. They should be instructed to avail themselves, for their protection, of the slightest inequality of ground, and the smallest patch of cover, and how to make the best of the cover; also, now, in advancing or retiring, to run or creep from one point of cover to another without unnecessary exposure.

The squad will be told off into a right and left half-squad.

When the recruits have made sufficient progress, one squad should be opposed to another, in order that the men may more readily see and judge for themselves the errors committed.

Skirmishers at the halt, if not ordered to kneel or lie down, will stand at ease; on the last executive word, they will come to attention, and proceed with the ordered movement.

When skirmishers are in movement, and the HALT is ordered, they will halt (or halt and front), and stand, kneel, or lie down, as ordered, taking advantage of any cover.

---

#### S. 49. *Extending.*

In extending, as a general rule, the front-rank man will keep the direction, the rear-rank man will regulate the interval.

1. *From the Halt.*—The front-rank man of the named file will stand, kneel, or lie down, as ordered. The remainder will turn outwards, and step off in quick time, covering correctly and without opening out; the rear-rank man of the named file will continue moving to the

FROM THE  
RIGHT (LEFT,  
CENTRE, OR  
NO.—, FILE),  
—PACES,  
—EXTEND.

flank until he divides the ordered interval between his front-rank man and the front-rank man on his outer flank, when he will also halt and front in the alignment. As each file gains the ordered interval, the rear-rank man will tap the front-rank man, who will at once halt, and front; the rear-rank man will move up in the alignment of the front rank on gaining his proper interval as above described. In an extension from a central file, the rear-rank man of that file will move to the left.

2. *On the March.*—The front-rank man of the named file will continue to move on; the remainder will make a half turn in the required direction, and front-rank and rear-rank men respectively will turn to the front, as they gain their intervals in the alignment as described in No. 1.

If the squad is moving in quick time, the extending files, as they make the half turn outwards, will break into double time; if the squad is moving in double time, they will quicken the pace; resuming the original time, in each case, as they turn to the front.

TO—PACES  
FROM THE—,  
—EXTEND.

3. *Increasing Intervals between Files.*—If skirmishers are directed to increase the intervals, they will open out from the named file as described in No. 1 or 2; the man then in rear of each file looking to the interval.

No dressing, or correction of intervals, will be permitted at the halt; the instructor will simply point out the

fault any man may have committed, without allowing him to move. All corrections will be made when the skirmishers are in motion.

S. 50. *Closing.*

1. *From the Halt.*—The front-rank man of the named file will rise and stand at ease. The remainder will rise, turn towards him, and close in quick time, front rank on front rank, rear rank (disengaging to the rear) on rear rank, each man halting, fronting, and standing at ease as he arrives at his place.

The front-rank man of the file on which the skirmishers are to close may be turned in any direction; the remainder will then form up in the same direction.

2. *On the March.*—The front-rank man of the named file will continue to move on; the remainder will make a half turn towards him, and close in double time, turning to the front, and resuming the quick, as they arrive at their places.

If the squad is closed while retiring, it will move as above, continuing to retire, rear rank leading.

ON THE RIGHT  
(LEFT, CENTRE,  
OR No.—, FILE)  
—CLOSE.

S. 51. *Advancing and Retiring.*

SQUAD—  
ADVANCE,  
OR  
RETIRE.

{ *Advancing.*—The men will move off in quick time.  
{ *Retiring.*—The men will turn about, and step off in quick time.

The intervals will be kept from the centre.

S. 52. *Moving to a Flank.*

RIGHT  
(OR LEFT)—  
INCLINE.

The skirmishers will at once make a half turn, and move to the flank indicated, until ordered to resume their original direction to the front or rear, by the word ADVANCE OR RETIRE.

If the INCLINE is repeated, the skirmishers will move direct to the flank.

S. 53. *Changing Front, or Direction.*

RIGHT (OR  
LEFT)—WHEEL.

FORWARD,  
OR HALT.

If it is intended to throw back the line, the line will be turned about, and then proceed as above directed.

CHANGE FRONT  
TO THE RIGHT  
(OR LEFT), ON  
THE RIGHT  
(OR LEFT) FILE.  
DOUBLE.

1. *By Wheeling*—The line of skirmishers will come gradually round on the principles laid down for a wheel in S. 28, No. 1; the outer file regulating.

The line will advance, regulated by the centre, or halt, as may be ordered.

2. *By File formation.*—If at the halt, the instructor, having given the caution, will place the men of the named file in the direction required; on the word DOUBLE, the remainder will move across, by the nearest way, to their places in the new alignment. If on the march, the whole will move steadily forward till the word DOUBLE; the men of the named file will then be placed rapidly in the required direction, and the remainder will move as above ordered.

If it is intended to throw back the line, or part of it, the caution will be CHANGE FRONT TO THE LEFT (OR RIGHT), ON THE RIGHT (OR LEFT) FILE, OR CHANGE FRONT TO THE RIGHT (OR LEFT), ON THE CENTRE (OR No. — FILE); the movement proceeding as above described.



## IN TWO RANKS.

## DISMISSING.

S. 54. *Dismissing a Squad.*

- |                    |   |  |
|--------------------|---|--|
| <i>Right-Turn.</i> | { | 1. <i>Without Arms.</i> —On the word <i>Turn</i> , the men will turn as directed.  |
| <i>Dismiss.</i>    | { | On the word <i>Dismiss</i> , the front rank will take a side pace to the left, and the rear rank will take a side pace to the right; after a pause the squad will break off quietly. |
| <i>Right-Turn.</i> | { | 2. <i>With Arms.</i> —As directed in the   |
| <i>Dismiss.</i>    | { | <i>Rifle Exercises</i> , S. 6.   |
- When there is only one rank it will act as a front rank.

PART II.  
COMPANY DRILL.

GENERAL RULES.

I.

*Soldiers to be formed in a Company.*—The soldier, having been thoroughly grounded in the squad drill, will now be instructed in the movements of the company, as a more immediate preparation for his joining the battalion; for this purpose from 18 to 20 files will be formed and told off as a company.

II.

*Sizing a Company.*—A company will be sized from flanks to centre, the front and rear rank men being nearly the same height. When a company is first sized, the following method will be adopted:—Having arranged the men in single rank according to their heights, tallest on the right, shortest on the left, direct the right-hand man to take three paces to the front, the next to place himself three paces in front of the left of the rank, as a left-hand man, the third tallest man to place himself one pace in rear of the right-hand man, the fourth in rear of the left-hand man; then place the two next on the inner side of the front-rank men of the formed files, then the two next as their rear-rank men, the taller man in each case taking the right; and so on. Lastly, cause the half-

companies to close inwards on each other, and dress, the rear rank covering correctly ; the blank file, if there is one, to be placed the third from the left.

### III.

*Soldiers to know their Places.*—After the men of a company have once been sized, they must remember their relative heights, and be able to fall in, in their proper places.

### IV.

*Formation and Telling-off of a Company.*—The company will fall in in two ranks at close order, files nearly touching, and be numbered from right to left ; it will then be told off into two half-companies and four sections. When the number of files is odd, the right half-company will be the stronger. When a half-company is divided into sections of unequal strength, the outer section will be the stronger. The left file of the right half-company will always be considered the centre of the company.

### V.

*Supernumerary Rank.*—The subaltern officers and serjeants will be formed in a third or supernumerary rank, as will hereafter be described. Their duties are to control the expenditure of ammunition, correct any mistakes that may occur while manœuvring, and take note of awkward men. Too much attention cannot be paid to these points.

### VI.

*Officers, &c., of a Company.*—The commander of the company will be termed “the captain,” the senior subaltern. “the right guide,” and the junior subaltern “the left guide. Two serjeants will be told off as “right” and “left” markers, and will give points as required, each for

his own flank of the company (except the leading marker of a company moving from line into column, who will proceed as directed in Part III., S. 25). In the absence of an officer, his place will be taken by the next in rank, whether officer or serjeant; when required, corporals from the ranks will in like manner supply the places of serjeants. Non-commissioned officers do not move out in front of the line at open order.

### VII.

*Relative Proportion of Paces to Files.*—Each man occupies a space of about 24 inches; therefore, to ascertain the number of paces of 30 inches required for a given number of files, multiply the number of files by 8, and divide by 10, the latter operation being accomplished by cutting off the last figure, which multiplied by 3 will give the odd inches. It will be useful to remember, that 10 files require 8 paces, 20 files 16, and so on—100 files 80 paces, 1,000 files 800.

### VIII.

*Application of Squad Drill.*—All the rules laid down for the instruction of a squad in two ranks are equally applicable to the movements of a company; it will, therefore, only be necessary in this Part to describe the positions and duties of the officers and serjeants during these movements, and to add the different formations and movements of half-companies and sections that may be used when moving in column of route.

### IX.

*Companies to be drilled as if with the Battalion.*—When a company falls in alone, it will first be formed as a company in line, but in order to teach officers and non-commissioned officers the different positions it will occupy in battalion drill, it will be drilled both as a company in line and column, as though it were with the battalion. The instructor must

state before each movement the supposed battalion formation, upon which the officers and serjeants will move at once to their proper places.

### X.

*Companies to be exercised by their own Officers.*—Every company of a battalion should be frequently exercised by its own officers, the captain acting as instructor, and one of the subalterns taking his place.

### XI.

*Companies to be exercised on Rough Ground, and with the Ranks changed.*—A company should be exercised on rough and broken ground, as well as on smooth and level ground; and the rank which is in front during one drill should be in rear during the next, in order that every man may be equally well drilled. Companies should also be exercised with the ranks changed during the drill. On the words *Change Ranks*, the company will turn about, and the supernumeraries will turn outwards and double round to the new rear, the captain moving round at the same time; the men will be told off afresh if intended to remain in that formation.

### XII.

*Derangements to be quickly remedied.*—Great pains should be taken to accustom the men to remedy quickly, of their own accord, any derangement that may take place in the telling off of the company. For example, the captain will order certain files, or men, to fall out, and will then continue to drill the company without re-telling off. Soldiers thus trained are not liable to fall into confusion, whatever casualties may occur on service. It is especially necessary that companies should be so exercised as to ensure, under all circumstances, the ready formation of fours, upon which nearly all movements depend.

## XIII.

*Assembling on Markers.*—Men should frequently be practised in assembling, and rapidly forming company; for this purpose, the men will be dispersed, and on the bugle-sound *The Assemble*, or the word *Assemble*, they will run in and form company on the left marker or the left-hand man, who will previously be placed for that purpose; as they form, they will order arms and remain at attention.

## XIV.

*Marching on Points, and judging Distance.*—In order that officers and serjeants may be thoroughly trained in these important parts of their duty, they should frequently be practised separately, in marching on points, and judging distances. In the former exercise, the instructor must remain standing in rear of the officer or serjeant, to see that he marches perfectly straight to his front just clear of the point on which he is moving; in the latter exercise, the instructor must practically prove the distances, which may be taken by a number of officers or serjeants, on the same alignment one beyond another, the number of files for which the distance is to be taken being previously named.

## XV.

*Markers giving Points.*—1. A marker giving a point for his company to dress upon, in a line formation, will stand with recovered arms, turned towards the point of formation, at arm's length in front of the alignment; when the men approach, he will hold out his inner arm at right angles to his body, with the fist clenched, on which the line will dress. Thus all lines will be dressed at arm's length in rear of the line of markers. A marker giving a point will drop his arm as soon as the man opposite to his fist has dressed up to it.

2. A marker, when giving a point for his company to form on in column, will recover arms while being covered, coming to "The Shoulder" when correctly covered, or when covered simultaneously with other markers, as when points are given for companies to form on parade, on the word *Steady*. When the guide comes up to take his place, the marker will fall to the rear.

## XVI.

*The Captain.*—The captain, though his usual post will, as hereafter stated, be in rear of the centre of his company, will, when the company is in motion, take up such a position as will best enable him to superintend its movement; he should, in column, take care not to obstruct the covering. Captains, previously to giving a word of command, should call out the number of their companies, thus, *No. 1—Halt*. In giving their words they should carefully observe the rules laid down in Part I., Gen. Rules IV.

---

The rule laid down in Part I., S. 2, for a squad is equally applicable to the company and the battalion; on the cautionary word *No.*—, or BATTALION, the men, if standing easy, will at once assume the position of standing at ease.

N. B.—In this Part, words given by the instructor of the drill are in capital letters, those given by the captain, or guides, in *italics*.

---

## A COMPANY IN LINE AND COLUMN.

S. 1. *Formation of a Company.*—PLATE V.,  
Figs. 1, 2, 3, and 4.

The company will fall in in two ranks, sized as directed in Gen. Rules II. The captain will be three paces in rear of the centre: the guides and serjeants will form a third or supernumerary rank, two paces from the rear rank;—the right and left guides in rear of their flank files, the markers in rear of the second file from their guides: the remaining supernumeraries will take post alternately in rear of the right and left half-companies, dividing the space. The drummers and pioneer will be in the supernumerary rank, the former in rear of the second section, the latter in rear of the third.

1. *Formation in Line.*—On the caution AS A COMPANY IN LINE, the right guide will place himself on the right of the front rank, and his marker will cover him.

2. *Formation in Column.*—On the caution AS A COMPANY IN COLUMN, BY THE LEFT (OR RIGHT), the guide of the flank named to direct will align himself with the front rank, his marker placing himself in rear of the flank file.

S. 2. *A Company in Line taking Open Order.*

Bayonets will be fixed, and arms shouldered, before taking open order.

1. *Taking Open Order.*—On the word ORDER, the officers will recover their swords; the guides will place themselves one pace from the front rank, the left guide in front of the second file from the left, the right guide in front of the centre; the captain passing round the



PLATE V.—Fig. 1.—A COMPANY IN LINE.

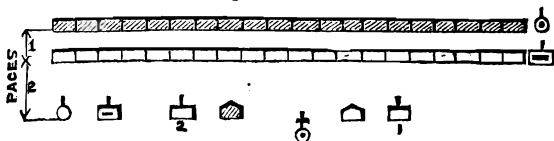


Fig. 2.—OPEN—ORDER.

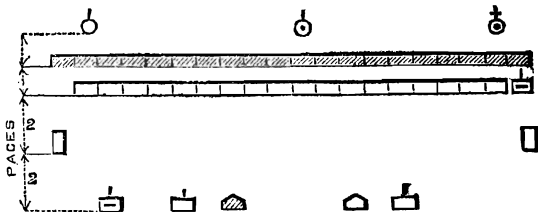


Fig. 3.—MARCH.

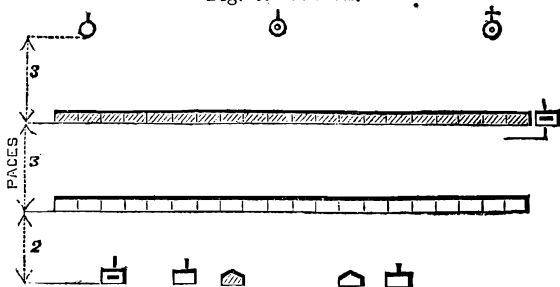
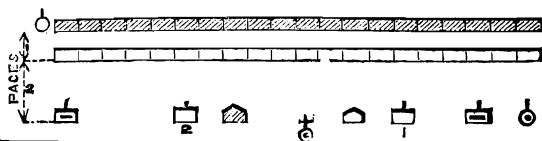


Fig. 4.—A COMPANY IN COLUMN BY THE LEFT.





OPEN-ORDER.

right of the company, will place himself one pace in front of the second file from the right. Should only one guide be present, he will take the place assigned to the left guide, passing by the front. The supernumerary rank will step back two paces; the flank men of the rear rank will step back two paces, and turn to the right; and the right marker will take one pace of 24 inches to his left, into the space vacated by the right-hand man of the rear rank.

MARCH.

On the word MARCH, the officers will take two paces to the front, look to their right, and dress; the right marker will take one side pace to his right, and one pace to his front with his left foot, into the place vacated by his guide; and the rear rank will step back two paces, the flank men of the rear rank fronting at the same time, and raising their arms.

*Rear Rank*  
*Dress.*  
*Eyes-Front.*

The serjeant on the right of the supernumerary rank will dress the rear rank, and give the words *Eyes-Front*, on which the flank men will drop their arms; the supernumerary rank will take up its dressing by the right.

STEADY.

The instructor will dress the officers from the right, and give the word STEADY, on which they will carry swords and look to their front.

CLOSE-ORDER.

2. *Taking Close Order.*—On the word ORDER, the officers will recover their swords; the captain and right guide turning to the right, the left guide to the left.

## PART II.—COMPANY.

MARCH.

On the word MARCH, the rear and supernumerary ranks will take two paces to their front, and the left guide will take his place in rear of the left file; the captain will move to his place in rear, passing round the right flank of the company, the right marker taking two paces to his rear and one to his left, to make room for him to pass; the right guide will then resume his place on the right of the front rank, and the right marker will move up to his place on the right of the rear rank: the officers will carry their swords as they take post. If only one guide is present, he will pass to the right of the company by the rear.

Arms will then be ordered, and bayonets unfixed.

S. 3. *Marching to the Front and Rear.*

1. *Marching to the Front.*—The instructor, having stated the supposed order of the battalion, will proceed as follows:

THE LINE (OR  
COLUMN) WILL  
—ADVANCE.

QUICK  
(OR DOUBLE)—  
MARCH.

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

As described in Part I., S. 39.

2. *Marching to the Rear.*—When the company is to retire, the caution THE LINE (OR COLUMN) WILL—RETIRE will be given, and the men will be turned about. The directing guide, if the company is in line, will fall to the rear of the centre to superintend the movement; if the company is in column, he will step up in line with the rear rank and select points to march on.

## WHEELING, OR FORMING, FROM THE HALT.

A company will wheel, or form, from column into line, and wheel from line into column, as directed in Part I., §. 42. The officers and markers will move as follows:

4. *A Company Wheeling, or Forming, from the Halt, from Column into Line.*

Caution,—AS A COMPANY IN COLUMN, BY THE LEFT.

LEFT WHEEL  
or LEFT FORM)  
INTO—LINE.

{ On the word *LINE*, the left guide will fall to the rear, and the right guide move up: the right marker will run out, and give a point as directed in Gen. Rules, XV., No. 1, where the outer flank of the company will rest when the movement is completed, turning to the rear of the column; the left marker will give a point on the left of the company in like manner.

STEADY.

{ The instructor will cover the points, and give the word *STEADY*.

QUICK--  
MARCH.

{ On the word *MARCH*, the left guide will move to the left of the company ready to dress it, on the captain's word *Dress*, or as the files come up into line.

Company—Halt,  
*Dress.*

{ In the case of a wheel, the captain will give his word *Halt*, when the wheeling flank of the company is two paces from the marker, and immediately follow it by the word *Dress*.

Eyes—Front.

{ The left guide, having completed the dressing, will give *Eyes—Front*, and fall into his place in rear.

†

STEADY. { On this word from the instructor, the  
markers will take post.

A company in column, by the right, will be taught to wheel, or form, into line to the right in a similar manner (except that the left guide will not move on the caution), on the words RIGHT WHEEL (or FORM) INTO—LINE, &c.; on the word MARCH, the rear-rank man of the pivot file will step up to keep the right guide's place.

In these movements, the company is considered the leading company of a column wheeling, or forming, into line. When several companies are practised together, both markers of the leading company will give points as above described; each of the remaining companies will have only its inner flank marked. See Part III., S. 26.

—

*S. 5. A Company Wheeling, from the Halt, from Line into Column.*

Caution,—AS A COMPANY IN LINE.

- |  |   |   |
|--|---|---|
| BREAK INTO<br>COLUMN, TO<br>THE-RIGHT. | } | 1. <i>Breaking into Column, to the Right.</i> —On the word RIGHT, the left guide will stand fast; the remainder will turn to the right about. |
| RIGHT-WHEEL,<br>QUICK-MARCH.           | } | On the word MARCH, the left guide will place himself on the left of the company, turning to the front of the column.                          |
| <i>Company,<br/>Halt-</i>              | } | The captain having given the words <i>Halt, Front-Dress</i> , on the completion of the wheel, the right guide and the                         |

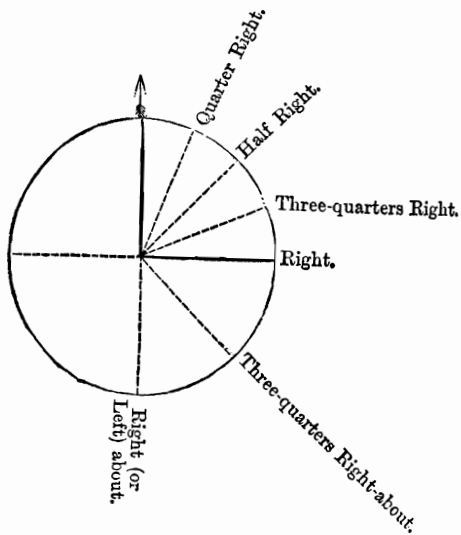
WHEELING, OR FORMING, FROM THE HALT.

2010MM004

71

## PLATE VI.

DEGREES OF WHEEL.  
DIVISIONS OF THE QUARTER CIRCLES, AND THE CAUTIONS.





*Front-Dress.* } markers will take post in column. Having taken up their own dressing by the left, the men will look to the front.

2. *Breaking into Column, to the Left.*—A company in line will be taught to wheel into column to the left in like manner; dressing, when in column, by the right. On the word LEFT, the right guide will stand fast, the remainder turning about: on the word MARCH, the right guide will place himself on the right of the company, turning to the front of the column.

3. *Wheeling forward into Column.*—A company in line, halted, may also wheel forward into column; the caution and command being, COMPANY, RIGHT (OR LEFT)—WHEEL. QUICK—MARCH; the word FORWARD, BY the LEFT (OR RIGHT), OR HALT, DRESS, will be given when the company has wheeled square. When the wheel is to the right, the right guide and his marker will fall to the rear, the left guide moving up, as the company commences its wheel; when the wheel is to the left, the right marker will fall to the rear.

S. 6. *A Company changing Front as the base Company of a Line formation.*—PLATE VI.

CHANGE FRONT  
 QUARTER, HALF,  
 or THREE-  
 QUARTERS,  
 RIGHT (OR LEFT),  
 OR TO THE  
 RIGHT (OR LEFT),  
 ON THE RIGHT  
 (OR LEFT)  
 COMPANY,  
 or

On the Inspector's caution, the markers will move out to give base points, as directed in Gen. Rules XV., No. 1. If the change of front is towards that flank of the line on which the base company stands (*i.e.*, if front is changed to the right on the right company, or to the left on the left company), the base points will turn towards the flank on which the com-

CHANGE FRONT  
 QUARTER, HALF,  
 or THREE-  
 QUARTERS, LEFT  
 (or RIGHT), OR  
 TO THE LEFT  
 (or RIGHT), ON  
 THE RIGHT (or  
 LEFT) COMPANY.

pany is to wheel; if the change of front is to the left on the right company, or to the right on the left company, and in a change of front on a central company, they will turn to where the wheeling flank of the company will rest. The instructor will cover them in the required direction.

STEADY.  
*Company,*  
*Right (or Left)*  
*-Wheel.*  
*Quick-March.*  
*Halt-Dress.*  
*Eyes-Front.*

On the instructor's word STEADY, the captain will give the executive words. The word *Halt* must be given two paces before the wheeling flank of the company comes up to the marker. The guide of the flank on which the wheel was made will dress the company, and give the word *Eyes-Front*, falling in on the right if the right guide, falling to the rear if the left.

STEADY.

The instructor will then give a second word STEADY, on which the markers will take post.

#### WHEELING, OR FORMING, ON THE MARCH.

##### S. 7. *Wheeling, or Forming, from Column into Line; and Wheeling from Line into Column.*

1. *From Column into Line.*—While on the march, a company in column may wheel, or form, into line on the words RIGHT (or LEFT) WHEEL, or FORM INTO—LINE. Before wheeling, or forming, to the reverse flank, the column will be ordered to march by that flank. In the case of a wheel, the word FORWARD, or HALT, will be given, on its completion.

2. *From Line into Column.*—A company in line may wheel, while on the march, into column, on the principle laid down in S. 5, No. 3, by the words COMPANY, RIGHT (or LEFT)—WHEEL. FORWARD, BY THE LEFT, OR RIGHT (or HALT, DRESS) : the left will direct if the wheel was to the right, the right if it was to the left.

---

S. 8. *A Company in Column changing Direction.*

A company in column, on the caution CHANGE DIRECTION TO THE RIGHT (OR LEFT) from the instructor, will wheel into the named direction by command of the captain. The word FORWARD will be given by the instructor, at the required angle. When two or more companies are practised together, each company in rear will be ordered by its captain to wheel at the same point as the leading company, and will receive from him the word *Forward* as its front becomes perpendicular to the new direction.

---

## MISCELLANEOUS MOVEMENTS AND FORMATIONS.

S. 9. *Marching Past.* PLATE VII.

For this practice, the company will be formed as a company in column, by the left. Bayonets will be fixed.

Four points will be placed marking the angles of an oblong, of which the long sides will be 80 paces in length, and the short sides 30, or more if the company is strong. The left of the company will rest on the centre of one of the long sides of the oblong, the opposite side will be called the saluting base ; a fifth point, called the saluting point, will be placed four paces outside of the centre of the saluting base, and turned towards the flank of the company. The men marking the angles will turn in the same direction as the company. If more convenient, the points may be marked with camp colours.

The company will step off as usual, by command of the instructor, and will wheel to the left by command of the captain at the four corners of the oblong. It will wheel round the 1st point, and will again wheel at wheeling distance from the 2nd, the right guide moving up, and the captain moving towards the right of the company.

As the wheel is completed, the captain will give the word *Forward, by the Right*, on which the men will come to "The Shoulder ;" the captain and guides will run out three paces in front of the company, the captain moving round the right flank, and place themselves as when at





SLOPE-ARMS.

MARCH PAST.

QUICK-

MARCH.

*Left-Wheel.**Forward.**Left-Wheel.**Forward,**by the Right.*

open order in line, each officer taking up the quick time as he arrives at his place; the right marker will move up to the place vacated by his guide, to lead the company. When at ten paces from the saluting point, the officers will salute as follows, taking the time from the right. As the left foot comes to the ground, the sword will be brought smartly to the recover, the next time that foot comes to the ground, it will be lowered to the salute (the point of the sword to be 12 inches from the ground, in the direction of the right foot; the arm to be straight, hand just behind the thigh, the thumb flat on the handle of the sword; the left arm to remain steady): the head to be slightly turned to the saluting point while passing it. When at six paces beyond the saluting point, as the left foot comes to the ground, the officers will recover swords, make a pause of one pace, and on the following pace come to the carry; when at 20 paces, they will resume their places with the company, in doubletime, the captain passing by the right; the right marker will take post at the same time.

*Left-Wheel.**Forward,**by the Left.**Left-Wheel.**Forward.*

COMPANY-

HALT.

On the word *Forward*, after the third wheel, the men will slope arms (or trail arms with the short rifle).

On the word *Forward* being given after a wheel, the leader of the company must at once observe some object in the straight line between himself and the next point, to guide him in marching.

If a company is required to march past in slow time, it will move in the same manner as in quick time.

---

### S. 10. *The Diagonal March.*

As in Part I., Ss. 30 and 43.

In column, the guide of the leading flank will move up, if not already there, and lead the company.

---

### S. 11. *File Marching and Wheeling in File.*

As in Part I., Ss. 31, 32 and 44.

For the position of the officers, see the next Section.

---

### S. 12. *The Formation of Fours.*

In forming fours, the men will move as explained in Part I., S. 45. Both in file marching and the flank march by fours, the guide of the leading flank will lead the company, being placed next to the pivot man of the leading file or four, with his marker in front of that man. The guide not leading the company will be on the reverse flank of the rear file or four; his marker on the reverse flank of the next file but one, or the next four. The supernumerary rank will close to the files they cover, as the company turns, or forms fours, to a flank.



**MISCELLANEOUS MOVEMENTS.****81**

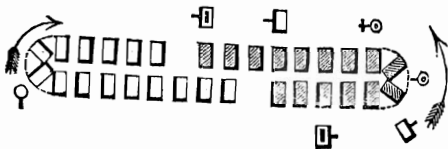
## PLATE VIII.

Fig. 1.

RIGHT FORM—COMPANY.



Fig. 2.

COUNTER-MARCH. RANKS, RIGHT AND LEFT-TURN.  
QUICK-MARCH.

S. 13. *A Company marching in Files, or Fours, forming to the Front (or Rear); to the Right (or Left); or to the Right (or Left) about.*—PLATE VIII., Fig 1.

These formations will be made as described in Part I., Ss. 44 and 46, the word COMPANY being substituted for the word *Squad*, in the command. On the words AT THE HALT, FRONT FORM-COMPANY, and in forming company to the right or the left, or to the right or left about, the markers will mark the flanks of the company, turning towards the flank of formation; and will be covered by the instructor. The guide of the flank of formation will dress the men file by file as they come up; and when the company is formed will give the words *Eyes-Front*, and take post in line; the markers will take post on the word STEADY from the instructor. The supernumerary rank will form with the company.

---

S. 14. *A Company formed in Fours closing on a Flank, or on the Centre, and re-forming Two Deep.*

A company having formed four deep will be practised in closing on the flanks and centre, and re-forming two deep, both at the halt and on the march, as described in Part I., S. 47. The directing guide and the supernumerary rank will close, and open out with the company.

---

S. 15. *The Side or Closing Step.*

A company will be practised in the side step, as it is explained in Part I., S. 34.

S. 16. *Counter-marching.*—PLATE VIII., Fig. 2.

A company in column will counter-march as follows:—

- |                                   |   |   |
|-----------------------------------|---|---|
| COUNTER-MARCH.                    | { | 1. <i>From the Halt.</i> —On the word COUNTER-MARCH, the directing guide will turn about, and take a pace to his front; the guide of the reverse flank will place himself one pace from that flank, and turn inwards. |
| RANKS,<br>RIGHT AND<br>LEFT-TURN. | { | On the word TURN, the front rank will turn to the right, the rear rank to the left.   |
| QUICK-MARCH.                      | { | On the word MARCH, the company will step off together, each rank wheeling close round to its right, till the leading man of the front rank comes up to the guide.   |
| COMPANY-HALT-FRONT,<br>DRESS.     | { | The instructor will then order the company to halt, front, and dress; and the guides will change flanks and take post.  |

Each man must be careful to move up to the guide on the flank at which he wheels, and to lengthen his pace with the outer foot during the wheel, in order not to check the rest of the company.

The captain and the supernumerary rank will turn towards the reverse flank, and will counter-march round that

flank, marking time successively as they arrive at their places, and halting and fronting with the company.

COUNTER-  
MARCH.  
RANKS, RIGHT  
AND LEFT-  
TURN.

2. *On the March.*—On the word TURN, the directing guide will turn to the right-about, take a pace to his front, and mark time. The other guide will also move as in No. 1, but marking time.

COMPANY-  
FRONT-TURN,  
BY THE LEFT  
(OR RIGHT)  
OR  
HALT, FRONT-  
DRESS.

As the company advances, or halts and fronts, the guides will change flanks and take their proper places in column.

S. 17. *Diminishing and increasing Front, by breaking off Files and bringing them again to the Front.*

Files will be broken off, and brought again to the front, as described in Part I., S. 48. The guide on the flank whence the files break off will touch in to the remainder of his front rank, as the files drop to the rear; his marker will move up and remain covering him as long as there is a file in rear. The instructor will give the caution BREAK OFF—FILES; the captain will give the executive words.

S. 18. *Diminishing and increasing Front, by breaking into Files, or Fours, and re-forming Company.*

A company in column may advance from either flank in files or fours, on the words RIGHT (OR LEFT)-TURN, OR

**FOURS—RIGHT (OR LEFT), LEFT (OR RIGHT)—WHEEL, QUICK-MARCH.** These movements may also be done when the column is on the march. If the instructor gives the caution **ADVANCE (OR RETIRE) BY FOURS (OR FILES) FROM THE RIGHT (OR LEFT)**, as when companies in battalion move off in succession from quarter column, the captain will give the foregoing executive words of command.

The company will increase its front as explained in Part I., Ss. 44 and 46; the directing guide taking his place on the word **FORWARD**.

### S. 19. *Forming Company Square.*

The instructor will give the caution—**FORM COMPANY SQUARE.**

*Fours—Deep.*  
*On the Centre*  
*Close.*  
*Quick—March.*

On the caution, the captain will order the company to form fours deep, and close on the centre. When the closing is completed, the men will fix bayonets (or swords): the flank fours, after fixing, will turn outwards. The officers and serjeants will form in rear of the company.

*Prepare for*  
*—Cavalry.*  
*Ready.*  
*&c.*

If the instructor gives the caution to prepare for cavalry, the captain will give the words *Prepare for Cavalry. Ready, &c.*, on which the men will move as described in the *Rifle Exercises*, S. 5. The officers and serjeants may, if necessary, move in between the fours, and the two rear ranks be turned about, the outer rank kneeling.

<p><i>Order-Arms.</i></p> <p>RE-FORM— COMPANY.</p> <p><i>Unfix-Bayonets</i> (or <i>Swords</i>).</p> <p><i>From the Centre,</i> <i>Re-form—</i> <i>Two-deep.</i> <i>Quick-March.</i></p>	}	<p>As the men come to “The Order,” the flank fours will front, and the officers and serjeants, if in the square, will move out.</p> <p>On this caution from the instructor, the men, if they have prepared for cavalry, will be ordered to unfix bayonets (or swords), and the captain will then reform the company two-deep.</p>
---	---	---

---

### FORMATION OF HALF-COMPANIES AND SECTIONS.

#### S. 20. *Formation of Half-companies and Sections.*

The company will be practised in wheeling outwards a quarter circle on the march, by half-companies and sections, and halting, as a central company in the formation of a battalion square (Part III., S. 38), and in re-forming column; by the following words of command:—*Form Square, Quick-March, Half-companies-Outwards; or Four-deep, Form Square, Quick-March. Sections-Outwards. Unfix Bayonets (or Swords). Re-form Column. Quick-March. Halt, Front-Dress. Stand at-Ease.*

In forming four-deep square, the two inner sections will close on the outer on completing their wheel. On the caution *Re-form-Column*, if the square is two-deep, the half-companies will turn about; if four-deep, the sections will turn about, and the two inner sections will then move off to section distance from the outer. On the word *March*, the half-companies, or sections, will wheel into company, receiving the words *Halt, Front-Dress* when square.

Although formations of half-companies and sections are not used in battalion manœuvres, except in the above

formations of square, they are required on the line of march, where columns always move with as large a front as the ground will admit.

An increase of front from fours to sections, or half-companies, may be effected on the principles laid down in Part I., S. 46, Para. 2. When it is required to increase the front from sections to half-companies, the rear sections may be moved into line with the leading sections by the diagonal march: a formation of companies from half-companies may be made in like manner.

To diminish its front, a company may advance from a flank in column of half-companies, or sections, on the principle laid down in Part III., S. 23 (except that the half-companies or sections will move into column in files instead of fours). A diminution of front may also be effected by turning to the right (or left), and then wheeling to the left (or right).

These movements are always to be done on the march.

A company may also move to a flank by half-companies, or sections, on the principle laid down in S. 5, No. 3, or S. 7.

*Posts of Officers, &c. in Column of Half-companies and Sections.*—The captain will be in his usual place. The guides, markers, &c. will be posted as follows:—In column of half-companies, each guide will be on the directing flank of his half-company, his marker two paces in rear of the flank file; in column of sections, each guide will be on the directing flank of the outer section of his half-company, his marker on the same flank of the inner section; the remaining supernumeraries will retain their places.

---





## PLATE IX.

Fig. 1.—A COMPANY IN EXTENDED ORDER.

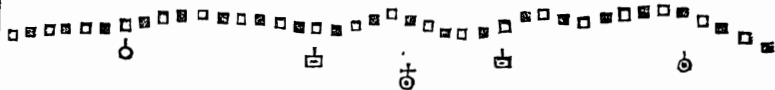
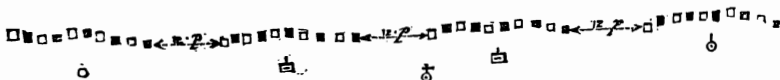


Fig. 2.—A COMPANY EXTENDED BY SECTIONS.



## SKIRMISHING.

The company will now be practised in skirmishing, as laid down in Part I., Ss. 49-53 ; it will also be taught firing in skirmishing order, and how to move both as skirmishers and supports, as detailed in the following Sections.

On the caution **THE COMPANY WILL SKIRMISH**, the officers will return their swords, and officers and markers will take post as follows :—The captain will be six paces in rear of the centre ; the guides will be three paces in rear of the centre of the outer sections ; their markers in rear of their inner sections. The guides and markers will take charge of their sections, under the general control of the captain. During an extension, they will see that the men take their proper intervals and preserve the general alignment ; the guides should also see that the outer files lead in a true direction.

The extension completed, the captain and the section commanders will take such positions in rear of their commands as will best enable them to superintend their men ; they will on all occasions take care that the men avail themselves of cover, preserving their intervals as far as possible, and that they fire only when directed so to do, adjusting their sights, and aiming at precise objects.

If the caution is, **THE COMPANY WILL SKIRMISH BY SECTIONS**, the captain will name the section and file of extension, the number of paces, and the intervals between sections. The named section will extend ; and the commanders of the remaining sections will extend them from their inner flanks, as they gain the ordered intervals ; the intervals may be from twelve paces upwards, according to the nature of the ground.

*Bugle Sounds.*—In order to teach the bugle sounds used in skirmishing, the bugle should be used at instruction

parades. The bugle sounds will be found at the end of the book ; their names are as follows :—

I. EXTEND.	IX. INCLINE.
II. CLOSE.	X. WHEEL.
III. ADVANCE.	XI. ALERT.
IV. RETIRE.	XII. PREPARE FOR CAVALRY.
V. HALT.	XIII. QUICK.
VI. FIRE.	XIV. DOUBLE.
VII. CEASE FIRE.	XV. LIE DOWN.
VIII. ASSEMBLE.	XVI. RISE.

One G sounded on the bugle will denote the right of the line ; two G's the centre ; three G's the left.

The G, or G's, preceding any sound will denote the part of the line to which it applies. For instance : two G's before the Extend, will signify, to extend from the centre ; one G, followed by the Close, to close to the right ; one G, followed by the Incline, to incline to the right ; three G's, followed by the Wheel, to wheel to the left.

The Halt annuls all previous sounds except the Fire. The Incline and Wheel must be preceded by the distinguishing G ; a double Incline will signify a direct turn to the flank indicated. When the Fire is combined with any other call, it should always be the last sounded, for if the men were ordered to fire they might not hear the second call.

The Alert implies unexpected danger ; when it sounds, the men in movement will at once halt, and wait for further orders.

When moving by sound of bugle, men will wait till the bugle has ceased before they move.

Bugle sounds apply only to men extended ; a support invariably moves by word of its commander, who will give the words of command usual in close order, placing himself in front.

S. 21. *Skirmishers Firing.*

The word, or sound, FIRE is only permissive, subject to the discretion of the commander of the line of skirmishers, who will name the number of men in each section who are to fire. Skirmishers will at all times assume such position as may be most convenient, and may render their fire most effective. The section commanders, when they see that the enemy is within range, will select the men to commence the fire.

On the word, or sound, CEASE FIRE, the men will remain steady in whatever position they may be.

Soldiers, when firing in extended order at the halt, are not required to shut down the flap of the back-sight until ordered to cease fire, or to advance or retire.

FIRE. Bugle Call, FIRE, No. VI.	}	1. <i>Firing at the Halt.</i> —On the word FIRE, or on the last sound of the bugle, the men, being under cover, will fire as they may be directed.
--	---	--

A line of skirmishers may be ordered to lie down, or single soldiers may lie down for the sake of cover. When firing in this position, both elbows must rest on the ground to support the body and rifle.

FIRE. Bugle Call, FIRE, No. VI.	}	2. <i>Firing when Advancing.</i> —On the word FIRE, or on the last sound of the bugle, the skirmishers will open fire according to the orders of their section commander, and continue the advance in a general line, taking advantage of such cover as may offer.
--	---	--

FIRE. Bugle Call, FIRE, No. VI.	}	3. <i>Firing when Retiring.</i> —On the word FIRE, or on the last sound of the bugle, the men selected to commence will halt, front, and fire, the remainder continuing to retire. As soon as the former have
--	---	---

delivered their fire, they will turn about and join the general line of skirmishers. In the meantime, those who have been selected as the next shots will have halted and fronted, and prepared to fire as soon as the front is clear ; and thus the retreat will continue in a general line, advantage being taken of every available position to make a stand.

In firing when advancing and retiring, it will be found a good plan to commence by ordering alternate men, or files, to fire : in advancing, as soon as these have delivered their fire, the remainder may run to the front and deliver theirs ; in retiring, the named men, or files, having halted and fronted, will open fire, the remainder moving on to the rear. Thus, while preserving a general line, a steady continuous dropping fire will be maintained, the men who are exposed in moving from place to place being protected by the fire of those halted and under cover. Care must be taken by the men, in moving from place to place, to avoid crossing the line of fire of those men who are covering their advance or retreat ; while the men who are firing must be equally careful not to fire if there is any possibility of striking the men in front of them.

The advance, or retreat, may also be effected by alternate sections, half-companies, or companies.

When any large object, affording considerable shelter, comes in their way, several files may run up behind it ; but section commanders will guard against too many men running towards it (which might draw a fire of artillery, or the concentrated fire of skirmishers), and will see that the men duly move on again with the general line.

When the company thoroughly understands the principles of this mutual support, the men should be allowed, under

the general superintendence of their section commanders, to act on their individual judgment in choosing cover, advancing, halting or retiring; and also when they should each fire. Section commanders should also judge when a rush of their entire sections to available cover, under the protecting fire of the remainder, might be made with advantage. But all must bear in mind that individual movement is subordinate to, and regulated by, the general movement of the line of skirmishers; a part of the line being usually named as the guide for the movement of the remainder.

No opportunity should be lost of practising companies in opposing each other on broken ground, which will enable the men, by detecting the faults of others, to correct their own.

---

#### 4. *Firing while inclining, or moving direct, to a Flank.*

When the word, or sound, FIRE is given while skirmishers are inclining, or moving direct, to a flank, the men ordered to fire will make a momentary halt, turn to the front, and fire.

---

When skirmishers firing are directed to halt, they will get under cover, if available, and continue firing as they may be directed.

---

#### S. 22. *Relieving Skirmishers.*

For the movements described in Ss. 22-24, two companies are required, one extended, the other formed in rear, as a support; or a company may be formed in half-companies, one of which will skirmish while the other acts in support. The distance between skirmishers and their support, on a plain, as a general rule, is 300 yards. The

support will invariably conform to the movements of the skirmishers, keeping in rear of their centre.

1. *Relieving Skirmishers that are halted.*—To relieve skirmishers that are halted, the supports will usually be extended from the halt, on their own ground, but when they are completely hidden from the enemy, they may be ordered to advance, and to extend on the march; they will then run up to the line of skirmishers, each man forming on the right of the man he is to relieve. The old skirmishers, on being relieved, will run straight to their rear, and when out of immediate reach of the enemy's fire, will close on their centre and form support.

Should an immediate advance be intended, the word will be passed, and the old skirmishers, on being relieved, will remain lying down till the new skirmishers have gained sufficient distance to their front; they will then advance, close on the centre, and form support.

If skirmishers are advancing, they will be halted before being relieved.

2. *Relieving Skirmishers that are retiring.*—To relieve skirmishers that are retiring, the supports will halt, front, and extend, each man lying down, or, if possible, getting under cover. When the old skirmishers arrive within about 20 or 30 paces of the new, they will run through them to the rear, until they are out of immediate reach of the enemy's fire, and then close on their centre, and form support. The new skirmishers should be extended at a considerable distance in rear of the old line, in order that they may have time to complete their extension and get under cover before they are required to check the enemy.

After relieving, the new skirmishers must hold their position until ordered to continue the retreat.



*S. 23. Reinforcing, or Prolonging a Line of Skirmishers to a Flank.*

1. *Reinforcing.*—Any part of a line of skirmishers may be reinforced, by throwing forward the support, or part of it, as it is thrown forward when relieving skirmishers, but on joining the old line, both will remain and skirmish together, dividing the intervals. The strength of a line may be diminished by calling in any portion of the skirmishers, who will retire in the same manner as they are brought in when relieved. In this case, the remaining skirmishers may, if expedient, be ordered to divide the space left by those who have retired.

2. *Prolonging to a Flank.*—When it is necessary to prolong skirmishers to a flank, without weakening the rest of the line, the support may be extended in the rear, and then ordered to move up on the flank of the skirmishers.

---

When a captain brings up his company to relieve or reinforce another that is extended, he, and the section commanders, will call out 'to reinforce' or 'to relieve,' as the case may be, that the old skirmishers may know how to act.

---

*S. 24. Closing on the Support.*

When skirmishers are to be brought in on the support, the word of command CLOSE ON SUPPORT, or the bugle sound CLOSE, will be given, on which they will run independently, clearing the front of the support and form at six paces in rear of it. In this position they will be prepared to form an oval with the support.

If the skirmishers are attacked by cavalry before they reach their supports, they will form rallying squares, as detailed in S. 25, by word of command.

After the skirmishers have closed on the support, if the **EXTEND** is again ordered, the old support will advance and extend from the centre, or from such file as will cause them to occupy their original ground, and the old skirmishers will form company in support. Or, if necessary, the old support will extend on its own ground from the halt, and the old skirmishers will retire to their proper distance as support.

### S. 25. *Rallying Squares.*

**FORM RALLY-  
ING SQUARE.**

The instructor having caused the company to disperse to a certain distance, will give the word **FORM RALLYING SQUARE**, at the same time placing an officer as a rallying point, who will hold up his sword and turn towards the supposed enemy. The men will run to the officer, form around him, without crowding, order arms, fix bayonets (or swords), and turn outwards.

When a rallying square is composed of a large number of men, the officer should order the faces to take a given number of paces to their front, and the men in the centre will fill up the intervals which will thus be left at the corners; in this manner the square may be made four or two deep.

A company may be formed into several rallying squares on different points, placed as above described; the word being **FORM RALLYING SQUARES**.

**THE SQUARE  
WILL ADVANCE  
(RETIRE, OR  
MOVE TO THE  
RIGHT, OR LEFT).**

*To Move the Square.*—The instructor's caution will be repeated by the officer on whom the square is formed; on this, the square will turn in the direction

*The Square will Advance (Retire or Move to the Right, or Left). Inwards—Turn.*

*Quick—March.*

THE SQUARE

WILL HALT.

*Square—Halt.*

Bugle Call,

PREPARE FOR

CAVALRY.

*Prepare for Cavalry—Ready, &c.*

RE-FORM—

COMPANY.

*Unfix—*

*Bayonets (or Swords).*

*Re-form—*

*Company.*

*Quick—March.*

named. On the word *March*, the square will step off, marching by the left of the leading face if advancing or moving to the right, by the right if retiring or moving to the left.

On the instructor's caution, the officer will give the word *Halt*, on which the square will halt and turn outwards.

*Preparing for Cavalry.*—If the square is ordered to prepare for cavalry, the men will move as directed in the *Rifle Exercises*, S. 8.

*Re-forming Company.*—On this caution from the instructor, the men will be ordered to unfix bayonets (or swords); the left marker will mark where the left flank of the company is to rest, turned towards the supposed enemy.

On this command from the officer, the men will form company upon the marker.

### S. 26. *Attack by Cavalry.*

It should be impressed upon the men that, on open ground, a skirmisher has nothing to fear from a single rooper; and that on broken ground the advantage is altogether on his side, provided that he remains calm and collected. Also, that the smallest square or circle is secure from cavalry so long as the men are cool, and fire only at the proper moment by order of their commander.

Except on ground impracticable for cavalry, skirmishers should at any moment be prepared to form to receive it.

The officers should habitually take note of the best positions, as they offer themselves, on which to rally their men.

PREPARE FOR  
—CAVALRY.

1. *The Skirmishers.*—The skirmishers, under the direction of their commander, will run to the best cover that time may permit, and place themselves in position according to its nature.

Should there be no cover within reach, they may at once form rallying squares, by half-companies, or sections. These squares may be moved in on each other as opportunity may offer.

2. *The Support.*—The support will at once move up into the best position to aid the skirmishers, and, if necessary, will open fire to check the attacking force. Should the cavalry still press upon them, the flanks will gradually fall back, so that the company will form an oval two-deep round the captain. Or the support may form company square.

*Forming Files, or Groups.*—In case the peculiarity of the cover, the nature of the ground, or the presence of small bodies of cavalry may demand a closer formation than that of single rank, skirmishers may be ordered to FORM—FILES, when the rear rank will cover their front rank as in close order; or the command FORM—GROUPS may be given, when the right and left files of every four will close to each other, and act as required, either on the skirmishing principles already laid down, or prepared in groups of fours to receive cavalry.

## INSPECTING, PROVING, AND DISMISSING.

S. 27. *Inspecting and Proving a Company.*

A company on parade will be inspected as follows :—

*Fix—Bayonets (or Swords).*

*Open Order—March.*

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

*Unfix—Bayonets (or Swords).*

*Shoulder—Arms.*

*For Inspection, } As detailed in the Rifle Exercises, S. 11.*  
*Port—Arms, }  
 Close Order—March.*

*Examine—Arms. As detailed in the Rifle Exercises, S. 11.*

The company will then be told off and proved, as follows :—

*Number. The men having numbered, No. —, Left of the Right Half-company, Nos. —, —, —, —, left of Sections.*

*Right Half-company, Trail—Arms.*

*Left Half-company, Trail—Arms.*

*Outer Sections, Order—Arms.*

*Inner Sections, Order—Arms.*

*Fours—Deep, Front.*

*Fours—Right, Front.*

*Fours—Left, Front.*

*Fours—About, Front.*

The above method of proving should generally suffice. The company may further be proved, if considered expedient, in any particular movement in which it may be deficient.

S. 28. *Dismissing a Company.*

A company will be dismissed as described in Part I., S. 54.

In turning in a guard or piquet, the same mode is to be observed.

## PART III.

# FORMATION AND EVOLUTIONS OF A BATTALION.

### GENERAL RULES.

#### I.

*Application of Squad and Company Drill.*—The evolutions of a battalion are effected by combinations of the movements that have been described in the company drill. The rules laid down in Part II. for the positions and movements of officers, non-commissioned officers, and privates, are applicable, with the few exceptions hereafter specified, to all the movements of a company when with the battalion.

#### II.

*Battalions to move as component Parts of a Brigade.*—The formations and movements of a company are explained in Part II., as having reference to the evolutions of a battalion; in like manner, the evolutions of a battalion should be performed with a constant view to the more extended movements of a brigade. Commanding officers, therefore, when drilling their battalions singly, should accustom themselves to make changes of position, and formations, on fixed battalion points dressed on previously determined alignments.

#### III.

*Words of Command.*—Words of command must be given as described in Part I., Gen. Rules IV,

## IV.

*Mounted Officers.*—1. The field officers and adjutant, when with the battalion, are at all times to be mounted, in order to take up ground, cover points, correct mistakes, and circulate orders. They should be able to take up the distance required for the whole or any part of the front of the battalion ; the eye will be found the most convenient and accurate guide in judging distances. The majors and adjutant, when not marking points, must afford every assistance to the commanding officer during a manœuvre, and move to their places when it is completed.

2. When only one major is present, the senior captain should, if practicable, be mounted. When this cannot be done, the adjutant will take the place of the junior major ; if only one mounted officer is present, besides the commanding officer, he should be prepared to cover the markers from either flank, or to give distant points, as may be required ; the serjeant-major will also assist in covering the markers, so far as that duty can be performed on foot.

## V.

*Giving Points.*—When mounted officers give points, they should place their horses at right angles with the alignment, turned towards it ; if the horses are unsteady, they must dismount, and mark the points on foot ; in line formation, the horses' heads will be dressed at arm's length from the alignment. The dismounted points will be given as described in Part II., Gen. Rules XV., No. 1, by the markers, whose bodies will be dressed in the same line as the horses' heads.

## VI.

*Alignment and Points of Formation.*—1. That point in the alignment upon which a formation is made, and from which all intermediate points are dressed, is called the Point of Appui. The Distant Point is that upon which the line, or intermediate points, are dressed.

2. To enable intermediate points to take up their covering correctly in an alignment, a second point will occasionally be required outside the point of appui, as a guide to the distant points ; this point must be correctly dressed on the prolongation of the alignment. By means of successive points covering on this base, a formation may be prolonged in a straight line to any extent.

3. In the deployment of a single battalion, the base points of the company of formation, which must be correctly covered from the point of appui, will be a sufficient guide for the markers of the remaining companies.

4. When battalions, or companies of a battalion, come up successively into line, the outer flank of the last formed body is always to be considered the point of appui for the succeeding one.

5. The dressing, or covering, of all points must be corrected by a field officer, from the point of appui ; the horse's body to be in prolongation of the alignment.

6. As a general rule, the major nearest to the point of appui will cover the points ; the senior major will do so in a central formation. On the completion of the formation, the major will give the word *Steady*, and take post.

7. The adjutant will mark the outer flank of the battalion in formations that require it. In a central formation, the junior major will mark the left, the adjutant the right of the battalion. Mounted points will take post on the word *Steady* at the completion of a formation.

## VII.

*Degrees of March.*—1. The slow pace is only applicable to purposes of parade.

2. The quick march is the usual pace to be applied to all general movements of battalions or greater bodies in column or line.



3. The double march should not be applied to the movements of large bodies of troops for a longer distance than is required in a charge, or a short rush to seize a position; it should be used frequently in the movements of companies during the internal formations of a battalion, and in skirmishing.

### VIII.

*Bayonets not to be fixed.*—Field movements except where otherwise directed, and firings, except in square, are to be performed with unfixed bayonets.

### IX.

*Keeping the Right Guide's place in Line.*—When the right guide moves from the front rank in a line formation, his marker will take his place and preserve it till he returns; when both guide and marker move out, the rear-rank man of the right file will move up and keep the place.

### X.

*Making way for an Officer, or Marker, to pass through the Line.*—When a mounted officer requires to pass through the line at any point, the two files at that point will take two paces to the rear and one pace outwards from each other, resuming their places when he has passed. When a guide has to make way for another officer, or a marker, to pass, he will take one pace to his front, and a side pace to his left, stepping back when the officer, or marker, has passed.

### XI.

*The Front.*—A battalion in line, or fighting, formation, is supposed to be turned towards the enemy; the direction in which it is turned is called “the front.”

All interior movements of the battalion are made with reference to this front. When the battalion breaks or wheels into column, and the companies wheel again into line, they wheel, as a rule, into their original order; the flank on which they would so wheel into line is the directing flank in

column ; thus if the line breaks or wheels into column to the right, the left directs, if to the left, the right directs. If it is required, as an exceptional case, to change the front of the line to the rear, the column is wheeled into line to the reverse flank, having previously been ordered to cover, or to march, by that flank ; the front of the line, when formed, becoming, according to rule, The Front, and the companies being re-numbered as directed in Rule XII.

## XII.

*Companies, when they lose their Order, to be re-numbered.*—If companies lose their order, each captain, when the guide has given the words *Eyes—Front*, in line formations, or after giving *Halt—Front, Dress*, in forming column, will warn his company of its new number. When companies lose their order on the march (S. 15 and S. 23, No. 2), their captains will re-number them as they move forward in their new order. In line, the numbers of the companies run from right to left ; in column, from front to rear.

## XIII.

*A Battalion firing.*—There are two descriptions of firing :—volleys, and independent firing. Volley firing may, at the discretion of the commander, be by battalion, half-battalions, companies, half-companies, or sections ; the number of rounds to be expended being, in all cases, specified. Independent firing may, under very exceptional circumstances, be permitted ; in this case, also, the number of rounds to be expended will invariably be stated.

When firing volleys by companies (or parts of companies), in order to prevent the volleys being given simultaneously, the caution will be given to fire from the right or left of half-battalions, or companies ; the “present” of the preceding body being the signal for the “ready” of the next. After the completion of the first round by the battalion, each half-battalion, company, or part of a company, will fire by order of its commander, without reference to the remainder.

The requirements of the moment can alone determine the description of fire that will be most effective ; but it may be assumed that, except under extraordinary circumstances, no firing should be permitted when smoke, or other causes, prevent such a view of the enemy being obtained as would ensure a reasonable certainty of an effective result. On this principle, the bugle sound, or order, to *Fire* will, as likewise in skirmishing, be permissive and not obligatory. The *Cease Fire* must, on all occasions, be complied with, although the men may not have expended the specified number of rounds.

When in line prepared for cavalry, or in square, the kneeling, as well as the standing, ranks may fire volleys by word of command, or may fire independently, as ordered ; but they must be prepared to return to the usual position for receiving cavalry when its near approach renders so doing advisable.

In all firings, the right guides will fall to the rear on the caution ; returning to their posts when the firing ceases. When a battalion is firing both ranks kneeling, officers, supernumeraries, and the colour party will kneel also.

#### XIV

*A Battalion Dispersed, Re-assembling.*—A battalion should frequently be practised in assembling when dispersed, or in confusion ; for this purpose, the left markers will be placed, turned towards the supposed enemy in line, or in column, as may be directed by the commanding officer ; the bugle will then sound THE ASSEMBLE, or the words FORM ON MARKERS will be given, on which each company will form on its marker.

---

N.B.—In this Part, words given by the commander of the battalion are in Capitals ; the mounted officers' word *Steady*, and words given by captains or guides, in *italics*.

## A BATTALION ON PARADE.

*S. 1. Formation of a Battalion on Parade, in Column.*

1. *The Close.*—Companies, having been inspected by squads on their private parades, will form company on the *Close* being sounded.

2. *Formation of the Battalion.*—As a general rule, a battalion will assemble on parade in column by the left. Plate X., Fig. 2.

3. *Companies may be equalized.*—Companies may be equalized in point of numbers when the battalion is formed for field movement; but it is also necessary that a battalion should be accustomed to exercise with companies of unequal strength.

4. *Companies forming in Column on their Markers.*—The companies having been told off and proved as directed in Part II., the markers, under the direction of the adjutant, will mark, as directed in Part II., Gen. Rule XV., No. 2, the spots on which the directing flanks of their companies are to rest in column on any given alignment; each taking sufficient distance from the marker in front of him to allow of his company being wheeled into line. On the *Advance* being sounded, the companies will be marched upon their markers into column, arms will be ordered, and the men allowed to stand at ease.

5. *Arrangement of Companies.*—Every company will be arranged as directed in Part II., S. 1, No. 2.

6. *Colour party.*—The colours, each carried by an officer, will be formed in an independent party; the Queen's colour

## PLATE X.

Fig. 1.—A BATTALION IN LINE IN CLOSE ORDER.

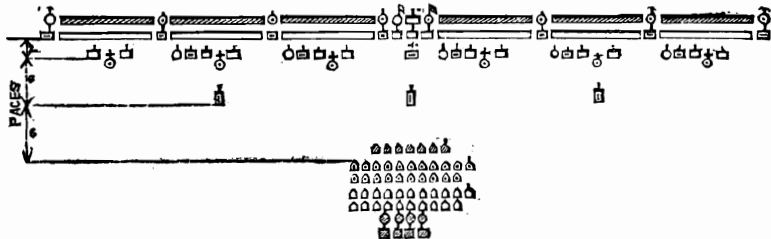
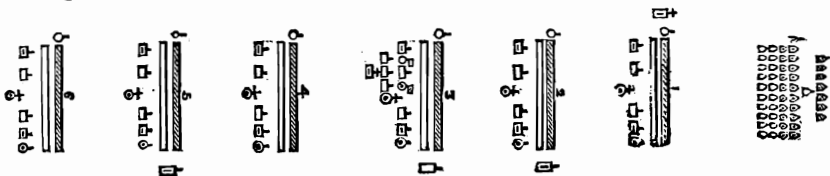


Fig. 2.—A BATTALION FORMED SINGLY ON PARADE, IN COLUMN BY THE LEFT.





on the right, the regimental colour on the left, with a serjeant between them, and two non-commissioned officers or steady men, with a serjeant in the centre, in the rear rank. The colour party will be posted in rear of the leading centre company, its front aligned with the supernumerary rank, covering the fourth, fifth and sixth files from the directing flank. The officer carrying the Queen's colour will command the party.

7. *Posts of Mounted and Staff Officers and Staff Serjeants.*—The usual post of the commanding officer in column is on the directing flank of the leading company: the majors and adjutant are on the reverse flank of the column, the senior major two paces from the centre of the right half-battalion, the junior major two paces from the centre of the left; the adjutant two paces from the leading centre company. The staff officers (consisting of the surgeon, the paymaster, the assistant-surgeon, and the quarter-master) will be on the reverse flank of, and two paces from, the band; the staff serjeants will be in rear of them. When a column is ordered to advance or retire, the major of the leading half-battalion will place himself in rear of the directing flank of the second company from the front, to superintend the direction; keeping clear of the line of guides.

8. *Post of the Serjeant-Major.*—The serjeant-major will be one pace in rear of the centre of the colour party.

9. *Posts of Band, Drums and Pioneers.*—The band, drums, and pioneers will be placed on the reverse flank of the column; the band and drums, in several ranks, three paces from the centre of the battalion, the pioneers two paces in front of the band. When the battalion is manœuvring, the band will remain on the flank, but the drummers, fifers, buglers, and pioneers will join their companies, taking post in the supernumerary rank. In column

of route, the band and drums will move up to twelve paces in front of the leading company, formed in several ranks; the pioneers will move up to six paces in front of the band. In Plate X., Fig. 2, the staff officers and serjeants have fallen out; the band, drums, and pioneers are shown as formed preparatory to marching past (Part VI., S. 1).

10. *Telling-off the Battalion.*—When a battalion is assembled for exercise, it will be told off as follows:—

TELL OFF THE —BATTALION.	}	On the words TELL OFF THE—BATTALION from the commanding officer, the captain of the leading company will call out <i>Number One</i> , then the captain of the next company, <i>Number Two</i> ; and so on to the rear of the column.
N <sup>o</sup> 1 to 5, RIGHT HALF- BATTALION. N <sup>o</sup> 6 TO 10, LEFT HALF- BATTALION.	}	The commanding officer will next name the companies which are to form the right half-battalion, and those which are to form the left.

The companies of a battalion, like the files of a company, are termed “right” or “left,” according as their numbers are odd or even.

When companies in column are required to take open order for inspection, the commanding officer will give the words OPEN—ORDER. MARCH, and each company will proceed as described in Part II. S. 2. Each captain will receive the inspecting officer with a salute, and follow him during the inspection of his company, the men standing with shouldered arms. As the inspection of his company is completed, the captain will close the ranks and give the words to order arms, unfix bayonets, and stand at ease; resuming his proper place in column.



**FORMATION AND MOVEMENTS OF A  
BATTALION IN LINE.**

---

**GENERAL RULES.****I.**

*Formation of Lines for Attack and Defence.*—Lines formed for attack must be straight, or the troops could not advance in order; those formed for defence may be curved, following the advantages of the ground.

**II.**

*Marching in Line.*—Correct marching in line, the movement by which soldiers are brought into immediate contact with the enemy, is the most important and the most difficult of military movements. The rules laid down for the instruction of a soldier in marching, apply especially to the men of a battalion when marching in line.

**III.**

*Passing over Inequalities of Ground.*—When soldiers in line pass over mounds or across hollows, they should be taught to step a little longer than the usual pace, to enable them to keep up with those who are moving on level ground: when these inequalities are considerable, the men moving on level ground must be made to shorten their pace to enable the remainder to keep up.

**IV.**

*Retiring in Line.*—A battalion should never unnecessarily stand turned to the rear: it should, therefore, when about to retire, not be turned about till everything is ready for its instant march.

## V.

*Base Points, and Markers.*—In all deployments, and formations of line, on any one company, a marker will be placed in front of each flank file of that company as a base. A marker will also run out from each of the other companies, to mark the distance required for it, covering in the line established by the base points. All the markers will turn to the battalion point of appui, except the base points in the two cases specified in Part II., S. 6.

In a deployment on the two centre companies, the centre serjeant will step out and give a centre base point, turning to the right; and the serjeant in rear of him will step up to occupy his place. The outer flanks of the two centre companies will be marked by their markers, who will turn inwards; the serjeant-major will move up to the marker of the right centre company, and assist in covering these three base points.

The base points will invariably move out on the battalion caution, and remain steady until the whole line is formed, when the major who has covered them will give the word *Steady*, on which they will fall in in their proper places; each of the other markers will run out to give his point when within 20 paces of his ground, remaining steady until the second company from him receives the words *Eyes—Front*, when he will fall in.

In wheeling, or forming, from column into line, in which case the companies move simultaneously, all the markers giving points will move out, and take post, together.

## VI.

*Points to be kept clear.*—As it is of great importance that the base points, and other markers, of a battalion forming line should be kept clear, companies must upon all occasions be halted in rear of them, and then dressed up into line.

## VII.

*Closing to correct Intervals.*—After wheeling, or forming, into line, any intervals will be corrected, from the rear, by the majors, who will close the companies as may be required ; the captains will halt their own companies, except when the number of paces they are to close is named ; when an entire half-battalion is closed, the major will halt it. The centre of the battalion should, as a general rule, remain unmoved. A right guide will close with his company, unless files are out on its right, when, if it closes to the left to admit them, he will stand fast ; but if the company next to him closes to the right, he will close with it till his files have all moved up.

---

## FORMATION AND MOVEMENTS.

S. 2. *Formation of the Battalion in Line.*—

## Plate X. Fig. 1.

1. *Arrangement of Companies.*—When a battalion is formed in line, there is to be no interval between the companies. Each company will be arranged as described in Part II., S. 1., except the company on the left of the line, which will have its left guide on the left of the front rank, covered by his marker.

2. *Colour Party.*—The colour party, formed as described in S. 1, will be placed between the two centre companies.

3. *Posts of Mounted Officers.*—For the purpose of exercise, when the battalion is alone, the commanding officer may occasionally be in front ; but, as his post, when the

battalion is in brigade, is always in rear, it is necessary to accustom the men to receive his words of command from that direction. When the battalion is ordered to fire, or to advance in line, the commanding officer will usually be in rear of the colours, at about twenty paces from the supernumerary rank.

The senior major will be in rear of the centre of the right half-battalion, the junior major in rear of the centre of the left, the adjutant in rear of the colours; at six paces from the supernumerary rank. The junior major and adjutant will dress by the senior major.

4. *Posts of Band, Drums, and Pioneers.*—The band is placed twelve paces from the supernumerary rank, in rear of the centre of the battalion, two deep, at loose files, occupying no more space than is necessary. The drummers, fifers, and buglers will be assembled, two deep, in rear of the band. The pioneers will be two paces in front of the band, in single rank.

5. *Posts of Staff Officers and Staff Serjeants.*—The staff officers will be three paces in rear of the drums. The staff serjeants will be formed in rear of the staff officers.

6. *Post of the Serjeant-Major.*—The serjeant-major will be in rear of the centre of the colour-party, aligned with the supernumerary rank.

---

*S. 3. A Battalion in Line taking Open Order.—*

PLATE XI.

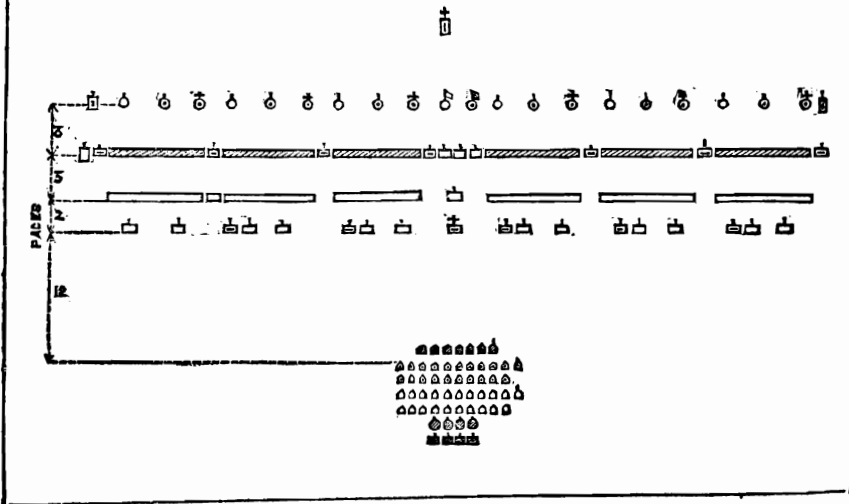
Bayonets will be fixed, and arms shouldered, before taking open order.

{

1. *Taking Open Order.*—On the word ORDER, each company will proceed as directed in Part II., S. 2; except that the right-hand man only of the rear rank

# PLATE XI.

A BATTALION FORMED IN LINE AT OPEN ORDER.





## LINE MOVEMENTS.

OPEN-ORDER.

of each company, and the rear-rank man on the left of the line, will step back to mark the ground for the rear rank, and that the marker of the left company of the line will move up into the place vacated by his guide. The senior major will move up to the right, the junior major and adjutant to the left, of the front rank. The serjeant-major will cover the rear-rank flank men, and give the word *Steady*; he will also dress the supernumerary rank from the right, and give *Eyes—Front*; he will then fall in.

MARCH.

On the word MARCH, each company will proceed as directed in Part II., §. 2. The officers carrying the colours will take three paces to the front, and dress with the line of officers; the non-commissioned officers, or men, in their rear stepping up to replace them in the front rank.

The staff, band, drummers, and pioneers will remain as posted at close order. The senior major will move up on the right of the line of officers, and will dress them; the junior major will move up on the left of the line of officers; the adjutant will remain on the left of the front rank. The lieutenant-colonel will place himself six paces in front of the colours.

*Steady.*

On the word *Steady* from the senior major, the officers will carry swords, and look to the front.



- CLOSE-ORDER.** { *2. Taking Close Order.*—On the word **ORDER**, each company will proceed as directed in Part II., S. 2. The officers carrying the colours will turn to the right; the mounted officers turning their horses' heads outwards.
- MARCH.** { On the word **MARCH**, the whole will resume their places, each company proceeding as directed in Part II., S. 2. The guide of the left company will place himself on its left, his marker covering him.

*S. 4. Advancing and Retiring in Line.*

- THE LINE  
WILL  
ADVANCE.** { *1. Advancing in Line.*—On the caution from the commanding officer, the centre serjeant will select points to march on, under the superintendence of the adjutant, who will give the word *Steady* as a signal, when the line of direction is determined.
- Steady.*
- QUICK-  
MARCH.** { On the word **MARCH**, the whole battalion will step off, the touch being to the centre, the serjeant between the colours directing. The serjeant-major will stand fast until the line has advanced 10 or 15 paces; he will then follow in rear, under the direction of the adjutant, who will remain covering him on the centre serjeants, until he sees the true line of direction being maintained.
- BATTALION—  
HALT.** { On the word **HALT**, the battalion will halt, every man remaining perfectly steady.



THE LINE  
WILL RETIRE.

*Steady.*

RIGHT  
ABOUT-TURN.

QUICK-  
MARCH.

BATTALION—  
HALT-FRONT.

2. *Retiring in Line.*—On the word RETIRE, the colour party will turn about, and the adjutant and the serjeant-major will pass through the line, and place themselves behind it; the adjutant superintending the direction of the centre serjeant, and giving the word *Steady* when the line of direction is determined. On the word TURN, the battalion will turn about, and the right guides will fall to the present rear of the centre of their companies.

On the word MARCH, the battalion will step off, rear rank leading; the touch being to the centre, the serjeant in the centre of the rear rank directing; the adjutant and serjeant-major proceeding as in the advance in line.

On the words HALT-FRONT, the battalion will halt and front; the right guides taking post, and the adjutant and serjeant-major returning, through the line to their places in rear.

---

### S. 5. *Charging in Line.*

PREPARE TO  
CHARGE.  
CHARGE.

BATTALION—  
HALT.

Bayonets (or swords) having been fixed, the battalion will charge as described in the *Rifle Exercises*, Ss. 1 and 2, No. 3.

On the word HALT, the battalion will halt, both ranks coming to the shoulder, and remaining perfectly steady.

---

### S. 6. *Dressing a Battalion in Line.*

When it is necessary to dress a battalion in line, the commanding officer will give the words BY THE RIGHT (or LEFT), DRESS, on which the right or left markers, according to the flank of dressing, and the marker on the distant flank of the line, will double out to the front, looking to the major on the named flank. On the major's word, or signal, the markers will halt, turn towards him, and cover, recovering arms as they turn; when they are covered, the major will give the word *Steady*.

The commanding officer will then give the words QUICK —MARCH; each captain will halt his company, and give the words *Dress up*, when it is within two paces of the alignment; and the guide of the named flank will dress it, give the words *Eyes—Front*, and fall in.

When all have completed their dressing, the major will give a second word *Steady*, on which the markers will resume their places in line.

---

### S. 7. *A Battalion in Line passing Obstacles.*

If the obstacles are small, the files whose progress is interrupted by them will break off as directed in Part II., S. 17; but without word of command. The moment the obstacles are passed, the files must move up again into line. Should the breadth of the obstacles be found to decrease, the files will form up successively as there is room for them; should it increase, additional files will at once break off. Great care must be taken that the men who remain in line continue to move straight forward; neither closing on the intervals left by the men who have



FIG. 1.—A BATTALION IN LINE PASSING OBSTACLES.

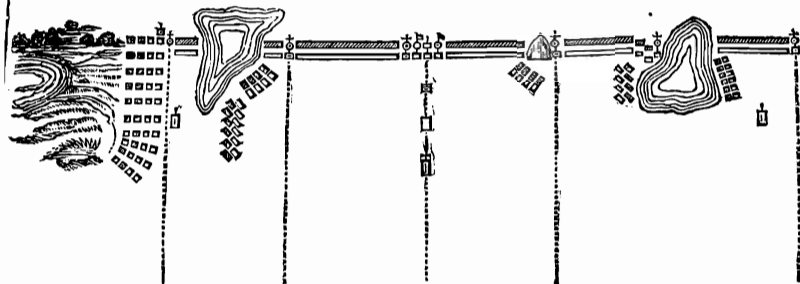
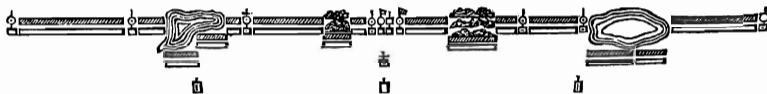


FIG. 2.—A BATTALION IN LINE HALTED WHILE BROKEN BY OBSTACLES.



fallen to the rear, nor pressing upon the remainder of the battalion should the obstacle increase in breadth.

Files, in breaking off, should turn towards their own companies ; thus, if an obstacle presents itself in front of the flanks of two adjoining companies, the files of the company on the right will turn to the right and wheel to the left, and those of the company on the left will turn to the left and wheel to the right. When the obstacle is in front of the centre of a company, the files, as a general rule, will turn to the right and wheel to the left. See Plate XII., Fig. 1.

If a company, or half-company, is required to break off, it will move in fours ; or if files break off successively till they amount to a half-company, they will form fours.

Should a line be halted while it is broken by obstacles, such as pools of water, marshy ground, or low bushes, the files that are broken off will form in rear of them, in lines parallel to the front ; in this manner, the line will appear to the enemy unbroken, and every man will be able to fire. See Plate XII., Fig. 2.

**ADVANCE  
IN FOURS  
FROM THE  
RIGHT (or LEFT)  
OF COMPANIES.  
FOURS—RIGHT,  
LEFT—WHEEL  
(or FOURS—  
LEFT, RIGHT—  
WHEEL).**

When a battalion is advancing, and the obstacles are such as to require all the companies to break into fours, the commanding officer will give the caution, **ADVANCE IN FOURS FROM THE RIGHT (or LEFT) OF COMPANIES**, followed by the words, **FOURS—RIGHT, LEFT—WHEEL, (or FOURS—LEFT, RIGHT—WHEEL)**, and may name any company to direct thus : **No. 4—COMPANY OF DIRECTION**. The guides will place themselves on that flank of the leading fours which is nearest to the company of direction, and

keep their distances, as far as circumstances will allow. When no company is named, that company will direct which would be at the head of the column if the words FRONT—TURN, were given. The markers will be responsible for the dressing.

When the ground will permit, the companies may be reformed into line by the words FRONT FORM—COMPANIES, FORWARD ; or ON THE MARCH, FRONT FORM—COMPANIES ; or AT THE HALT, FRONT FORM—COMPANIES ; or they may be halted and fronted into column, and then wheeled into line. In forming to the front at the halt, both markers of the directing company of the column, and the outer marker of each of the remainder, will give points as the formation commences (Part II., S. 13.)

If all the companies of a battalion retiring in line are required to break into fours, the commands will be, RETIRE IN FOURS FROM THE LEFT (or RIGHT) OF COMPANIES. FOURS—LEFT, RIGHT—WHEEL (or FOURS—RIGHT, LEFT—WHEEL).

When retiring in fours, the companies may form line, and continue to retire, by the words REAR FORM—COMPANIES ; or ON THE MARCH, REAR FORM—COMPANIES ; or they may be halted and fronted into column, and then ordered to wheel into line to the original front ; or they may be ordered to form to the original front by the command RIGHT (or LEFT) ABOUT FORM—COMPANIES. In the last case, the markers will not give points : should the dressing require correction, when the companies have formed, the line will be dressed as described in S. 6.

When the companies, having advanced in fours, are directed to turn into column, the flank that was leading when in fours will direct ; when they turn into column after retiring in fours, the flank that was in rear will direct.

S. 8. BATTALION.

MARKERS

TO POINTS

FROM THE

LEFT (or

RIGHT) OF

COMPANIES.

RIGHT—

WHEEL

(or FOURS

—LEFT,

—RIGHT—

WHEEL).

R

IN

FR

RM

LI

COI

FOU

LES

(

W

as

lie

it

S. 8. *Battalions in Line relieving each other.*

RETIRE  
IN FOURS  
FROM THE  
RIGHT (OR  
LEFT) OF  
COMPANIES.  
FOURS—RIGHT,  
RIGHT—  
WHEEL  
(OR FOURS  
—LEFT, LEFT  
—WHEEL).  
QUICK—MARCH.

1. *From the Halt.* — If a battalion halted in the front line is to be relieved by another advancing in its rear, it will, when the latter arrives within a company's wheeling distance, receive the command, RETIRE IN FOURS FROM THE RIGHT (OR LEFT) OF COMPANIES, &c., and the companies will proceed to the rear through the second line, which will throw back as many files as may be necessary to give them passage wherever they present themselves. The companies having passed, the files thrown back will immediately resume their places.

RETIRE  
IN FOURS  
FROM THE  
RIGHT (OR  
LEFT) OF  
COMPANIES.  
FOURS—RIGHT,  
LEFT—WHEEL  
(OR FOURS—  
LEFT,  
RIGHT—  
WHEEL), &c.

2. *Retiring.* — When a battalion retiring is to be relieved by another in its rear, it will, on arriving at a company's wheeling distance from the latter, break into fours and pass through the rear line, as above directed.

It is a general rule that the relieving line is to be kept as far as possible unbroken; the line which is being relieved will, in all cases, be the one to break into fours, or if necessary, into files.

## COLUMN MOVEMENTS.

## GENERAL RULES.

## I.

*Use and Advantages of Columns.*—Columns are formed from line for convenience of movement. In any column they can readily be formed into line in any direction or into square.

## II.

*Depth of Columns.*—In column, each company is at a distance equal to its own breadth from the company immediately in front of it, measuring from the heels of the front rank of the one to the heels of the front rank of the other. Consequently a battalion in column occupies an extent of ground that it would cover in line. A half column is formed with the companies at half-company distance. A quarter column is formed with the companies at six paces distance.

## III.

*Application of Columns.*—Columns, column, half, or quarter columns, are employed in advancing to the attack, for the passage of defiles, or in manoeuvre; the employment of the one or the other must necessarily depend on the circumstances, and can only be determined by the general officer.



mander on the spot. The quarter column combines the convenience of moving in a small space, with the capability of forming in any manner to resist attack; and is applicable to all the changes of position of a column.

## IV.

*Directing Flank in Column.*—When companies wheel from line into column to the right, the left flank will direct in column; when they wheel to the left, the right will direct; unless the column is ordered to cover, or to march, by the other flank, previous to forming line to that flank. In all other formations of column from line, and also in column of double-companies, the proper left flank directs, unless otherwise ordered.

---

## MOVEMENTS.

S. 9. *Formation of a Battalion in Half and Quarter Column.*

The arrangement of a half or quarter column will be the same as that of a column, as described in S. 1, the distances only being different. The band will be formed in two ranks in the rear when the column is alone, or in a line of columns; in several ranks on the reverse flank, when the column is in mass in brigade. When a half or quarter column is on the march, the major of the rear half-battalion will superintend the covering from the rear in *quarter* column.

---

**S. 10. Forming Quarter Column from any more Open Column.**

QUARTER  
COLUMN ON  
THE LEADING  
COMPANY.  
OR  
QUARTER  
COLUMN ON THE  
REAR (or N<sup>o</sup>—)  
COMPANY.  
COMPANIES IN  
FRONT, RIGHT  
ABOUT-TURN.

1. *Closing from the Halt.*—A column may be closed to quarter column on the leading, rear, or on any named company. In closing on the rear, or on a central company, the companies in front will be ordered to turn about.

When the column is being closed, the major of the half-battalion to which the named company belongs will cover the guides, from the battalion point of appui, the guide of the named company.

QUICK—MARCH.  
N<sup>o</sup>—, *Halt—*  
*Dress.*  
N<sup>o</sup>—,  
*Halt—Front,*  
*Dress.*

On the word MARCH, the named company will stand fast: the remainder will close on it to the distance required; halting, or halting and fronting, by command of their captains, as they arrive at their places. On the word *Dress*, the men will take up their own dressing.

*Steady.*

When the movement is completed, the major who has superintended the covering will give the word *Steady*, and move to his place.

QUARTER  
COLUMN ON  
THE LEADING  
COMPANY  
(N<sup>o</sup>—, H  
[?])

ON T  
(  
C  
T  
R

J

R 1

## COLUMN MOVEMENTS.

QUARTER  
COLUMN ON THE  
LEADING  
COMPANY.  
*No—, Halt  
Front)—Dress.*

2. *A Column on the March Closing on the leading Company.*—When a column on the march is ordered to close on the leading company, the captain of that company will give the words *No—, Halt, Dress*, or, if retiring, *No—, Halt—Front, Dress*. The column will then be closed as already described.

ON THE MARCH,  
QUARTER  
COLUMN ON  
THE LEADING  
COMPANY.  
REMAINDER—  
DOUBLE.  
*No—Quick.*

3. *Closing to the Front, without halting.*—When a column is required to close without halting, the leading company will move on steadily in quick time; the remainder will close up in double time, resuming the quick step in succession, by command of their captains, as they gain their distances.

S. 11. *A Quarter Column opening from the Front, the Rear, or a Central Company.*

OPEN TO  
COLUMN FROM  
THE LEADING  
COMPANY.

1. *Opening from the Front.*—If opening from the front, on the caution, the adjutant will mark the spot on which the directing flank of the rear of the column will rest, his horse's head being dressed on the line of guides.

REMAINDER,  
RIGHT ABOUT  
TURN.

The leading company will stand fast, the remainder will be ordered to turn about.

QUICK-  
MARCH.

No—, *Halt*—  
*Front.*

*Dress.*

*Steady.*

OPEN TO  
COLUMN FROM  
THE REAR  
COMPANY.

REMAINDER,  
QUICK-  
MARCH.

No—, *Halt.*

*Dress.*

*Steady.*

On the word MARCH, the companies turned to the rear will step off, the guide of the rear company marching with his outer shoulder just clear of the head of the adjutant's horse. The captain of the second company, having gained the distance required, will give the words *No—, Halt—Front.* The other captains in succession will halt and front their companies in like manner. Each guide, the moment his company has fronted, will correct his covering; the captain will then give the word *Dress.*

As usual.

2. *Opening from the Rear.*—If opening from the rear, on the caution, the adjutant will mark the alignment, at the wheeling distance of a company in front of the spot on which the directing flank of the head of the column will rest.

On the word MARCH, all but the rear company will step off, the guide of the leading company marching with his outer shoulder just clear of the head of the adjutant's horse; each captain will halt his company when it has gained the proper distance, on which the directing guide will turn about, correct his covering and front; the captain will then order the company to *Dress.*

As usual.

3. *Opening from the Rear, on the March.*—When a quarter column on the march is required to open from the

rear, on the caution OPEN TO COLUMN FROM THE REAR COMPANY, the rear company will be halted by the captain ; the movement will then proceed as described from the halt. If it is required to open without halting, the words will be, ON THE MARCH, OPEN TO COLUMN FROM THE REAR COMPANY. REMAINDER, DOUBLE ; the companies in front of the rear company will be ordered by their captains to break into quick time as they gain the required distance.

---

4. *Opening from a Central Company.*—In opening from a central company, the guide of that company will be the point of appui for the battalion, and the companies in front and rear of it will proceed as already described, the junior major giving a point for the guides of the left half-battalion to march upon, and the adjutant giving a point for the guides of the right.

---

In each case the senior major will superintend the covering of the guides from the battalion point of appui.

---

5. *Opening by the Companies advancing, or retiring, in Succession.*—When a battalion standing in quarter column is required to advance in column, it will receive the caution, ADVANCE IN COLUMN. The captain of the leading company will at once give the words *N<sup>o</sup> 1, Quick March* ; when that company has gained the required distance, the captain of the second company will give the words, *N<sup>o</sup> 2, Quick March* ; and so on in succession. If the column is on the march, the words will be, OPEN TO COLUMN. REAR COMPANIES—HALT ; the leading company will continue to

advance, and the movement will then be performed as above described. If a quarter column is required to retire in column, on the caution **RETIRE IN COLUMN**, the companies will be turned about in succession, commencing with the rear company, and marched off in like manner.

---

*S. 12. Columns diminishing and increasing their Front, and passing Obstacles.*

1. *Columns diminishing Front.*—When a column on the march arrives at a narrow space or defile, each company in succession will diminish its front : as each company clears the narrow space, it must again increase its front.

The methods of increasing and diminishing the front of a company have been explained in Part II., Ss. 17, 18.

---

2. *Passing Obstacles when Marching on an Alignment.*—When the march of a column on an alignment, is interrupted by a pool of water, or any other obstacle which is impassable, the march will be continued direct to that obstacle, which will be passed by diverging on all occasions, when practicable, to the reverse flank ; the alignment will again be taken up by the guides on the other side of the obstacle, at a point placed for that purpose. When marching on an alignment, directing guides should never diverge unless it is absolutely necessary.

---

3. *Columns of Double-Companies diminishing Front.*—A battalion in column of double-companies may reduce

its front by advancing, or retiring, in double fours or files from the centre, on the command ADVANCE, or RETIRE, IN DOUBLE FOURS (OR FILES) FROM THE CENTRE : FOURS—INWARDS (OR INWARDS TURN), RIGHT AND LEFT—WHEEL. On the column being reformed, the intervals between companies must be at once corrected. In double fours or files, the colour party will move between the two proper leading companies, as in file ; the Queen's colour between the two proper leading fours or files, the remainder of the party moving in their regular succession. The captains and supernumeraries to move as in file between the half-battalions in advancing only.

---

4. *A Quarter Column diminishing Front.*—A quarter column may reduce its front by breaking off a file or two from the flanks of companies, or by the companies advancing in succession (see Part II., Ss. 17, 18) ; or it may form fours deep, and close on a flank, or on the centre.

---

5. *Reduction of Front by breaking off Files to take place on the Directing Flank.*—As a general rule, files should be broken off from the directing flank.

---

S. 13. *A Column changing Direction, and marching on an Alignment ; or Changing Position by the Flank March of Fours.*

1. *Changing Direction.*—A battalion marching in column may change direction by the successive wheel of its companies round the same point. Should the wheel be to the

H

reverse flank, the guides of that flank will move up and lead during the change of direction, retaining the relative positions the flanks held when the column was marching by the directing flank : weak companies will march a little past the wheeling point before they wheel, the strongest companies will wheel upon it.

The word FORWARD will be given to the leading company by the commanding officer ; but each company that follows will receive that word from its captain, as its front becomes perpendicular to the new direction.

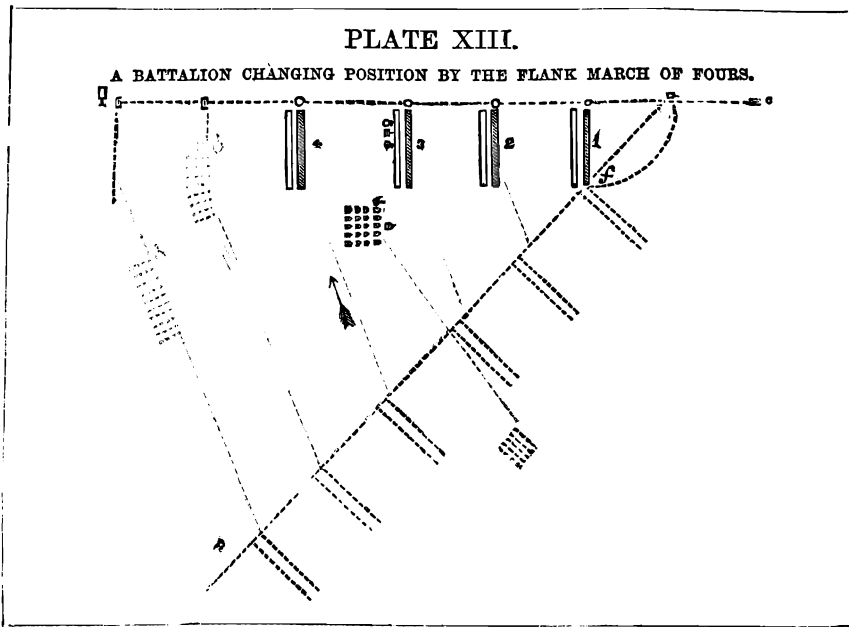
---

In changing direction into a new alignment, if the column is halted before all the companies have changed their direction into the alignment, the rear companies may move into it by the flank march of fours, their markers running out to mark the spots on which their directing flanks are to rest.

---

2. *Changing Position by the Flank March of Fours.*—A battalion in column marching in an oblique direction (e. a.) Plate XIII., on that point in an alignment where the outer flank of its leading company is to rest when in line, will move up till it arrives at rather more than wheeling distance (f.) from the point ; it will there receive the words FOURS—LEFT (or RIGHT), MARCH ON YOUR MARKERS, from the commanding officer. All the companies will then move across into the new alignment, each marker running out in succession to take up the distance and covering for the directing flank of his company, the major of the leading half-battalion (c.) covering them from the front ; the marker



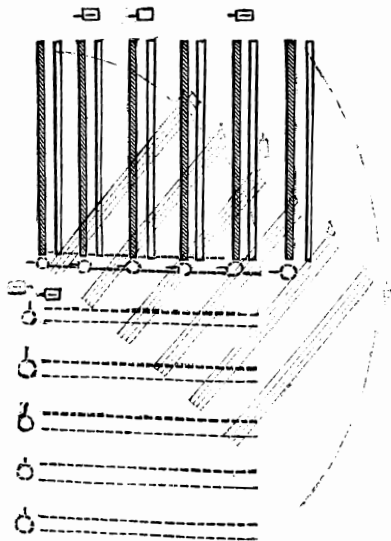






## PLATE XIV.

A QUARTER COLUMN WHEELING.



of the leading company will take his distance from the point (a) on which the column originally marched.

S. 14. *A Quarter Column Wheeling.*—Plate XIV.

BATTALION—  
 QUARTER,  
 HALF, *or*  
 THREE-  
 QUARTERS,  
 LEFT (*or*  
 RIGHT)  
 —WHEEL.  
 OR  
 LEFT (*or*  
 RIGHT)  
 —WHEEL.  
*Steady.*

1. *Wheeling from the Halt.*—On the caution, the markers of the leading company will run out to mark, as directed in Part II., Gen. Rules XV., No. 1, the spots where the flanks of the company will rest when the wheel is completed, turning to the flank on which it will wheel, and the major of the leading half-battalion will cover them and give the word *Steady* (see Part IV., S. 1); the rear companies will make a half turn to the wheeling flank, the guides of which, if not already there, will move up to lead.

QUICK (*or*  
 DOUBLE)—  
 MARCH.

On the word MARCH, the leading company will wheel as usual, except that the pace must be much shorter, and so regulated as to give the companies in rear time to circle round. The remaining companies will step off at the same moment, each man moving round on the circumference of a circle, of which the pivot man of the leading company is the centre; the men must keep the shoulder nearest to the front of the column well up during the wheel, so as to gain sufficient ground to the flank and to avoid diminishing the distances between companies.

BATTALION—  
HALT.  
(DRESS.)

*Steady.*

The commanding officer will give the word HALT, when the leading company has wheeled to the required angle, by which time the rear companies should also have circled round into the new position; the guides on the wheeling flank, if it is the reverse flank, will resume their places in column, the men will turn to the proper front, and remain steady unless the word DRESS is given, in which case they will take up their dressing by the directing flank. The base points will take post on the word *Steady* from the major.

BATTALION—  
LEFT (or  
RIGHT)  
—WHEEL.

2. *Wheeling on the March.*—A column on the march will change its direction in the same manner as it wheels from the halt; the rear companies making a half turn towards the outer flank, and the pivot man of the column moving at a very short pace round the wheeling point, keeping his shoulders square with his company.

BATTALION—  
FORWARD,  
BY THE LEFT  
(or RIGHT).

On the words FORWARD, BY THE LEFT (or RIGHT), the men of the rear companies will turn to the front, and the column will move on by the directing flank.

During these wheels, the outer flank will direct, and it requisite that the outer files of companies should carefully preserve, throughout the wheel, their distances, and same relative positions and covering on the leading company, that they held before commencing to wheel; remaining files will be guided by the outer flanks of their respective companies, and will conform to them during the wheel.

The major of the leading half-battalion will place himself on the outer flank of the leading company, to regulate its pace: in order to do so, he must watch the guide on the outer flank of the rear company (who will continue to march at a full pace throughout the wheel, and on whose movement the march of every man in the column should be made to depend); he must also look to the diagonal covering of the guides on the leading flanks. The captains will see that the companies close up to their leading files. If the word DRESS is given when the column halts, the major of the leading half-battalion will cover the directing guides from the front.

These wheels should generally be practised in double time.

---

#### *S. 15. A Column counter-marching.*

When a column is countermarched, each company will move as described in Part II., S. 16. The commanding officer will give the words HALT—FRONT, DRESS (or FRONT—TURN: BY THE LEFT, or RIGHT) on the completion of the countermarch. Should any companies be weak, they will mark time when the leading men reach the guides on the flanks at which they are to turn to the front. The colour party will wheel about, independently, and move across to its place.

---

#### *S. 16. Changing the Order of a Column.*

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

S. 17. *A Column moving to a Flank in Fours.*

MOVE TO THE  
RIGHT (*or*  
LEFT) IN  
FOURS.  
FOURS—RIGHT  
(*or* LEFT).  
(QUICK—  
MARCH.)

After the caution, the commanding officer will give the words FOURS—RIGHT (*or* LEFT), and, if halted, QUICK—MARCH; on which the companies will move to the named flank in fours. Any company may be ordered to direct; if no company is specified, the leading company of the column will direct. The guides of the leading flank will place themselves on that flank of their leading fours which is nearest to the company of direction, and will keep the distances. The markers of the leading flank will be responsible for the dressing.

When it is required to move diagonally to the flank, the column will get the words HALF LEFT (*or* RIGHT)—TURN as soon as it is moving in fours.

S. 18. *A Quarter Column in Files, or formed in Fours to a Flank, wheeling to the Right or Left.*

A column in files, or formed in fours to a flank, will wheel to the right, or left, on the principles laid down in S. 14; the leading files, or fours, of all the companies will wheel round the pivot in the same manner as the leading company of a column, the men on the outer or wheeling flank of the column preserving their distances and covering, the remainder of the column being guided by them during the wheel. The guide leading each company will place himself, if not there already, on the flank of the leading file, or four, nearest to the pivot, in order that he may be able to keep his distance; the markers will preserve the dressing.



S. 19. *A Column, when moving to a Flank in Fours, closing on, or opening from, any named Company.*

QUARTER  
COLUMN  
ON N°—  
or  
OPEN TO  
COLUMN FROM  
N°—  
REMAINDER,  
RIGHT (OR  
LEFT—  
WHEEL, OR  
INWARDS (OR  
OUTWARDS)  
—WHEEL.  
FORWARD.  
N°—, *Step—  
Short.*

When a column moving to a flank in fours is required to close on, or open from, any named company, on the word WHEEL the named company will step short by command of the captain, and the leading fours of the remainder will wheel as ordered; the guides, if not there already, will change to that flank of the leading fours which is nearest the named company.

As each company in succession arrives at the required distance, the guide will change direction parallel to that of the named company, and the captain will give the word to step short.

BATTALION—  
FORWARD.

When all the companies have closed, or opened, the commanding officer will give the words BATTALION—FORWARD, on which the column will move on at a full pace, the guides, if any, who have changed flanks resuming their places.

These movements may also be done by the named company moving on in quick time, and the remainder closing or opening, at the double, taking up the quick when in their places. The words will be ON THE MARCH, &c.

*S. 20. Application of the Flank March of Columns  
in Fours.*

The flank march of columns in fours will be found most useful in the advance or retreat of large bodies of troops.

A battalion in line may advance or retire in fours from the right or left of companies, thereby becoming a column moving to a flank. In this formation it may pass any obstacles or broken ground without risk of disorder or material loss of distance in the general line.

If a defile or bridge presents itself, the battalion may close on the company opposite to it; if a further reduction of front is required, one half-battalion may move on, the other following: if necessary, any company may be ordered to move on in fours, the remainder following in succession, as directed.

When the defile is passed, the leading half-battalion, or company, may be ordered to mark time or halt, while the half-battalion, or companies in rear, resume their places; or the rear half-battalion, or companies, may be ordered to double up. The column may then be ordered to open again; or while moving by the flank march of fours, may be wheeled in any direction, and then be opened.

Troops in this formation will be found flexible in the greatest degree, and as the companies move independently, they will not be liable to disorder, and the battalion will at all times be ready to form line or square, as may be required. See S. 7, and S. 38, No. 4.

---

## FORMATIONS OF COLUMN FROM LINE.

S. 21. *A Battalion in Line Wheeling into Column, from the Halt.*

- |   |   |   |
|---|---|---|
| BREAK<br>INTO<br>COLUMN<br>TO THE<br>--RIGHT.           | } | 1. <i>Breaking into Column to the Right.</i> —<br>On the caution, the senior major will move to the right of the line, the colour party will turn to the right and disengage to the rear, the left guides will stand fast; the remainder of the battalion, including band, drummers, and pioneers, will turn about.                               |
| RIGHT—<br>WHEEL.<br>QUICK (OR<br>DOUBLE)—<br>MARCH.     | } | On the word MARCH, the companies will move as described in Part II., S. 5; the senior major will cover the left guides, who will move up on the flanks; the colour party will wheel to the right, and, together with the band, drummers, pioneers, and mounted officers, except the senior major, will take post in column, as described in S. 1. |
| <i>No—,<br/>Halt—<br/>Front,<br/>Dress.<br/>Steady.</i> | } | On the words <i>No—, Halt, Front, Dress,</i> from the captains, the companies will halt, front, and dress by the left; the senior major will give the word <i>Steady</i> , and move to his place on the completion of the movement.   |

2. *Breaking into Column to the Left.*—Column will be formed to the left in like manner, the colour party turning to the left, when the battalion turns about, the right guides standing fast, and the junior major moving to the left of the line, ready to correct the covering of the guides. The right guides will turn to the left on the word MARCH, and move up on the flanks.

3. *Wheeling forward into Column.*—The line may also wheel forward from the halt into column, the caution and

commands being, COMPANIES, RIGHT (OR LEFT)—WHEEL. QUICK, OR DOUBLE, MARCH, HALT—DRESS, OR FORWARD BY THE LEFT (OR RIGHT). The companies will move as directed in Part II., S. 5; the colour party will wheel independently, and move by the shortest line to its position in column; the mounted officers and band will also move to their places in column during the wheel.

S. 22. *A Battalion in Line Wheeling into Column, on the March.*

COMPANIES,  
RIGHT (OR LEFT)  
—WHEEL.  
FORWARD  
BY THE LEFT  
(OR RIGHT),  
OR  
HALT, DRESS.

When a battalion, advancing or retiring in line, wheels into column, the companies will move as described in Part II., S. 7; the colour party, mounted officers, and band will move as directed in S. 21, No. 3.

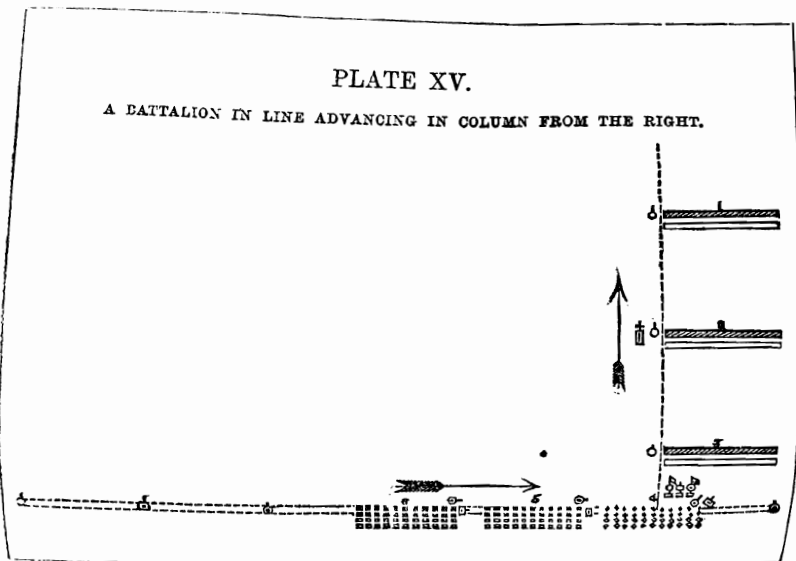
S. 23. *A Battalion in Line advancing in Column, Column of Double-companies, or Columns of Half-Battalions.—Plate XV.*

RIGHT (OR LEFT)  
COMPANY TO  
THE FRONT.  
REMAINDER,  
FOURS—  
RIGHT (OR LEFT).  
QUICK—MARCH.  
*Leading Com-  
pany, by the Left.  
No—, Half  
Left (or Right)  
Turn. Front  
Turn, by the Left.*

1. *Advancing in Column from a Flank.*  
—On the word MARCH, the named company will advance, the captain giving the word *Leading Company by the Left*. The companies in fours will step off at the same time; and each in succession will be ordered by the captain to make a half turn towards the front when its leading four is in rear of the centre of the preceding company, and to turn to the front as it arrives in column.



•



If the advance is from the right, on the caution, the left guide of that company will move up, the right guide, and also the right guide and marker of the next company, falling to the rear; the remaining left guides will move up, and right guides fall to the rear, as their companies receive the words *By the Left*, when in column.

N<sup>o</sup>—COMPANY  
TO THE FRONT.  
REMAINDER,  
FOURS  
—INWARDS.  
QUICK—  
MARCH,  
*Leading Com-  
pany, by the  
Left, &c.*

2. *Advancing in Column from a Central Company.*—The movement will proceed as above described; except that, as it may be intended to form line again to the front, no attempt will be made to correct the distances until ordered. The companies in fours, in moving into column, will pass each other left arm to left arm.

3. *Advancing from a named Company on the March.*—These movements may be done when the line is advancing, on the words RIGHT (LEFT, OR No.—) COMPANY TO THE FRONT. REMAINDER, FOURS—RIGHT (LEFT, OR INWARDS.)

TWO CENTRE  
COMPANIES  
TO THE FRONT.  
REMAINDER,  
FOURS  
—INWARDS.

4. *Advancing in Column of Double-companies.*—On the caution, the right guide and marker of the left-centre company will fall to the rear, the left guide will move up, the guide and marker of the company next on his left falling to the rear; the colour party will step back three paces.

On the word MARCH, the battalion will step off, the right-centre company closing on the left as it advances, and the left-centre captain giving the words *Leading Double-company by the Left*; and the outer guides moving up; each half-battalion will move in the same

QUICK—  
MARCH.

*Leading  
Double-com-  
pany, by the  
Left.*

*No—, Front  
Turn.*

*Second Double-  
company, by  
the Left, &c.*

manner as a battalion when advancing in column from line, as explained in No. 1, the corresponding companies meeting and following the two centre companies in column; the leading guides and markers of the companies in fours will move round the leading fours, to their places in column, just before the companies meet; the outer guides of each double-company will move up as their companies turn into column. The remaining captains of the left half-battalion will give the words—*Double-company, by the Left*, after giving the words *Front Turn* to their own companies.

The junior major will place himself in rear of the left flank of the second double-company from the front, to superintend the direction; the senior major and adjutant will follow in rear of the column; the band will also be in the rear.

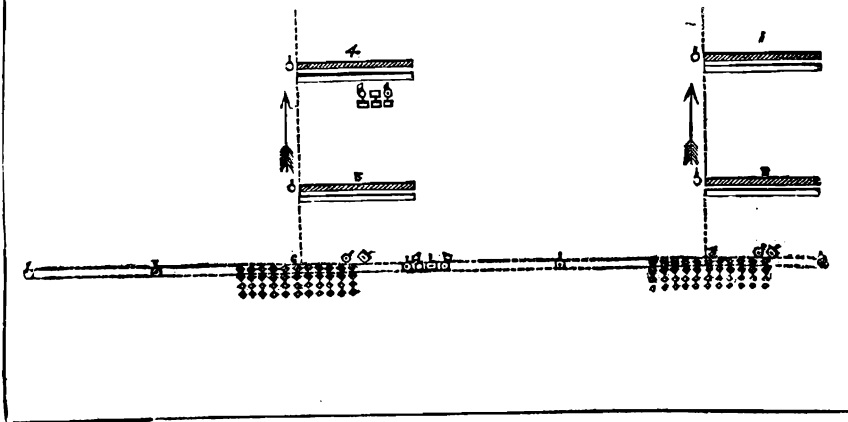
All words of command to a double-company will be given by the captain nearest to the directing flank. The colour party will always be in rear of the centre of the leading double-company.

5. *Advancing in Columns of Half-battalions.*—The battalion may advance from the right (or left) of half-battalions on the principle laid down in No. 1, on the words Nos. 1, AND—, TO THE FRONT: REMAINDER, FOURS—RIGHT (OR LEFT). If the advance is from the right of half-battalions, the colour party will move in rear of the left-centre company; if from the left, in rear of the right-centre company, covering the fourth, fifth, and sixth files from the flank nearest the centre of the battalion.



# PLATE XVI.

A BATTALION IN LINE ADVANCING IN COLUMNS OF HALF-BATTALIONS.



FORMATIONS OF COLUMN FROM LINE.

183



S. 24. *A Battalion in Line retiring from one flank in rear of the other; or from both Flanks in Rear of the Centre or any named Company.*

RETIRE IN  
COLUMN FROM  
THE RIGHT  
IN REAR OF  
THE LEFT.

*N<sup>o</sup> 1.,  
Fours—Left.  
Quick—March.*

*N<sup>o</sup> 1., Rear—  
Turn. By the  
Right.*

*N<sup>o</sup>—, Right  
about—turn.  
By the Right.  
Quick—March.*

1. *From one Flank in rear of the other.*—If the retreat is to be from the right in rear of the left, on the caution, the right company will form fours to the left by command of its captain, the leading four disengaging to the rear. On the word *March*, the company will step off, moving parallel to, and four paces in rear of, the line, led by the guide of the leading flank. On arriving in rear of the left flank company the captain will give the words *N<sup>o</sup> 1., Rear—Turn, by the Right.*

The remaining companies in succession, except the left, will move in like manner. To prevent loss of distance, each captain will order his company to make a half turn towards the rear, when its leading four is in rear of the centre of the preceding company.

The left company will be turned about, and marched off by its captain in time to follow at its proper distance in column.

The colour party will move independently in the same manner as the companies, following the right centre company; after it has turned to the rear, it will mark time in order to gain its position in the rear of the fourth, fifth, and sixth files from the directing flank of the left centre company.

A battalion will retire from the left in rear of the right in like manner.

RETIRE IN  
COLUMN OF  
DOUBLE COM-  
PANIES IN  
REAR OF THE  
CENTRE.

*No —,*  
*Fours—Left.*  
*Quick—March.*

*No —,*  
*Fours—Right.*  
*Quick—March.*

*Rear—Turn,*  
*By the Right.*

*Two centre*  
*Companies,*  
*Right about—*  
*Turn.*  
*By the Right,*  
*Quick—March.*

2. *From both Flanks in Rear of the Centre.*—On the caution the two flank companies will be ordered by their captains to form fours inwards (disengaging to the rear when in fours), and will move along the rear of the line till they arrive in rear of the two centre companies, when they will receive the words *No —, Rear Turn, by the Right*; the leading markers taking post in column just before the companies meet. The remaining (except the two centre) companies, in succession, will move into column as in No. 1; the outer guides of each double-company will take post as laid down in S. 23.

The captain of the left centre company will give the words *Two Centre Companies, Right about—Turn. By the Right, Quick—March*, in time for those companies to follow at their proper distance in column. The colour party will turn about with the two centre companies, and then take three paces forward; it will also step off with those companies on the word *March*. The right guide and marker of the left-centre company will step up into the supernumerary rank after turning about. The two centre companies will close on each other as they step off.

The junior major will superintend the direction as in column; the senior major and adjutant will follow in rear of the double column.

RETIRE IN  
COLUMN FROM  
BOTH FLANKS IN  
REAR OF N° —,  
COMMENCING  
FROM THE  
RIGHT (OR LEFT).

3. *From both Flanks in Rear of a Central Company.*—This movement will be performed as directed in N° 1, commencing from the named flank; that all the companies from the named flank move into column first.

A battalion may also prolong the line to either flank by the flank march of fours along the rear; suppose to the left from the right. On the words PROLONG THE LINE TO THE LEFT FROM THE RIGHT, the right company will receive the words *No—, Fours—Left*, and as soon as it has cleared the outer flank of the line, *No—, Front—Turn, Halt—Dress-up*; each of the other companies following in succession, and when halted in line, being dressed by the guide nearest the point of appui.

S. 25.—*A Battalion in Line forming Column, Quarter Column, Column of Double-companies, or Columns of Half-battalions.*—Plate XVII.

All formations of column from line will be in rear of the named company.

COLUMN  
ON N° —.

REMAINDER,  
FOURS—RIGHT  
(OR LEFT).

1. *Forming Column on a Flank Company.*—On the caution, the right guide of the right company and his marker will fall to the rear. The major of the half-battalion to which the named company belongs will move to the head of the column, ready to superintend the covering. On the word RIGHT (or LEFT), the companies will form fours to the named flank, and disengage to the rear, and the colour party will turn in the same direction. The marker of the leading flank

of the company that will form next in rear of the named company, will mark where its left flank will rest in column.

QUICK (or  
DOUBLE)—  
MARCH.

On the word MARCH, the left guide of the named company, if not already there, will move up; the companies in fours will step off, and move by the shortest lines to their places in column, changing direction in a line parallel to the leading company, as they reach the flank of the column. The marker of the leading flank of each company will run out, when within 20 paces of the column, to take up covering and distance.

No—,  
Halt—Front—  
Dress.

As each company gets into column, the captain will give the words, *No—, Halt, Front, Dress*, on which the company will halt, front, and take up its dressing by the left, the guide of which flank will, if in rear, move up; the marker who took up the covering taking post in column at the same time.

*Steady.*

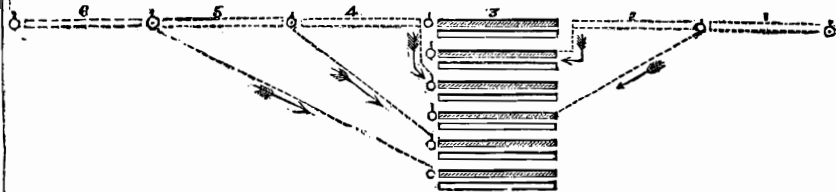
When the formation is completed the major will give the word *Steady*, and move to his place.

COLUMN  
ON N°—  
FOURS—  
INWARDS.  
QUICK (or  
DOUBLE)—  
MARCH.

2. *Forming Column on a Central Company.*—In this formation the companies will form fours inwards, and move into column in rear of the named company, in the same manner as they form on the flank companies. The companies in fours, in moving into column, will pass left arm to left arm.

## PLATE XVII.

A BATTALION IN LINE FORMING QUARTER COLUMN ON THE RIGHT CENTRE COMPANY.







No—,  
 Halt—Front—  
 Dress.  
 Steady.

The senior major will superintend the covering, from the directing flank of the base company.

In the preceding manœuvres, the major not superintending the covering, the adjutant, the band, &c., will move to their places during the formation; and the colour party will move independently, in files, to its place in column.

Quarter column will be formed in like manner.

3. *Forming Column of Double-companies.*—Column of double-companies will be formed from line on the two centre companies, in the same manner as single columns. The column, unless ordered to the contrary, will be formed at the wheeling distance of the companies of which each single column is composed. The caution will be COLUMN OF DOUBLE-COMPANIES (OR HALF, OR QUARTER, COLUMN OF DOUBLE-COMPANIES) ON THE TWO CENTRE COMPANIES. On the caution, the colour party will step back three paces, the right guide and marker of the left-centre company falling to the rear at the same time. On the word MARCH the two centre companies will close inwards four paces each. The guides and markers of each double-company will take post during the movement, as laid down in S. 23.

4. *Forming Columns of Half-battalions.*—Columns of half-battalions will be formed on Nos. 1 and 4, or Nos. 3 and 6, in a six company battalion; on Nos. 1 and 5, or Nos. 4 and 8, in an eight company battalion; in the same manner as single columns. The colour party will be in rear of the right or left centre company, as laid down in S. 23, No. 5.

## FORMATION OF LINE FROM COLUMN.

S. 26. *Wheeling, or Forming, from Column into Line.*

- LEFT (or  
RIGHT)  
WHEEL, OR  
FORM, INTO—  
LINE.
- Steady.*
- QUICK-  
MARCH.
- No—, Halt,  
Dress.*
- Eyes-Front.*
- Steady.*
1. *From the Halt.*—On the words LEFT (or RIGHT) WHEEL, or FORM, INTO—LINE, each company will proceed as described in Part II., S. 4, except that the leading company only will have both its markers out; each of the remainder will give a point opposite to where its inner flank will rest in line. The major of the rear half-battalion will cover the markers from the rear of the column, and give the word *Steady* when they are covered.
- On the word MARCH, the companies will wheel, or form, as directed in Part II., S. 4. The colours will wheel into line between the two centre companies.
- Each captain, in the case of a wheel, will give the words *No—, Halt*, followed by the word *Dress*, when the wheeling flank of his company is two paces from the marker of the company next in line. The leading company will wheel up to its own marker. The guide of the company that wheels up to the centre, will dress the colour party with his own men. The left guide of the left company will move up on its left.
- The major will then give a second word *Steady*, and take post, all the markers falling in at the same time.

2. *On the March.*—When a column on the march wheels, or forms, into line, the companies will move as described in Part II., S. 7.

A quarter column on the march may wheel into line by successive companies from the rear; on the caution **LINE TO THE LEFT (or RIGHT) ON THE REAR COMPANY**, the captain of that company will at once wheel it to the named flank, halting it when square; each of the other captains will wheel his company into line, in like manner, as it gains its proper distance. The markers of the rear company will give the base points, the outer markers of the remainder marking their outer flanks.

S. 27. *A Battalion in Column forming Line, by Companies in succession, to either Flank.*—Plate XVIII.

**LINE TO THE  
RIGHT (or  
LEFT), ON THE  
LEADING COM-  
PANY.  
QUICK—  
MARCH.**

1. *Forming Line at Right Angles.*—  
On the caution, the guides of the named flank, if not already there, will move up, the other guides falling to the rear; and the adjutant will mark the distant flank of the line.

*No—Right (or  
Left)—Wheel,  
Double.  
Forward.  
Halt, Dress up.*

On the word **MARCH**, the captain of the leading company will give the words *No—Right (or Left)—Wheel, Double*, on which the base points will move out, the major moving up to cover them; when the company is parallel to the alignment it will receive the word *Forward*, advance five paces, and then be halted by the

No —,  
*Right (or Left)—*  
*Wheel, Double,*  
*Forward.*  
*Halt,*  
*Dress up.*

{ captain and dressed on the base points by the guide ; the second company will advance along the rear of the first, and on reaching its outer flank will receive the words *No—, Right (or Left)—Wheel, Double, Forward, Halt, Dress up,* from its captain, and be dressed by the guide from the second file beyond the outer marker of the last formed company ; each company in succession will form in like manner on the outer flank of the last formed company.

*Steady.*

As usual.

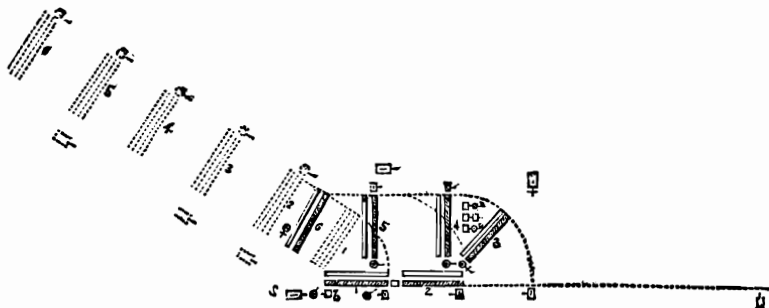
LINE,  
 QUARTER,  
 HALF,  
 or THREE-  
 QUARTERS,  
 RIGHT (or  
 LEFT), ON THE  
 LEADING COM-  
 PANY.  
 QUICK-  
 MARCH.

{ 2. *Forming Line at less than a Right Angle.*—In this case the captain of the second company will change its direction on the word MARCH, and march it on a line parallel to the new alignment, the following captains in succession changing the direction of their companies as they arrive at the same spot ; the guides of the named flank will not move up until their companies change direction. Plate XVIII.

When these formations are made on the march, the captain of the leading company will wheel it on the caution, the captain of the second company changing direction, if necessary, at the same time ; after which the movement will proceed as above detailed.

## PLATE XVIII.

A COLUMN FORMING LINE TO THE RIGHT, BY SUCCESSIVE COMPANIES, AT AN ANGLE LESS THAN A RIGHT ANGLE.



## PART III.—BATTALION.

## DEPLOYMENTS.

S. 29. *A Battalion in Column, or Quarter Column deploying into Line.*—Plates XIX. and XX.

Deployments will invariably be made on the leading company, and by the flank march of fours, unless the ground should render it necessary to move in files.

DEPLOY TO  
THE LEFT  
(OR RIGHT).

FOURS—LEFT  
(OR RIGHT).  
QUICK  
(OR DOUBLE)  
MARCH.  
No—,  
*Right (or Left)*  
—*Dress.*  
*Eyes—Front.*  
No—,  
*Left (or Right)*  
—*Wheel.*  
*Forward.*  
No—,  
*Halt—Front,*  
*Dress up.*  
*Eyes—Front.*  
*Steady.*

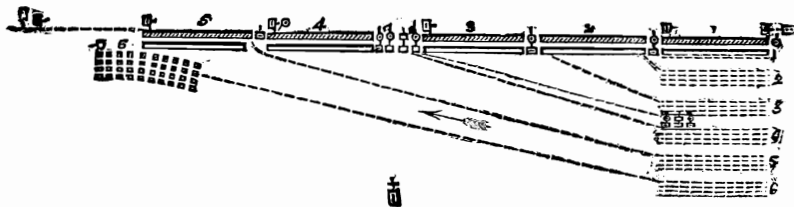
1. *Deploying to either Flank.*—On the caution, the base points will move out, the major of the leading half-battalion moving up to cover them; if the deployment is to the left, the left guide of the leading company, if directing, will fall to the rear, if to the right, he will stand fast; the right guide, in either case moving up; and the adjutant will mark the distant flank.

On the word MARCH, the companies in fours will step off. The guide nearest the point of appui will dress the leading company on the captain's word, and then take post. Each of the other companies will be led by the guide on the leading flank, by the shortest line, to the spot where the outer flank of the company preceding it into line will rest; it will then change direction by command of its captain, move parallel to the alignment, and when opposite to its place in line, will receive the words No—, *Halt*, —*Front, Dress up.* The guide nearest to the point of appui will then dress the company, give the words *Eyes—Front*, and fall in; the other guide will take post on the words *Halt, Front, Dress up.*

As usual.

## PLATE XIX.

A QUARTER COLUMN DEPLOYING TO THE LEFT.



FORMATION OF LINE FROM COLUMN.

169



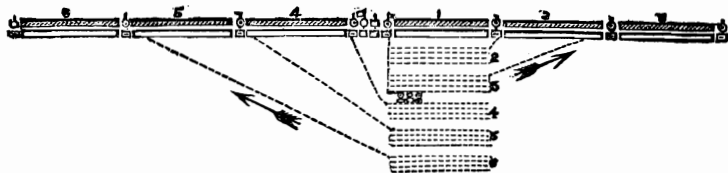


.

1

## PLATE XX.

A QUARTER COLUMN DEPLOYING OUTWARDS, TWO COMPANIES TO THE RIGHT.



The colour party will deploy independently, but will be dressed by the guide of the company that follows it into line; the band, &c., will move to their places during the deployment.

Each guide will dress the men, whether they belong to his company or not, between the marker of the next company (towards the point of appui) and the outer marker of his own company.

2. *Deploying to both Flanks.*—The deployment will be made on the principles above described for a deployment to a flank. The caution and command will be, DEPLOY OUTWARDS, ONE COMPANY (OR TWO, OR MORE, COMPANIES) TO THE RIGHT. FOURS—OUTWARDS. QUICK—MARCH. The base markers will turn to the directing flank of the column. The senior major will cover the markers from the point of appui, that is, whichever flank of the base company was directing in column; the serjeant-major moving up to the reverse flank of that company to assist him: the junior major and adjutant will mark the flanks of the line. It is a general rule that the company, or companies, next in succession from the front shall move to the right. When any companies of the rear half-battalion move to the right, the colour-party will wait till its front is clear, and then move up at the double to its place in line, the captain of the new right-centre company leaving space for it: in all other cases, it will deploy as a company.

3. *Deploying on the March.*—A battalion may be ordered to deploy while advancing in column towards an intended alignment, the leading company being halted by its captain when the remainder form fours: the battalion command to form fours should be given when the leading company is three paces from the alignment.

---

S. 30.—*A Battalion in Column of Double-companies, or Columns of Half-battalions, deploying.*

1. *Deploying from Column of Double-companies.*—A column of double companies will deploy on the two centre companies in the same manner as a column; the centre serjeant of the colour party, and the outer markers of the two centre companies, will mark the base; the two centre companies will close outwards, four paces each, on the word MARCH, to make room for the right guide and marker of the left-centre company, and the colours.

2. *A Column of Double-companies deploying to One Flank.*—The deployment will be by double-companies on the leading double company; each double company will receive the words—*Double-company, Halt, Front—Dress-up*, from the captain nearest the point of appui. The outer marker of each double company will run out to take up its distance, the outer marker of its inner company moving out to give his point when the double-company is halted. The colour party will deploy independently.

3. *Deploying from Columns of Half-battalions.*—Each half-battalion will deploy as a column deploying to a flank; the companies resuming their former order in line.

---

## MOVEMENTS AND CHANGES OF FRONT IN ECHELON.

---

### GENERAL RULES.

#### I.

*Application of Echelon, Short Echelon, and Oblique Echelon.*—Echelon is formed for the purposes of advancing or refusing a flank. Short echelon combines the advantages of an advance in line with greater freedom of movement

than is possible in that formation. Oblique echelon is used when a battalion is required to move diagonally to the front and to a flank, or when a line is required to change its front or position. In changes of front, the company of formation may be wheeled to any angle not greater than a right angle ; the remainder being invariably wheeled up half the angle that the company of formation is wheeled.

## II.

*Oblique Echelon.*—1. In oblique echelon, the distance from the directing flank of one company to the directing flank of the next will always be equal to the breadth of the company that would occupy that space, if wheeled up into line.

2. When marching in oblique echelon, the directing guides must keep the proper distances from each other, carefully preserving their dressing, in a line parallel to the original alignment. They will look, for their distances and dressing, to the flank towards which the battalion is inclining.

3. Each company will move on a line perpendicular to its own front ; therefore, all the companies must be parallel to each other, in order that their lines of direction may also be parallel. |

## III.

*Moving to the Rear in Oblique Echelon.*—When a battalion is to move in an oblique direction to the rear, or when, in a change of front, a flank of the battalion is to be thrown back, the companies will be turned about and then wheeled.

## IV.

*Changes of Front by Echelon.*—The company on which the change of front is to be made will invariably be named, and wheeled up in the direction required.

---

## MOVEMENTS AND CHANGES OF FRONT IN ECHELON.

*S. 31. A Battalion in Line moving in Oblique Echelon, and wheeling up into Line parallel to the original Alignment.—Plate XXI.*

MOVE TO THE  
RIGHT (or LEFT)  
IN ECHELON.  
COMPANIES,  
RIGHT (or LEFT)  
—WHEEL.  
QUICK—MARCH.

1. *Wheeling from the Halt.*—On the word MARCH, the companies will wheel as directed.

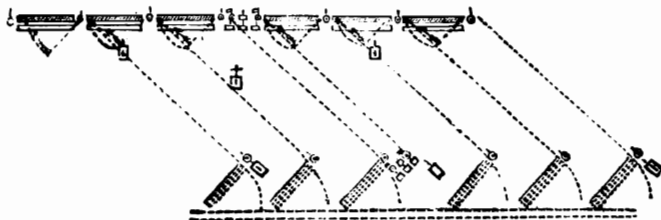
FORWARD.  
BY THE  
LEFT (or RIGHT).

On the word FORWARD, the companies will move on in the new direction; the guides of the leading flanks, if not already there, moving up. If the companies are not equalized, a weak company will not maintain the relative position it occupied when wheeled from line into echelon, but the directing guide will move up into the general line of guides. The guide of the leading company will select points to march upon; the major of the leading half-battalion will place himself in rear of the directing flank of the leading company, and superintend the direction during the march; the other major and the adjutant will look to the covering of the line of guides.

If a battalion is required to wheel into echelon to the rear, it will first be turned about.

## PLATE XXI.

A BATTALION MOVING IN OBLIQUE ECHELON, AND WHEELING UP INTO LINE.







In oblique echelon, the colour party will wheel up and form a section by itself, moving up into the line of directing files.

2. *Wheeling on the March.*—A battalion in line on the march will move to a flank in echelon as described in p. 1.

LEFT (or RIGHT) WHEEL INTO—LINE. FORWARD.	}	3. <i>Re-forming Line.</i> —When it is required to re-form line, the commanding officer will give the words LEFT (or RIGHT) WHEEL INTO—LINE, and as soon as the companies have wheeled up,
		FORWARD.

The colour party will wheel up into line with the companies.

Should the nature of the ground be such as to prevent companies moving with so large a front, the echelon will be formed by the companies moving from line in fours (opposite to the left), as follows —The commanding officer will give the words FOURS—LEFT, RIGHT—WHEEL, FORWARD, and guides moving up on the left of the leading fours of companies. The junior major will place himself on the flank of the directing guide of the leading company, and be responsible, as already explained, for the direction. Line parallel to the original line may be formed by the leading fours of companies wheeling to the original front, the remainder front forming; or a line may be formed at any angle on the leading company by that company wheeling the leading four into the required direction, and then front forming, and becoming the base company for the remainder to form on.

**S. 32. A Battalion in Line changing Front on any named Company.—Plate XXII.**

**CHANGE FRONT**  
**QUARTER,**  
**HALF, or THREE-**  
**QUARTERS,**  
**RIGHT, (or LEFT),**  
**or TO THE RIGHT**  
**(or LEFT), ON**  
**THE RIGHT (or**  
**LEFT)—COM-**  
**PANY. Steady.**  
*No—, Right (or*  
*Left)—Wheel,*  
*Quick—March.*  
*Halt—Dress.*  
*Eyes—Front.*

**REMAINDER,**  
**RIGHT (or LEFT)**  
**—WHEEL.**  
**QUICK—MARCH.**  
**FORWARD.**  
*No—, Right or*  
*Left—Wheel.*  
*Halt—Dress up.*  
*Eyes—Front.*

*Steady.*

The colour party will move up independently into line and will be dressed by the guide of the centre company that wheels upon it into line.

**1. On a Flank Company, Forward.—**  
 On the caution, the adjutant will mark the distant flank of the battalion, and the base markers will move out, the major of the inner half-battalion moving up to cover them; on the major's word *Steady*, the captain of the named company will wheel it to the required angle, and it will be dressed by the guide (Part II., S. 6).

On the word **MARCH**, all except the company of formation will step off and wheel into echelon; on the word **FORWARD**, they will move across to the new alignment, the guides on the inner flanks moving up if not already there, the other guides falling to the rear. Each company in succession, as it reaches the rear rank of the previously formed company, will receive the words *No—, Right (or Left)—Wheel, Halt—Dress-up*, from its captain; the guide will then dress it, give the words *Eyes—Front*, and take post.

As usual.

## ECHELON MOVEMENTS.

CHANGE FRONT  
 QUARTER,  
 HALF, or THREE-  
 QUARTERS,  
 LEFT (or RIGHT),  
 (OR TO THE LEFT  
 or RIGHT), ON  
 THE RIGHT (or  
 LEFT)—COMPANY.

*Steady.*  
*No—,*  
*Left (or*  
*Right)—Wheel,*  
*Quick—March.*  
*Halt—Dress up.*  
*Eyes—Front.*

2. *On a Flank Company, remainder thrown back.*—On the caution, as directed in No. 1.

REMAINDER,  
 RIGHT-ABOUT  
 —TURN.  
 LEFT (or RIGHT)  
 —WHEEL.  
 QUICK—MARCH.  
 FORWARD.

*No—,*  
*Left (or Right)—*  
*Wheel, Forward.*  
*Halt—Front.*  
*Dress up.*  
*Eyes—Front.*

The rest of the battallion will be turned about by the commanding officer; on the word MARCH, the companies will move as described in No. 1. As each company in succession arrives at the outer flank of the last formed company, it will receive the words *No—, Left (or Right) Wheel,* and when on the alignment, *Forward*; when its front rank is in line with the rear rank of the last formed company it will be ordered to halt, front, and dress up; the guide will then dress it, give the words *Eyes—Front,* and take post. The inner company of those that were turned about will be cautioned by its captain, when the word FORWARD, is given, to continue the wheel. Each outer marker, as he takes up his covering, must leave room for his company to pass clear of him, and when

it has passed to the rear take a pace forward, without losing his covering, in order not to interfere with the inner flank of the next company.

As usual.

*Steady.*

The colour party will move into line as an independent section in the echelon, and will be dressed by the guide of the centre company that wheels upon it into line.

CHANGE FRONT  
QUARTER,  
HALF or THREE-  
QUARTERS,  
RIGHT (or LEFT),  
OR TO THE RIGHT  
(or LEFT), ON  
No—COMPANY.

*Steady.*  
No—, Right (or  
Left)—*Wheel,*  
Quick—*March.*  
Halt—*Dress.*  
Eyes—*Front.*

COMPANIES ON  
THE RIGHT (or  
LEFT), RIGHT  
ABOUT—TURN.

INWARDS—  
WHEEL. QUICK—  
MARCH. FOR-  
WARD. No—,  
Right (or Left)  
—*Wheel, Forward.*  
Halt (Front),  
*Dress up.*  
Eyes—*Front.*

*Steady.*

3. *On a Central Company, part forward, part back.*—On the caution, as in No. 1; except that the junior major and adjutant will move out to mark the left and right of the line; the senior major covering the base points. When the change of front is on the right or left centre company, the colour party will wheel up and be dressed with the named company.

The companies which are to be thrown back will next be turned about by the commanding officer.

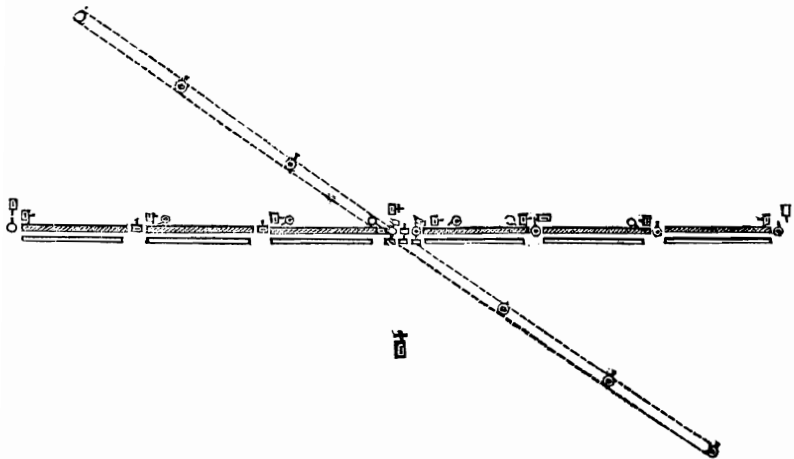
On the word MARCH, the battalion will wheel into echelon, and form line as described in Nos. 1 and 2.

As usual.

A battalion on the march may change front on any named company without halting; the company of formation receiving the word *Double* from its captain on the word WHEEL. When any companies are turned about, the remainder will mark time three paces while those companies are turning.

## PLATE XXII.

A BATTALION IN LINE CHANGING FRONT HALF LEFT ON THE RIGHT CENTRE COMPANY.



ECHELON MOVEMENTS.

183



Should the nature of the ground require it, these formations may be done by the flank march in fours, on the caution BY FOURS, CHANGE FRONT, &c. The named company will be wheeled as usual into the required direction; the remainder will receive the words FOURS, RIGHT (LEFT, or INWARDS); and on the words QUICK—MARCH, each company will move direct upon the marker of the company formed before it and, on reaching him, will receive the word *At the Halt, Front form—Company*. In moving in fours to the rear, when a flank is thrown back, each of the remaining companies, on reaching the outer flank of the company formed before it, will receive the words *Right (or Left) About form—Company*, or *Rear form—Company*. *Halt—Front, Dress*, according to the angle of formation.

In changing front at a very small angle, it will frequently be found more convenient to move out markers to take up the intended alignment than to apply the formations above described. The major on the named flank will place the markers of the company on that flank in position, and cover the remainder from them; the companies then moving on the markers as directed in S. 6: the captains of the outer companies may, if necessary, wheel them up.

---

S. 33. *A Battalion in Line advancing or retiring in Echelon, or advancing in Short Echelon.*—Plate XXIII.

1. *Advancing, or Retiring, in Echelon, from either Flank.*  
—If it is intended to re-form line parallel to the original alignment, the companies may be cautioned to march off at any named distance from each other, but if it is intended to change front to either flank at right angles, they must be marched off at wheeling distance from each other. When no distance is named, the companies will be marched off at wheeling distance.

**ADVANCE**  
(OR RETIRE) IN  
ECHELON (AT  
—PACES DIS-  
TANCE) FROM  
THE RIGHT (OR  
LEFT).

No —, *By the*  
*Right (or Left),*  
*Quick—March.*

OR

No —, *Right*  
*About—Turn.*  
*By the Left*  
*(or Right),*  
*Quick—March.*

The captain of the company on the named flank, if the battalion is to advance, will at once give the word No —, *by the Right (or Left), Quick—March,* and when that company has gained the required distance, the next will be marched off by its captain, and so on in succession till all are in motion. Both guides of each company will be on the flanks, the markers will cover the flank files; if the advance is from the right, the right will direct, and *vice versa*. If the battalion is to retire, the companies will be turned about in succession, and marched off one after the other, at the required distance, as above described; in retiring from the right, the present left will direct, and *vice versa*.

2. *Advancing in Short Echelon from the Centre.*—An advance in short echelon may be made from the centre, on the words **ADVANCE IN SHORT ECHELON FROM THE CENTRE.** The two centre companies will advance, marching by the centre serjeant as in line, by command of the captain of the left centre company, the left guide of that company moving up; the remainder will move off in succession at six paces distance, having a guide on each flank, their directing flanks being those nearest to the centre companies.—Plate XXIII.

S. 34. *Forming Line from Echelon, or Short Echelon.*—  
Plate XXIV.

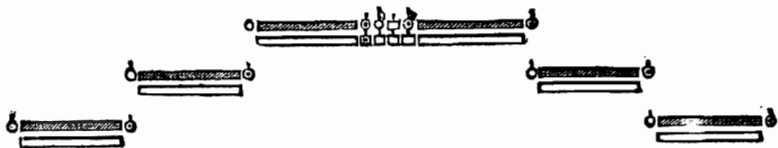
**LINE ON**  
**THE LEADING**  
**COMPANY.**  
*Steady.*

1. *Forming Line from Echelon on the*  
*Leading Company.*—On the caution,  
the base points will move out and be  
covered as usual.



## PLATE XXIII.

SHORT ECHELON.



ECHELON MOVEMENTS.

187



REMAINDER,  
QUICK—MARCH.

No—,  
*Halt—Dress-up.*  
*Eyes—Front.*  
*Steady.*

On the word MARCH, the remaining companies will move up in succession into line, and be dressed by the guides.

As usual.

LINE  
ON THE REAR  
COMPANY.

REMAINDER,  
RIGHT  
ABOUT—TURN.

QUICK—MARCH.

No—,  
*Halt—Front,*  
*Dress-up.*  
*Eyes—Front.*

*Steady.*

2. *Forming Line from Echelon on the Rear Company.*—On the caution, as in No. 1. The remaining companies will be turned about.

On the word MARCH, the companies turned to the rear will step off and form in succession on the rear company, each receiving the words *No—Halt—Front—Dress-up*, when its proper front rank is in line with the rear rank of the last halted company.

As usual.

LINE  
ON N<sup>o</sup>— COM-  
PANY.

COMPANIES IN  
FRONT, RIGHT  
ABOUT—TURN.  
QUICK—MARCH.

No—, *Halt,*  
*(Front,) Dress-*  
*up. Eyes—Front.*  
*Steady.*

3. *Forming Line from Echelon on a Central Company.*—On the caution, as in No. 1. The companies in front of the named company will be turned about, and on the word MARCH, line will be formed as described in Nos. 1 and 2.

As usual.

In these movements, the distant flank, or flanks, will be marked by the adjutant, or the junior major and adjutant; the left guides will take post as line is formed.

4. *An Echelon forming Line on the March.*—A battalion in echelon on the march may form line in like manner; if to the front, the leading company will be halted and dressed on the caution; if on the rear or a central company, the named company will be halted and dressed on the words REMAINDER (or COMPANIES IN FRONT), RIGHT ABOUT-TURN. Line may also be formed on the leading company without halting, on the words ON THE MARCH, LINE ON THE LEADING COMPANY: REMAINDER, DOUBLE, &c.

COMPANIES  
RIGHT (or LEFT)—  
WHEEL.  
FORWARD.  
LINE ON N°—  
COMPANIES IN  
FRONT: RIGHT  
ABOUT-TURN.

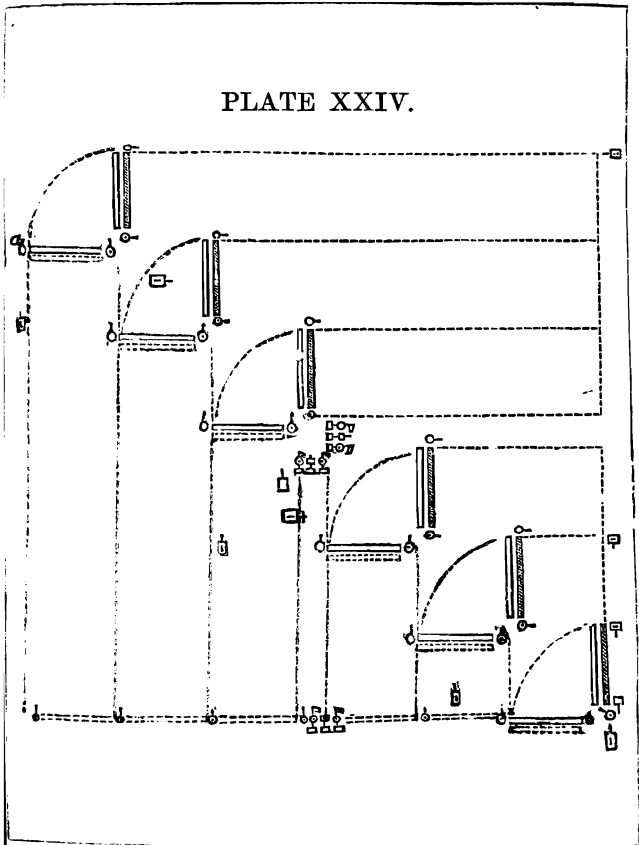
5. *An Echelon forming Line at Right Angles to the original Alignment.*—If the battalion has advanced in echelon at wheeling distance (Plate XXIV.), and is required to form line to either flank, the companies will be wheeled a quarter circle to that flank; after which line will be formed on any named company as already described, the guides nearest to the named company directing. The named company will be halted when the remainder receive the word FORWARD.

6. *A Short Echelon forming Line.*—A short echelon will form line to the front on the two leading companies, as described in Nos. 1 and 4.

S. 35. *A Battalion in Echelon forming Line in an Oblique Direction.*

When a battalion, having advanced in echelon from the right, is required to form line at an angle less than a right angle to the original alignment, to the left, and *vice versa*, the companies will be wheeled to the required angle, on the word FORWARD, the named company will advance three paces, and be halted and dressed; and the remainder will be closed on it by fours, by command of their captains.

## PLATE XXIV.





## FORMATIONS TO RESIST CAVALRY.

## FORMATIONS TO RESIST CAVALRY.

## GENERAL RULES.

## I.

*Various methods.*—The methods of preparing to resist cavalry must vary according to the nature of the ground on which the troops are formed, and of that over which the cavalry has to advance.

## II.

*Receiving Cavalry in Line.*—A line of infantry formed on a plain where there are no inequalities, either in front or on the flanks, which would either protect cavalry, or enable it to form unperceived anywhere near, may remain in line to receive an attack of cavalry from a distance.

In this formation, the flank companies may be either wheeled forward to give flank defence, or wheeled back to save the line from being outflanked; occasionally one flank may be wheeled forward, the other back.

## III.

*Squares.*—Where there is any possibility of cavalry approaching unperceived, the troops should be prepared to form square, two or four deep, at any moment.

S. 36. *A Battalion preparing for Cavalry, in Line.*

FROM THE  
RIGHT (LEFT, OR  
BOTH FLANKS),  
PREPARE FOR  
—CAVALRY.

No —, *Right*  
(or *Left*) *Wheel*,  
or *Right-about*  
*Turn. Right*  
(or *Left*) *Wheel*.  
*Quick—March.*

1. *Receiving Cavalry in Line.*—On the word CAVALRY, the line will at once fix bayonets (or swords); and, except the two flank companies, prepare for cavalry. The two flank companies will be wheeled by their captains (Gen. Rules II.); and will then be ordered to halt, or halt and front, and prepare for cavalry. If the caution is to prepare for cavalry from the right, the right flank company will be wheeled back, the left will be wheeled

*Halt—(Front).* | up; and *vice versâ*; if from both flanks,  
*Prepare for* | both flank companies will be wheeled  
*Cavalry, &c.* | back.

On the words ORDER—ARMS, the flank companies will be wheeled into line.

FORM COMPANY }  
 SQUARES. } 2. *Forming Company Squares.*—On the caution, each company will move as directed in Part II., § 19.

S. 37. *A Battalion in Line forming Square.*

(Suppose a battalion of 8 companies.)

ON THE TWO  
 CENTRE  
 COMPANIES,  
 FORM—SQUARE.

*Forming Square.*—On the caution, the colours, and the right guides and markers of the two centre companies will fall to the rear; the two centre companies will stand fast; the remainder will form fours inwards, and disengage to the rear

QUICK (or  
 DOUBLE)—  
 MARCH.  
 Nos 3, 6,  
*Halt.*  
*Rear—Turn.*  
 Nos 2, 7,  
*Halt,*  
*Rear—Turn.*  
 No—, *Halt,*  
*Rear—Turn.*

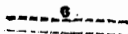
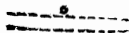
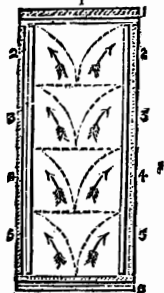
On the word MARCH, the two centre companies will each close inwards four paces; Nos. 3 and 6 will wheel to the left and right respectively, and when in square will receive the word *Halt, Rear—Turn*: Nos. 2 and 7 will move to where their inner flanks will rest in square, change direction by order of their captains, and be halted, and turned as above. Nos. 1 and 8 will form the rear face of the square, getting the words *Halt, Rear—Turn*, when in position. The captains and supernumeraries will run round the leading fours of their companies into square. The flank files of the front and rear companies will turn outwards.





## PLATE XXV.

A COLUMN FORMING SQUARE TWO DEEP.



UNFIX  
BAYONETS (OR  
SWORDS). RE-  
FORM—LINE.

QUICK (OR  
DOUBLE)—  
MARCH.  
No— *Halt,*  
*Front, Dress up.*

*Re-forming Line.*—On the caution, the two centre companies will stand fast, the side face companies will form fours towards the line, the rear face companies outwards.

On the word MARCH, the two centre companies will each close four paces outwards, and the colours, and the right guides and markers of the two centre companies, will move up; the remainder will wheel outwards, and deploy into line as directed in S. 30.

The same directions will apply to a battalion of six companies, omitting the instructions for Nos. 2 and 7.

A square formed as above described may form column of double-companies as follows:—

*Forming Column of Double-companies.*—On the words FORM COLUMN OF DOUBLE-COMPANIES, the side face companies will form fours towards the rear of the square. On the word MARCH, the side face companies will wheel to the right and left respectively, receiving the words No—, *Halt, Front, Dress,* when in their places in column; and the two rear companies will move to company distance, and be halted and fronted by the left half-battalion captain. The captains and supernumeraries of the side face companies will run through to the rear, to their places in column, as the companies commence wheeling into column.

S. 38. *A Battalion in Column forming Square.*—Plates XXV. and XXVI.

The formation will invariably be on the leading company of the column. If a battalion is very strong, and time permits, double-companies should be formed, and moved into square, as described in S. 39. The column of double-companies will be formed by the left companies forming on the left of the right companies by the diagonal march.

FORM SQUARE.  
 QUICK (OR  
 DOUBLE)—  
 MARCH.  
 No—,  
*Half-companies*  
 —Outwards.

No—,  
*Halt—Right*  
*about—Turn.*

I. *Forming Square Two-deep from Column.*—On the word MARCH, the leading company will stand fast (the flank files turning outwards, and the guide on the directing flank falling to the rear); the other companies will step off, and all except the rear company will wheel outwards by half-companies, by command of their captains, as they arrive successively at half-company distance from the companies that precede them; when the half-companies have wheeled the quarter circle, they will halt without word of command, touching towards the leading company.

The rear company will close up and form the rear face of the square, being halted and turned about by its captain, touching to its centre, and the flank files turning outwards. The officers and sergeants of the rear company will run into square the moment the second company from the rear receives the words *Half-companies—Outwards.*

The colour party will wheel up with, and halt in rear of, the half-company it is following.

FOUR-DEEP,  
 FORM-SQUARE.  
 QUICK (OR  
 DOUBLE)—  
 MARCH.

2. *Forming Square Four-deep from Column.*—On the word MARCH, the leading company will stand fast, (the flank files turning outwards, and the captain and supernumeraries running to the rear of the second company); the second company will close upon the first, halt-

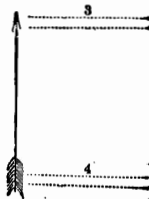
**FORMATIONS TO RESIST CAVALRY.**

2010MM004

PLATE XXVI.  
COLUMN FORMING SQUARE FOUR DEEP.



2



5

6

*No—,  
Sections—  
Outwards.*

*No—,  
Halt—Right  
about—Turn.*

ing without word of command, and the flank files turning outwards.

The remaining, except the two rear, companies will wheel outwards by sections by command of their captains, as they arrive successively at section distance from the companies that precede them; when they have wheeled the quarter circle, the flank sections will halt without word of command, the two centre sections closing upon them, all touching towards the leading company. The two rear companies will close up and form the rear face of the square, being halted and turned about successively by their captains, the flank files turning outwards. The captains and supernumeraries of the two rear companies will run into square the moment the third company from the rear receives the words *Sections—Outwards*.

During the march the colour party will incline towards the centre of the company which it is following, and on the words *Sections—Outwards*, it will wheel to the left (or right), and halt in rear of the directing half-company.

If a column on the march is ordered to form square, the leading company will at once receive the words *No—, Halt*, from its captain; if retiring, the column will first be ordered to turn to the front.

3. *Forming Square Four-deep from Quarter Column.*—A quarter column will form square four deep, on the words **FORM SQUARE**, in the same manner as a column (distances being, if necessary, previously adjusted); except that the

commanding officer will give the words SECTIONS—OUTWARDS to all the centre companies, as the second company closes on the first; the colours, on the caution, must move to the centre of the company they are following: or close to that place if at the halt, that they may not interfere with the sections as they wheel outwards.

4. *A Column, Half or Quarter Column moving to a Flank in Fours, forming Square.*—When a battalion in column moving to a flank in fours, is required to form square, the commanding officer will order it to turn to the front before forming square.

S. 39. *A Battalion in Column of Double-companies, or in Columns of Half-battalions, forming Square.*

A column of double-companies, at company distance, will form square, two-deep, on the leading double company in the same manner as a column forms square on the leading company; the companies wheeling outwards to form the side faces, and the rear double-company closing on the flanks of the side faces, and being ordered to turn about. A half-battalion column will form square, two deep, on its leading company in the same manner as a column.

S. 40. *A Square marching in any Direction.*

THE SQUARE  
WILL ADVANCE  
(RETIRE, OR  
MOVE TO THE  
RIGHT, OR LEFT).

A battalion formed in square may be ordered to march in any direction.

FOURS—  
INWARDS,  
OR  
INWARDS—  
TURN.

When the square is two deep, the companies that will form the side faces will be ordered to form fours inwards; when it is four-deep, those companies will be ordered to turn inwards. The face that will be in rear will turn about



QUICK—  
MARCH.

On the word MARCH, the square will step off; care being taken, if the side faces are moving in files, that the men remain properly closed up.

SQUARE,  
HALT.

A square when advancing, retiring, or moving to a flank, will march as directed in Part II., S. 25.

On the word HALT, the square will halt and turn outwards, every man standing steady, unless ordered to close or dress.

S. 41. *A Battalion in Square re-forming Column, or Column of Double-companies.*

Bayonets (or swords) having, if necessary, been unfixed:—

RE-FORM—  
COLUMN.

1. *Re-forming Column from Two-deep Square.*—On the caution, RE-FORM-COLUMN, the side faces will turn about; the flank men of the leading and rear companies will turn respectively to the front and rear.

QUICK-MARCH.  
*No—, Halt,  
Front, Dress.*

On the word MARCH, the half-companies will wheel into companies, receiving the words *No—, Halt—Front—Dress* from the captains; the rear company will move to half-company distance and will then receive the same command.

RE-FORM—  
COLUMN.

2. *Re-forming Column from Four-deep Square.*—On the caution RE-FORM-COLUMN, the side faces will turn about, and their rear sections will move to wheeling distance; the flank men of the two leading companies will turn to the front, and those of the two rear companies to the rear.

## QUICK-MARCH.

*No—,*  
*Halt—Dress.*  
*No—,*  
*Halt—Front—*  
*Dress.*  
*No—,*  
*Halt—Front,*  
*Dress.*

On the word MARCH, the sections of the side faces will wheel into companies, their captains giving the words, *No—, Halt—Front—Dress*; at the same time, the leading company will advance, and the two rear companies retire, receiving respectively from their captains the words *No—, Halt—Dress,* and *Halt—Front, Dress,* when at quarter distance.

3. *Re-forming Column of Double-companies.*—A square formed from column of double-companies, as described in S. 39, will be reduced in a similar manner to that described in No. 1 of this Section; the side faces turning about on the caution, and on the word MARCH wheeling into double-companies, receiving the words *No—, Halt—Front, Dress,* from their captains, and the two rear companies moving out at company distance, and being halted and fronted by the left half-battalion captain.

In these formations, the directing guides must run out the instant the words QUICK—MARCH are given, and take up their covering on the flanks of their companies.

## SKIRMISHING.

## GENERAL RULES.

## I.

*Divisions of a Regiment when Skirmishing.*—Troops in extended order may be divided into three parts,—skirmishers, supports, and reserve. Supports are not usually required in front of a line deployed, or of a line of columns at deploying intervals. A reserve is only needed when a battalion is skirmishing alone, or at some distance from the force it covers.

## II.

*Relative Strength of Skirmishers, Supports, and Reserves.*

—1. The supports should always be composed of numbers equal to the line of skirmishers ; thus, each company that is extended should have a company to support it.

The reserve should be at least one third part of the whole body.

2. If a single company is detached to skirmish at a distance from the main body, not more than half of the men should ever be sent forward to skirmish at a time : the other half must remain formed in support.

## III.

*Relative Duties of Skirmishers, Supports, and Reserves.*—

1. The movements of the skirmishers must depend in a great measure on the position and movements of the enemy. Care should be taken that the skirmishers protect and overlap the flanks of the main body they are intended to cover.

2. It is the duty of the supports to assist and support the skirmishers in every way. The movements of the former must therefore correspond with those of the latter. The supports should be as nearly in rear of the centre of their own skirmishers, as the configuration of the ground may permit, and in echelon with each other, having due regard to cover. The reserve is the point on which both supports and skirmishers may rally. It will also send relief to them when necessary; it should therefore be placed as nearly as possible in rear of the centre of the formation.

3. When the skirmishers are sent out to a distance, the commander of the line of skirmishers must take care that they are always so situated as to protect, in the most effectual manner, the front and flanks of the main body.

#### IV.

*Relative Distances of Skirmishers, Supports, and Reserves.*—The distance of supports from the skirmishers, and of reserves from supports, must depend on circumstances and the nature of the ground. The supports should always be in the most convenient position to assist the skirmishers, without being unnecessarily exposed to fire. For instance, when skirmishers have ascended a bank or hill, and are halted on the summit, it is evident that the supports may approach close to them, without being exposed to fire; but, on a plain, they must necessarily be kept at a greater distance; the same remark applies to the reserve. As a general rule, on a plain the distance between skirmishers and supports should be about 300 yards; between supports and reserves, about 500 yards; between the reserve and main body, 500 yards.

## V.

*Time of Movements, and Cover.*—1. When not under fire, all movements will be in quick time; when under fire, all movements will be in double time, or at the run if specially ordered.

2. Skirmishers, at the halt, when there are inequalities of ground, should at once avail themselves of them, but without advancing or retiring too far from the general alignment, or moving to a flank out of control.

3. Officers commanding supports must, with due regard to the assistance they should afford to the skirmishers, take advantage of all inequalities of ground and other objects affording cover to protect their men, and should make the men lie down when cover can be obtained by so doing; they must examine the ground well, and select positions that will protect them from cavalry, in case of attack, without preventing the skirmishers from forming upon them.

4. The officer commanding the reserve should also keep his men under cover when practicable; but, as the reserve is not immediately under fire, his attention should principally be directed to the selection of positions favourable to the relief and assistance of the skirmishers and supports, with proper regard to the protection of the main body. When in the presence of cavalry, the reserve should be kept in column; but under the fire of artillery it should be deployed into line.

## VI.

*Principles of Movements to be explained.*—On an instruction parade, where there is variety of ground, the commanding officer should explain to the battalion the nature and advantages of the ground for attack or defence, and the general object he has in view. J

## VII.

*Points of Direction.*—1. For skirmishers of the same battalion their own centre is usually the point of direction; for skirmishers of different battalions, the officer commanding the line will name the directing company or battalion (skirmishing), and the officers commanding the other companies will keep their men properly extended from, and aligned upon, it.

2. When moving to a flank, obliquely or direct, the leading man will direct, during the movement only. In changing front, the file on which the change is made becomes, during the movement, the file of direction.

3. When skirmishers become mixed, or are in disorder, the officer commanding may order any named man to direct, and the others will at once align themselves with him, without regard to their general places; the officers and non-commissioned officers will take charge of proper portions of the line, and the whole will move and act by the new centre.

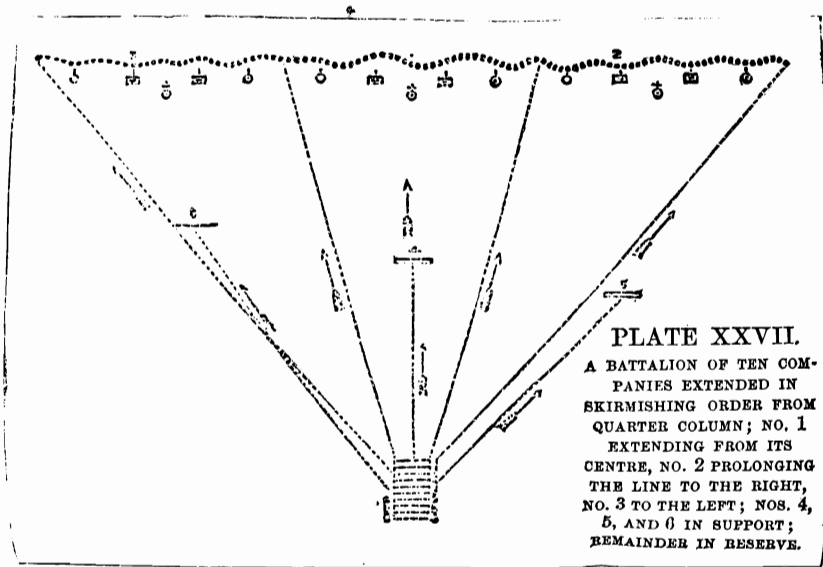
## VIII.

*How Arms are carried.*—Arms will be carried as directed in the *Rifle Exercises*, Ss. 1, 2.

## IX.

*Officers and Supernumeraries.*—When a company is extended, the captain and supernumeraries will be placed as described in Part II.; when in support, the captain will be in front. The officers, &c., of a reserve, when in quarter column, will always take post as in column by the left.









**PLATE XXVIII.**

A BATTALION OF  
SIX COMPANIES  
EXTENDING FROM  
QUARTER COLUMN:  
NO. 1 EXTENDING  
FROM ITS LEFT,  
NO. 2 PROLONGING  
THE LINE TO THE  
RIGHT, NOS. 3 AND  
4 IN SUPPORT, RE-  
MAINDER IN RE-  
SERVE.

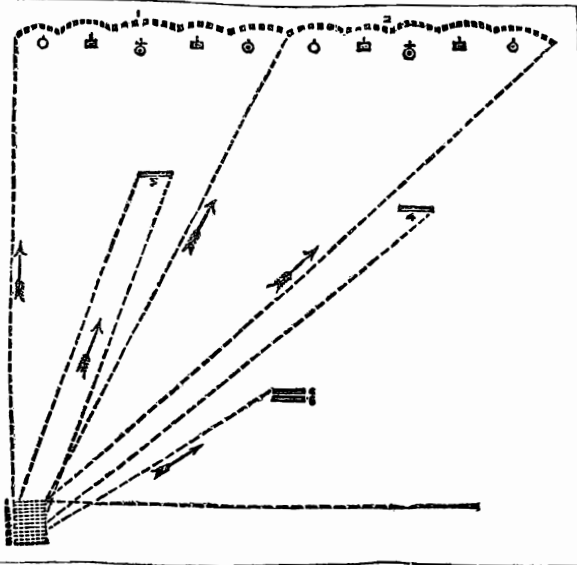
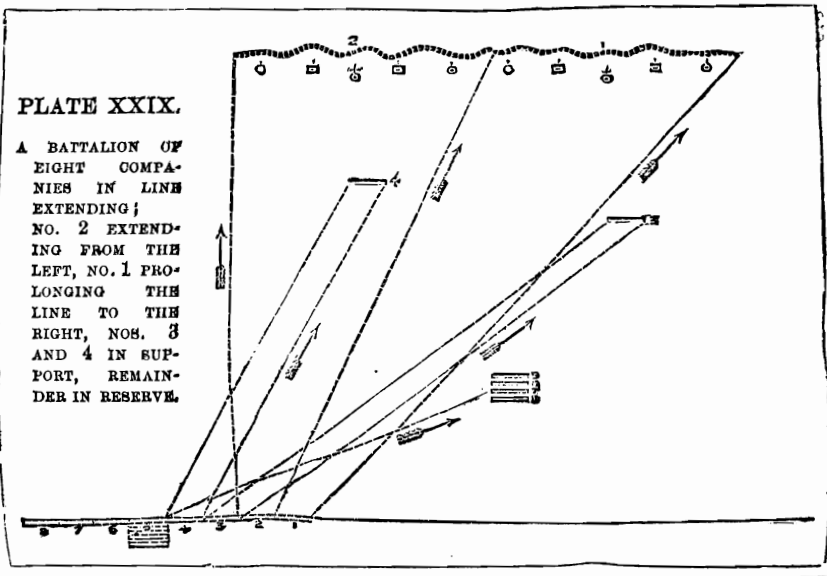




PLATE XXIX.

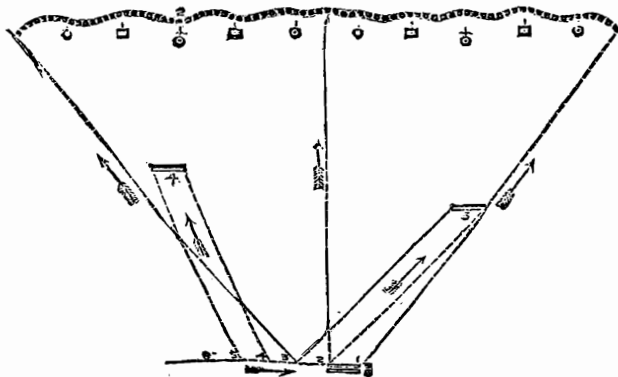
A BATTALION OF  
EIGHT COMPANIES  
IN LINE  
EXTENDING;  
NO. 2 EXTENDING  
FROM THE  
LEFT, NO. 1 PRO-  
LONGING THE  
LINE TO THE  
RIGHT, NOS. 3  
AND 4 IN SUP-  
PORT, REMAIN-  
DER IN RESERVE.





## PLATE XXX.

A BATTALION OF SIX COMPANIES EXTENDING IN SKIRMISHING ORDER FROM LINE;  
 NO. 1 EXTENDING FROM THE LEFT, NO. 2 PROLONGING THE LINE TO THE LEFT,  
 NOS. 3 AND 4 IN SUPPORT, REMAINDER IN RESERVE.



## II

*Words of Command and Bugle Sounds.*—1. Skirmishing movements must in general be regulated by word of command. Commands must be repeated by the captains and every supernumerary belonging to the line of skirmishers.

2. Calls on the bugle may occasionally be necessary as substitutes for the voice, but as they are liable to be misunderstood, and may reveal intended movements to the enemy, they should seldom be used, unless for purposes of drill. The commanding officer's bugle will generally be found sufficient; repeated sounds only create confusion and delay.

3. Every regiment should have a well marked and simple regimental call.

4. Bugle sounds, as has been stated in Part II., only apply to men extended; supports and reserves invariably move by word of their commanders.

The bugle sounds will be found at the end of the book.

S. 42. *A Battalion extending in Skirmishing Order from Quarter Column or Line.*—Plates XXVII.—XXX.

THE BATTALION  
WILL SKIRMISH.  
(BY SECTIONS.)

No. 1  
WILL EXTEND  
—PACES FROM THE  
RIGHT (LEFT,  
CENTRE OR No.—  
FILE).

1. *Extending from Quarter Column.*  
—On this caution, the battalion will come to attention, and the guides will fall to the rear; swords will be returned.

As each company is named, its captain will move it out, and extend it as ordered; continuing the advance when extended, until ordered to halt, unless it

No. 2  
 PROLONG TO THE  
 RIGHT (or LEFT),  
 or,  
 Nos 2 and 3,  
 PROLONG TO THE  
 RIGHT AND LEFT,  
 No —, —,  
 RIGHT (CENTRE,  
 or LEFT),  
 SUPPORTS.

is otherwise directed. The companies not ordered out as skirmishers or supports will form the reserve, which will be moved, by its senior officer, to the rear of the centre of the skirmishers.

If a quarter column is ordered to skirmish to the right or left, it will be wheeled to the flank named, and then proceed as above directed.

The companies to skirmish, or act in support, having been sent out, the guides of the remainder will take post.

2. *A Battalion extending from Line.*—The companies to skirmish or support will be named, as in quarter column, and each captain will act as above directed.

A battalion in line ordered to skirmish to a flank will be wheeled up by companies to that flank; during the wheel, the commanding officer will name the companies to skirmish and support, on the word FORWARD each captain will move his company into the position assigned to it.

The file from which the extension is to be made, and the intervals, between files, will be determined by the nature of the ground and the extent to be covered.

Before a retreat, skirmishers may be extended in rear of the line, and when the line has passed, they will open fire as directed, holding their ground until ordered to retire. Supports may, if deemed necessary, be dropped as the line retires, at the proper distances.

When retiring, the successive relief of the skirmishers by supports, is the most effectual manner of keeping an enemy in check: the officer commanding a support, should, therefore, be constantly on the look-out for good positions, such as a bank, a ditch, a wall, or like cover, where he



may extend his men with advantage. After relieving, the new skirmishers must hold their position until ordered to continue the retreat.

---

*S. 43. Relieving and Reinforcing Skirmishers.*

Skirmishers will be relieved and reinforced as detailed in Part II., Ss. 22 and 23.

When skirmishers are relieved, and find that fresh supports have been sent out, they will, as soon as closed, join the battalion.

When supports are thrown forward to reinforce skirmishers, or extended in order to prolong the line of skirmishers, fresh supports should at once be sent out, if required.

---

*S. 44. Changes of Front.*

No precise rules can be laid down for battalion changes of front in a forward direction, which will necessarily depend upon ever varying circumstances, and must therefore be left to the intelligence of the commander, who will issue such orders as the emergency demands. But changes of front retiring, can be advantageously effected by the supports being extended on the new alignment while the old skirmishers continue the retreat, and, as each company is relieved, form supports to the new front.

The skirmishers of a battalion in extended order can rarely be required to change front at right angles; if it is necessary to protect a flank, fresh skirmishers should be sent out from the reserve or the main body.

---

*S. 45. Attack by Cavalry.*

When skirmishers are unexpectedly attacked by cavalry, which will be signified, for parade purposes, by the bugle sound PREPARE FOR CAVALRY, the skirmishers and supports will proceed as described in Part II., S. 26. Should there be a reserve, it may form square, clear of the

supports and skirmishers ; if only two companies are in reserve, the rear company will close on the front, so as to be able to fire ; if necessary, the rear company may be turned about.

The squares of skirmishers, and the supports, will rarely be found in straight lines or directly one behind another ; but, when such is the case, the captains, if time will permit, must endeavour to move them into echelon, in order that they may protect each other mutually by their fire. For purposes of drill, the following general rule will prevent commanders from acting at cross purposes. The captain of the left skirmishers will run up into the line of skirmishers ; the captain of the centre skirmishers will stand fast ; the captain of the right skirmishers will run back ; the respective companies will form rallying squares round their captains.

If a battalion is required to extend again from this formation, the skirmishers and supports may again occupy their original ground. If the skirmishers are about to advance, the supports and reserve may lie down till at a sufficient distance from the front.

---

*S. 46. Closing on Supports.*

The skirmishers will form at six paces in rear of their supports ; or, if attacked by cavalry before they reach their supports, will form rallying squares by word of command ; as described in Part II., Ss. 24, 25.

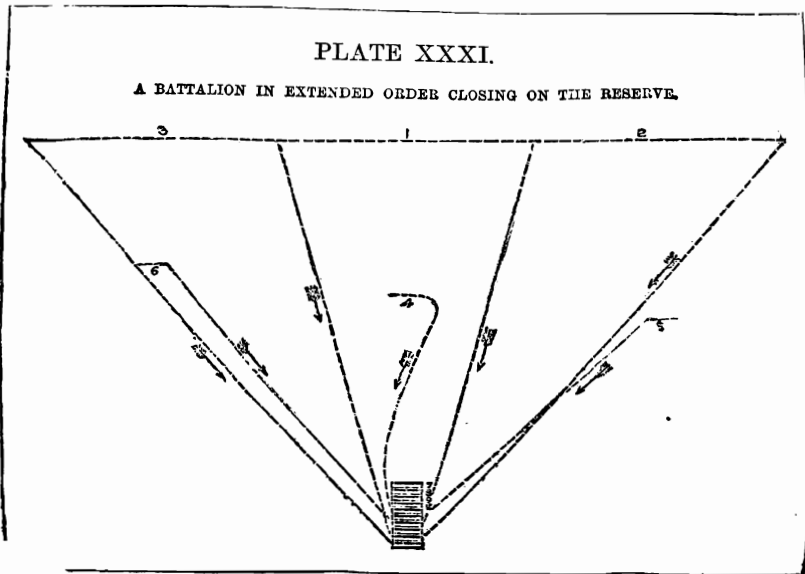
After the skirmishers have closed on the supports, if the **EXTEND** is again ordered, the old supports will advance and extend from the centre, or from such file as will cause them to re-occupy the ground, and the old skirmishers will form companies in support. Or, if necessary, the old supports will extend on their own ground from the halt, and the old skirmishers will retire to their proper distance as supports.

---



## PLATE XXXI.

A BATTALION IN EXTENDED ORDER CLOSING ON THE RESERVE.



*S. 47. Closing on the Reserve. (Plate XXXI.)*

1. *Skirmishers and Supports closing independently on Reserve.*—If skirmishers and supports in extended order are to be collected on the reserve, the words “ASSEMBLE ON THE RESERVE,” or the bugle sound ASSEMBLE (No. VIII.) will be given. The supports will at once be ordered to form fours inwards and will retire in double time, by the shortest lines, in rear of the reserve ; the skirmishers will run in independently, and form companies in rear of the reserve, remaining with ordered arms, at attention. When there are three supports, the centre support will form fours right, and move into column, passing round the left of the reserve. The skirmishers and supports may be directed to move in quick time.

The companies will take their places in rear of the reserve as they arrive, without reference to their numbers ; if two companies from the opposite flanks meet, the one from the right will pass in front of the other, in other words, they will pass left arm to left arm.

Supports and skirmishers must on all occasions clear the front of any formed body on which they may be running in, as speedily as possible ; in order that fire may be opened.

When a line is advancing, skirmishers may be halted, and, as the line approaches, lie down, having kept up the fire till the last possible moment. As soon as the line has passed over them, they will rise, and quickly form companies.

2. *Skirmishers and Supports closing on Reserve together.*—When the skirmishers have closed in rear of their supports, as described in S. 46, and both are required to assemble on the reserve ; on the words ASSEMBLE ON THE RESERVE, or on the bugle sound ASSEMBLE, they will form fours inwards, each support moving with its skirmishers,

by command of the senior captain of the two, the centre skirmishers and support forming fours to the right. They will move in double time by the shortest lines, and form at six paces in rear of the reserve, the centre skirmishers and supports passing round the left of the column. Should four companies coming from opposite flanks meet, the two from the right will form in front of those from the left. Each captain will halt and front his own company, and give the word *Dress*, and the men will then remain with ordered arms, at attention.

In the presence of cavalry, supports should always be allowed to wait for their skirmishers before moving into the reserve.

---

Should any of the companies while they are assembling, be attacked by cavalry, they will at once form square by word of command, and prepare to receive it.

When a battalion, or part of a battalion, covering a line, skirmishers and supports only being in front, is ordered to assemble in rear of the line, or when the sound *ASSEMBLE* is given, the whole will move to the rear of the line by the shortest directions, and clearing the front as quickly as possible, the supports in fours, the skirmishers independently, passing through the intervals between battalions. When in rear of the line they will move towards the commanding officer of the battalion, and form quarter column wherever he may direct, which should generally be in rear of the centre. If part of the battalion is already formed, they will form in rear of it.

---

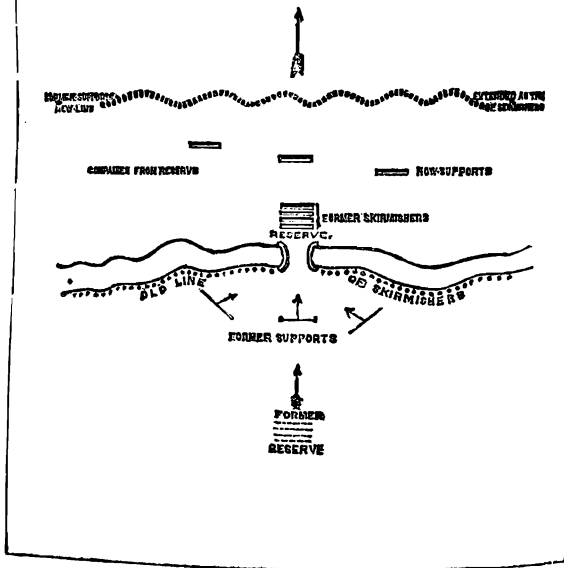
#### S. 48. *Flanking Parties.*

Skirmishers with supports, and, if necessary, a reserve, may be extended to protect the flank of a column. In this case, the skirmishers will move parallel to the direction of the column when it advances or retires, the



## PLATE XXXII.

A BATTALION IN EXTENDED ORDER ADVANCING ACROSS A BRIDGE IN CONTACT WITH AN ENEMY.

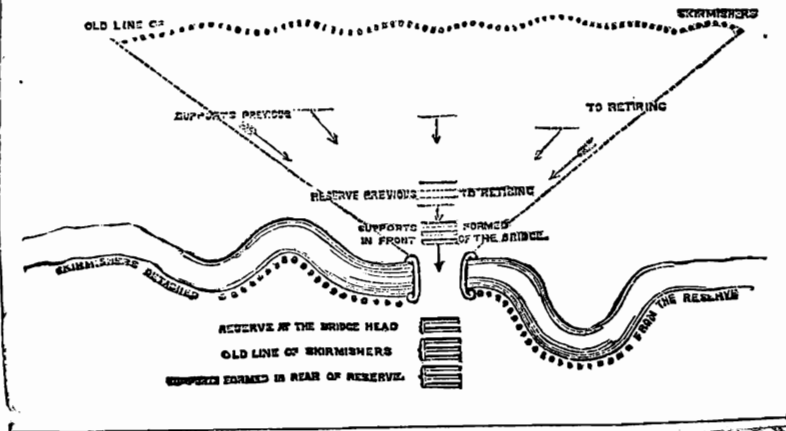






# PLATE XXXIII.

A BATTALION IN EXTENDED ORDER RETIRING ACROSS A BRIDGE IN CONTACT WITH AN ENEMY.



supports and the reserve will move in fours; the leading man of the skirmishers should communicate with the flank of the advance guard. When the column halts, the skirmishers, supports, and reserve will halt and front.

*S. 49. Passing a Bridge or Short Defile in contact with an Enemy.*—Plates XXXII. and XXXIII.

1. *Advancing.*—The skirmishers, on reaching the margin of the river, or the beginning of the defile, will (when the flanks cannot be gained) lie down and cover themselves, keeping up a brisk fire upon the enemy. The supports, on approaching the bridge (or defile) will close upon that support which may be opposite to it, and supported by the reserve, if any, charge and force the passage with the bayonet; this point gained, and the reserve having crossed the bridge, the supports will gradually extend from their centre, the reserve maintaining possession of the bridge, the old skirmishers will keep up their fire, until clouded in succession by the new line; when the new line has completed its extension the reserve will send out fresh supports, and the old skirmishers will assemble in rear of the reserve. The whole will then move forward according to the original formation.

2. *Retiring.*—In retiring, the reserve will first pass, and take post at the bridge-head, or the outlet of the defile, immediately detaching parties to both flanks to line the river, in extended order. The supports will close upon the one which is opposite the bridge, and in compact order, halt in front of it, until the line of skirmishers is withdrawn; in order that this may be effected without unnecessary delay, the skirmishers should incline towards the bridge when at some distance from it, and on arriving near it, they should run briskly over it, and form in rear of the reserve. The supports will then cross, and in like manner joining the reserve, the whole will be prepared to

defend the bridge or to retire, as may be ordered. The new line of skirmishers will commence firing as soon as its front is clear; and if the retreat is to be continued, supports will be again thrown out between them and the reserve.

*S. 50. Formation of an Advanced and Rear Guard.*—  
Plate XXXIV.

1. *An Advanced Guard.*—A company forming the advanced guard of a column marching along a road is divided into two parts. One half-company will form a support under the command of the captain, about 300 yards from the column; the other half-company, under its guide, will move about 200 yards in front of it, and will detach two files 100 yards to its front, two files 100 yards to its right (or left) front, and two files 100 yards to its left (or right) front; if the company is weak, one file only in front and one on each flank may be sent on. These three parties will each be in charge of a non-commissioned officer, or selected soldier. When either of the flanking parties is not required, it will at once join its half-company. The support should send on a connecting file about 100 yards, and drop a connecting file the same distance in its rear.

When an advanced guard consists of more than one company, the companies will be equally divided as above explained.

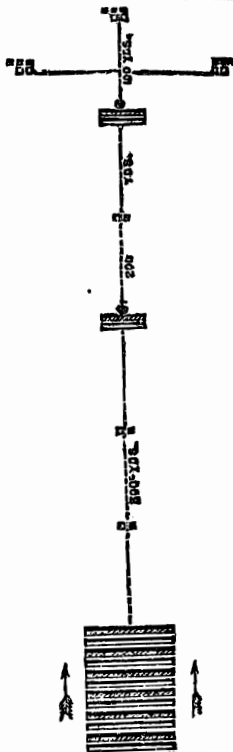
A connecting file should be sent out from the leading company of the column.

2. *A Rear Guard.*—A rear guard is formed in the same way as an advanced guard, but turned to the rear. If the column is on the march, the guard may be formed by the various parties marching off in succession as the column gains the proper distances from them. A connecting file should be dropped from the rear company of the column.

The general rules to be observed by advanced and rear guards will be found in Part V., S. 1.

## PLATE XXXIV.

AN ADVANCED GUARD ON THE LINE OF MARCH ON A ROAD.





## SPRING, OR SETTING-UP DRILL.

1. A battalion will be formed, as follows, in squads with intervals, for spring or setting-up drill, in which the system laid down in Part I. will be adopted, without alteration or omission.

2. Companies will be arranged, with considerable intervals between them, in lines parallel to each other.

3. Captains will divide their companies into squads, and place a subaltern officer or serjeant in front of each squad, as instructor.

4. On a signal from the commanding officer, the squads will be opened out to the right and left from the centres of companies, and be halted successively by their instructors when at sufficient intervals from each other.

5. Each squad will be formed into single rank thus :

If forming from the right, on the word *March* the front-rank man of the right file will stand fast, and the rest of the squad will close to the left by the side step; the rear-rank man of the right file will come up on the left of his front-rank man as soon as there is room for him; the front-rank man of the next file will then halt, and so on to the left of the squad, each rear-rank man moving up on the left of his front-rank man.

From the Right  
or Left), Form  
Single Rank.  
Quick-March.

If forming from the left, on the word *March* the rear-rank man of the left file will step up on the left of his front-rank man, who will stand fast; the rear-rank man of the next file will also stand fast, the rest of the squad will close to the right; as soon as there is room for the rear-rank man of the 2nd file from

the left, he will move up on the left of his front-rank man, who will halt; the rear-rank man of the 3rd file will then halt, and so on to the right; each rear-rank man moving up on the left of his front-rank man, all touching to the left.

6. The squads, when formed in single rank, will be told off from right to left; and the instructor will proceed as follows :

*Odd Numbers,*

*One Pace*

*Forward.*

*Even Numbers,*

*One Pace*

*Step Back.*

*Slow-March.*

The men will take their pace to the front or rear.

7. The lieutenant-colonel, assisted by the majors, will take general superintendence of the drill; the captains will superintend their respective companies.

8. To ensure uniformity throughout the battalion, the commanding officer will inform the captains, while their squads are standing at ease, what movement or exercise they are to practise next, and no instructor will vary from that movement or exercise until further instructions are given.

9. The following signals on the drum may be used:—

Three taps on the drum will signify that the instructors are to give the words *Stand at Ease*; or, if marching, *Halt, Dress, Stand at Ease*. If squads have arrived at the extent of their ground when marching, they will be turned about before they are dressed.

Twice three taps will signify that the instructors are to give the words *Stand at—Ease*, and *Stand Easy*; or, if marching, *Halt, Stand at—Ease*, and *Stand Easy*.



*Odd Numbers,  
one Pace Step  
Back. Even  
Numbers, one  
Pace Forward.  
Slow-March.  
Right—Dress.  
Eyes—Front.*

10. When a drill is concluded, squads will be closed.

*On the Right  
(or Left),  
Form Two-Deep.*

11. On the words *Form Two-deep*, the original rear-rank men will take one pace to the rear.

*Quick—March.*

On the word *March*, the whole will close on the flank named, the rear-rank men covering.

12. After this, companies will be re-formed, or the squads dismissed without re-forming, as the officer commanding the parade may direct.

---

## PART IV.

## FORMATIONS AND MOVEMENTS OF A BRIGADE.

## GENERAL RULES.

## I.

*Application of Battalion Movements.*—A battalion may be considered to hold in a brigade the situation held by a company in a battalion; consequently, the principles laid down for the evolutions of the battalion will apply in a great measure to the movements of a brigade. In the following Sections, such general principles and movements only will be described as are not provided for in Part III.

## II.

*Divisions of an Army.*—1. Great bodies of troops are formed into one or more lines, and are divided into right and left wings, or into corps d'armée; each wing or corps d'armée is divided into divisions, each division into brigades, and each brigade is composed of two, three, or more battalions.

2. When a body of troops is formed with a view to attacking or resisting an enemy, a portion should always be

**kept in reserve.** The reserve may be concentrated in one place, or divided, as circumstances may require. Troops in reserve should generally remain in column, as in that formation they can readily be moved to any point where they are required. Reserves should, as far as practicable, be kept under cover and protected from the enemy's artillery.

## III.

*Formation in Line.*—Battalions in line will be drawn up at the interval of thirty paces from each other. For the purpose of drill, or when the nature of the ground requires, the interval may be reduced to twelve paces. No greater interval than thirty paces should be allowed between brigades or divisions, unless specially ordered.

## IV.

*Line of Quarter Columns.*—A line of quarter columns is formed with the columns at intervals of thirty paces. The intervals may vary, however, at the discretion of the commander, from thirty paces to deploying interval.

## V.

*Formation of Column.*—When divisions or brigades are formed in column of route or manœuvre, the distances between battalions must be equal to the breadth of their leading companies, and thirty paces; thus, should the battalions wheel into line, the intervals of thirty paces will be preserved.

## VI.

*Mass of Quarter Columns.*—The distance between battalions, when in mass of quarter columns for purposes of manœuvre, will be varied, so as to preserve the intervals of thirty paces when wheeled into line of columns; but on other occasions, the distance may be diminished to twelve paces.

## VII.

*Points of Formation.*—1. In brigade movements the positions and evolutions of each battalion will have reference to those of other battalions in the brigade.

2. To enable the battalions of a brigade to dress correctly on the same general alignment, points will be employed in the following manner :—

3. When forming, or deploying or wheeling into, a line of columns, the markers of the leading companies of battalions will mark the alignment, giving their points at arm's length in front of the line on which the companies are to dress, as directed in Part II., Gen. Rules XV., No. 1. The outer markers will mark the outer flanks of the leading companies of their respective battalions; the inner marker of the leading company of the battalion of formation will mark the point of appui; the inner markers of the leading companies of the remaining battalions will mark the inner flanks of their companies, each preserving the interval of thirty paces from the outer flank of the battalion next to him towards the point of appui.

In the above formations, the brigade-major will cover the markers from the point of appui.

4. In the formation of a mass of columns, the directing guides of companies will preserve the line of covering, the brigade-major correcting their covering from the point of appui. The men should not be ordered to dress until the guides have completed their covering.

5. In all deployments or formations into line, or into line of columns at deploying interval, the general alignment will be preserved by mounted officers. The brigade point of appui will be marked by a major of the base batta-

tion. When the formation is on the right flank of the base battalion, the senior major will mark the point of appui, when on the left flank, the junior major; in both cases, the adjutant will mark the distant flank. When the formation is to both flanks of the base battalion, the senior major will mark the point of appui, the junior major the left flank, and the adjutant the right flank; the adjutants of the remaining battalions of the brigade will mark the outer flanks of their respective corps. The inner marker of the company on that flank of each battalion which is nearest to the base battalion, will preserve the usual interval of 30 paces from the outer flank of the battalion next to him towards the point of appui.

6. When a battalion, not being the base battalion, moves up in column to a central point of the alignment on which it is required to deploy, as represented by the centre battalion in Plate XXXIX., the central base points of the battalion will be covered by the major, assisted by the serjeant-major, on the points of the battalion of formation; but the remaining battalion points will cover on the centre of their own battalion, as usual. The adjutant will mark the outward flank, dressing on the brigade point of appui, but no other mounted point will be necessary. The same rule will apply if the battalion moves up in column of double-companies.

7. When battalions form line, or deploy, in succession, each battalion will preserve the interval of thirty paces from the outer flank of the previously formed battalion, although the adjutants may not have taken correct distance: the majors will, however, cover all the markers from adjutant to adjutant, as a guide in the deployment of a battalion dresses all the men, whether they belong to his company or not, from marker to marker. When battalions

K

deploy simultaneously, and the space they have to occupy is consequently limited (as when a line of battalion columns at deploying interval is ordered to deploy), if the intervals taken are not sufficient, they must not go beyond the inner point of the next battalion; the companies, or parts of companies, for which there is no room must be formed in rear of the line, where they will be directed to order arms and stand at ease until space is made for them by order of the general commanding the troops.

8. The foregoing rules will apply equally to a division, or any large body of troops. Only one base battalion, and consequently only one general point of appui, will be necessary in a line composed of any number of brigades, which may be prolonged to any extent by the adjutants, who will mark the outer flanks of their respective battalions. A brigade-major, when no general distant point has been given, may always use the two outward markers of the brigade next to his own towards the point of appui, to assist him in dressing his own mounted points, but he should first ascertain, by looking back over their heads towards the general point of appui, that they are correctly covered in the alignment.

9. When taking up an alignment for a large body of troops, the assistant adjutant-general of the base division will mark the point of appui, and the assistant quartermasters-general will mark the distant points for their respective divisions, the adjutant-general dressing them from the point of appui. When the troops approach the alignment, the brigade-majors will move up with their foot or mounted points to take up the ground for their respective brigades, under the superintendence of their assistant adjutants-general. The assistant quartermasters-general, when they are dressed, may be replaced by mounted orderlies.

10. When a brigade-major is required to take up ground at a distance, for his brigade, and is not informed on which flank he will have to form, he may be obliged to take two or more majors of the brigade as well as the adjutants with him, in case he should be required to give the point of appui.

11. It may also be necessary to send on mounted points to take up ground for a brigade in line of columns. In this case, one major and one adjutant will usually be enough to mark the flanks of the brigade, and they will be relieved at once when the markers move up.

12. The covering of points in an alignment will be much facilitated by selecting some clearly defined distant point, in its prolongation, which may be used by the assistant adjutants-general or brigade-majors as the outer point on which they may cover their intermediate points.

13. Points will be given as directed in Part III., General Rule V. When a mounted officer accompanying a movement leads a column or preserves deploying interval from it, while it is on the march, he will keep his own face in line with the leading rank of the column. In brigade movements, mounted officers giving points must not fall back to their posts until dismissed by signal from the brigade-major.

### VIII.

*Cautions and Commands.*—1. Cautions given by the general to a brigade or division will at once be passed by the commanders of battalions ; each commanding officer being responsible that the caution is repeated, and distinctly conveyed to the next battalion.

2. On the caution from the general of the division or brigade all interior movements of battalions will be made ; so that the whole may be ready to step off at the executive

command, which each battalion will receive from its own commander, not from the brigadier.

3. The commanders of battalions should give their executive words of command simultaneously, on some signal, or bugle sound, from the general; or the general may order the commanders to take the time from the battalion of direction.

4. The cautions of the general commanding the division, or brigade, must be expressed in terms which cannot be mistaken by the soldiers for battalion words of command.

5. When the progress of an order from battalion to battalion is interrupted by any cause, such as wind or the noise of firing, the commanders will conform as quickly as possible to the movement they see executed by the battalion of direction.

6. Generals will also make use of their staff officers to convey orders to distant battalions; the order to advance or halt may be communicated to large bodies of troops by sound of bugle, when considered necessary.

## IX.

*Echelon Formations.*—1. Echelon formations and movements are conducted in a line composed of a large body of troops, upon the principles laid down in Part III. They are calculated to place a body of troops in an advantageous position to gain an enemy's flank; and sometimes they are formed with effect from the centre of a line, by refusing each wing. If an attack made by an advanced corps of a great echelon be effectual, each succeeding one moves up to improve the advantage; if it fails the succeeding bodies are in a situation to protect the retreat; and in gradually retiring upon each other, they afford mutual aid and support.

2. An echelon, composed of a large body of troops, is formed by the successive advance of brigades or battalions



from either flank, or from the centre of a line, or by columns placed in echelon parallel to the enemy's position; in both cases, the distance of at least half their front will be preserved between the several parts of the echelon, in order to give sufficient room for the mutual protection of flanking squares, when such formation is required.

3. A line is thrown into oblique echelon of companies for the purpose of moving to a flank: the line formation can at any moment be resumed by wheeling up the companies (see Part III., S. 31). These echelons at a distance have the appearance of a complete line, and enable a flank movement to be made almost imperceptibly to an enemy.

4. When the object is to gain an enemy's flank, the whole line will be thrown into echelon towards that flank of the enemy which it is intended to attack or turn; care being taken that the outer flanks of the echelon are protected from the enfilade of the enemy. When it is necessary to refuse a flank attacked by an enemy, the line will be partially thrown into echelon from that flank direct to the rear; but when the enemy's attack is repulsed, a counter attack may be made upon him with advantage, by an advance in echelon from the other flank.

5. When the flank of a line is refused in this manner by a partial retreat in echelon of battalions, the flank that remains halted should (if possible) be posted upon a strong position, from which the fire of artillery could enfilade the advancing enemy.

6. In an open country, where the enemy can observe the intention, echelon movements to attack or gain a flank are attended with difficulty and risk; advantage must therefore be taken of any objects, or ground, that may afford the means of partial concealment.

7. Companies of battalions in echelon will move by their directing flanks, as explained in Part III., s. 33; columns in echelon will also move by their directing flanks on similar principles, but battalions in line moving in echelon of battalions will march by their centres, the leading battalion of the echelon being invariably the battalion of direction.

8. Echelons and oblique echelons may be formed of quarter columns. Echelons, whether of lines or columns, may be composed of small or large bodies moving in concert, according to circumstances and the object contemplated; the chief precaution to be observed, is that the different parts of the echelon are never so far separated as to prevent their mutually supporting each other.

9. It may be assumed as a principle, that great echelon movements, preparatory to action, and when not exposed to fire, will be made in quarter columns; and that echelon movements, when under fire, will be made either in oblique echelon of companies, or in echelon of battalions or larger bodies, in line.

10. The attacks of armies are generally conducted on the principles of the echelon. There are few situations where the whole could act at the same time, or where it would be prudent that they should do so.

## X.

*Advance and Retreat of Alternate Bodies.*—1. In a line composed of a large body of troops, the advance and retreat of alternate bodies are performed either by brigades or battalions.

In a retreat, the distance that the battalions or brigades retire alternately beyond each other must depend on accidents of ground; but in order to afford mutual protection and support, and to ensure a continued and steady resist-

ance to the enemy, it should rarely exceed 200 yards. In retiring, one body will protect the retreat of another ; and when the enemy presses hard, the retreating or rear line will turn to the front and form in the intervals of the first ; the whole being supported by the reserve.

2. The intervals left in the front line by the bodies which have retreated may be occupied by skirmishers. Each part of the line will move by a directing battalion, and any faults in either part of the line when halted should be corrected before the other part reaches it. The retiring part of the line will march direct upon the intervals between the battalions in its rear, and when it has passed them it will move by its directing body.

## XI.

*Movements to be covered by Skirmishers.*—All movements in line and changes of front or position in presence of an enemy should be protected by skirmishers.

## XII.

*Movements to be by the shortest lines.*—In all interior movements of a brigade (as in forming mass from line of columns : see S. 4), battalions will move to their places by the shortest lines ; cutting off angles, when possible, by the diagonal march.

## XIII.

*Men to stand Easy.*—Commanding officers should take every opportunity of ordering arms and allowing their men to stand easy.

---

N. B.—In this Part the cautions to be given by the general of the brigade, or division, are printed in Capitals, those to be given by the commanders of battalions in *italics*.

---

BRIGADE MOVEMENTS OF QUARTER COLUMNS IN  
MASS, AND IN LINE.

S. 1. *A Brigade in Mass of Quarter Columns wheeling into a Line of Columns.*—Plate XXXV., Fig. 1.

WHEEL  
INTO LINE OF  
COLUMNS.

*Left (or  
Right)–Wheel.  
Quick–March.*

On the battalion cautions, the markers will mark where the flanks of the leading companies of their battalions will rest, as directed in Part III., S. 14; the brigade major covering the line of markers from the flank of the rear battalion of the column. The brigadier will then give his signal, and each commander of a battalion will wheel his column as directed in Part III., S. 14.

When battalions, after wheeling into line of columns, are required to correct their intervals, on any named battalion, the markers of the leading companies of columns will mark the fronts of their battalions, turned towards the point of appui, which, when a central column has been named, will be the directing flank of its leading company.

---

## PLATE XXXV.

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

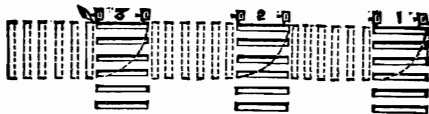
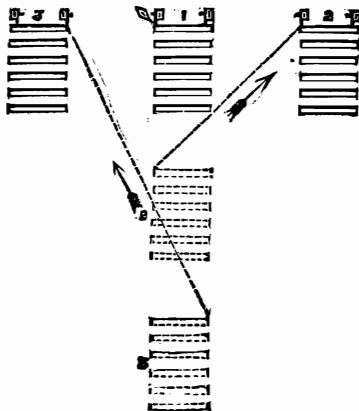


Fig. 2.—A MASS OF COLUMNS DEPLOYING INTO LINE OF COLUMNS OUTWARDS, ONE BATTALION TO THE RIGHT.





*S. 2. A Brigade in Line of Quarter Columns wheeling into Mass.*

WHEEL INTO  
MASS, TO THE  
RIGHT (OR  
LEFT).  
*Right (or Left)*  
—*Wheel.*  
*Quick—March.*

When it is intended to move the column as soon as it is in mass, there will be no dressing of the directing flanks after wheeling into mass; but the directing guides will gain their covering on the march. If it is necessary to dress the directing flanks of the battalions accurately on the halt, the guides will be covered from the front by the brigade-major assisted by the commanders of battalions or the majors, the men standing fast: when the guides are correctly covered, on the word *Dress* from the battalion commanders, the men will close to and dress on them.

*S. 3. A Brigade in Mass of Quarter Columns deploying into Line of Quarter Columns.*

DEPLOY INTO  
LINE OF  
COLUMNS TO  
THE RIGHT  
(OR LEFT).  
*Fours—*  
*Right (or Left).*

1. *To the Right or Left.*—On the battalion cautions, the markers of the leading company of the leading battalion will give base points at arm's length from it, being covered by the brigade-major. The remaining battalions will receive the words *Fours—Right (or Left)*, from their respective commanders.

*Quick—March.*  
*Half Right (or*  
*Left)—Turn.*  
*Front—Turn.*  
*Halt, Dress.*

On the brigadier's signal, the battalions in rear will receive the words *Quick—March* from their commanders, and move into their places in line by the shortest way.

In deploying to the directing flank of the columns, as each battalion receives the word *Front—Turn*, the guides of the inner flank will move up to lead, the guide of the leading company marching on the inner marker, who will be marking the inner flank of the column, the other guides retaining the relative positions held by the flanks of their companies when correctly dressed by the other flank in column; thus the original directing guides of each battalion will cover when the line of columns is completed.

2. *To the Right and Left.*—The markers of the leading company of the leading battalion will give a base at arm's length from it, turned to its directing flank. The markers of the leading companies of the remaining battalions will give points, (see Plate XXXV., Fig. 2,) and the deployment will be performed as described in No. 1. The brigade caution will be DEPLOY INTO LINE OF COLUMNS OUTWARDS, ONE BATTALION (OR TWO, OR MORE, BATTALIONS) TO THE RIGHT. The battalion (or battalions) next in succession from the front will move to the right. (Part III., S. 29, No. 2.)

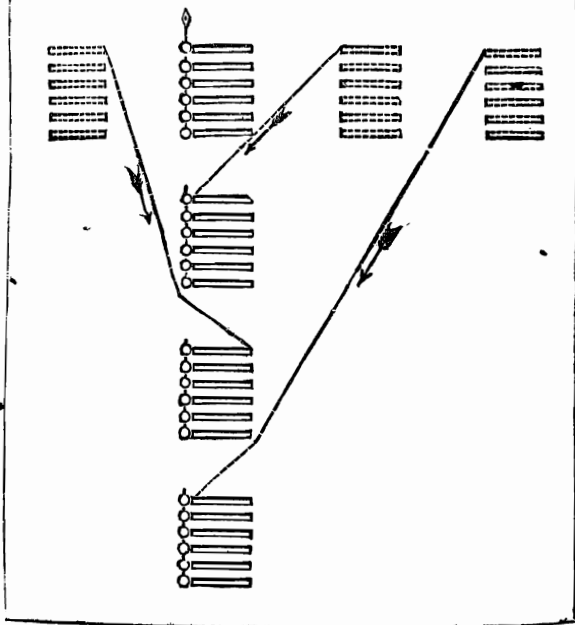
---





## PLATE XXXVI.

A LINE OF QUARTER COLUMNS FORMING MASS OF QUARTER COLUMNS ON A CENTRAL BATTALION.



**S. 4. A Brigade in Line of Quarter Columns forming Mass on any named Battalion.**—Plate XXXVI.

The formation will invariably be in rear of the base battalion.

MASS ON  
THE RIGHT  
(or LEFT)  
BATTALION.  
Right about—  
Turn.

By the Left  
(or Right),  
Quick-March.  
Fours—  
Right (or Left).  
Half Left (or  
Right)—Turn.  
Halt—Front,  
Dress.

MASS ON THE  
—BATTALION.

1. *On a Flank Battalion.*—The caution having been repeated, the battalions, except the battalion of formation, will be turned to the right about by their commanders.

On the signal from the brigadier, the commanders will give the words *Quick—March*, and each battalion will move into mass by the shortest way; when in mass, it will be halted and fronted, all the guides being covered by the brigade-major from the head of the mass, the commander or one of the majors assisting him.

2. *On a Central Battalion.*—The named battalion will stand fast, and the remaining battalions will form in rear of it, as described in No. 1. The battalions on the right and left of the battalion of formation will move into mass alternately, commencing from the right, as the companies of a battalion pass left arm to left arm in forming column from line on a central company. (Plate XXXVI.)

The original directing flank of the battalion of formation will be the directing flank of the mass.

S. 5. *A Brigade in Line of Quarter Columns changing Front.*—Plate XXXVII.

CHANGE FRONT  
 QUARTER, HALF,  
 or THREE-  
 QUARTERS,  
 RIGHT (or LEFT),  
 OR TO THE RIGHT  
 (or LEFT)  
 ON THE RIGHT  
 (or LEFT)  
 BATTALION.  
*Right (or Left)*  
 —*Wheel.*  
*Quick—March,*  
*Halt.*  
*Quick—March.*  
*Right (or Left)*  
 —*Wheel.*  
*Forward.*  
*Right (or Left)*  
 —*Wheel. Halt.*

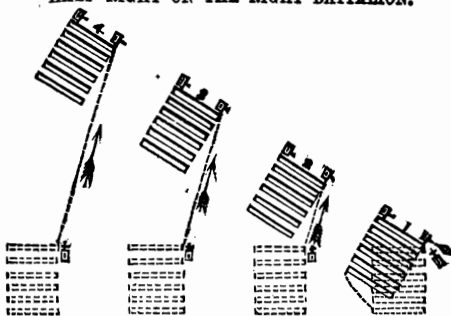
1. *Changing Front Forward.*—On the caution, the commanders will place themselves close to that flank of their leading companies which is nearest to the point of appui, and the markers of those companies will mark the ground on which the heads of their battalions are to rest in the new alignment, the brigade-major covering them from the point of appui.

On the signal, the base battalion will wheel at once into the alignment; each of the remaining battalions will wheel half the angle wheeled by the base battalion, move on its inner marker, and then wheel the remaining half angle into line.

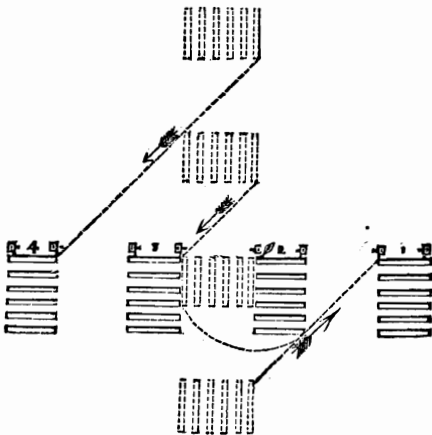
2. *Changing Front by throwing back the whole Brigade on a Flank.*—If the whole brigade is to be thrown back on the left flank, the caution from the brigadier will be, CHANGE FRONT, QUARTER, HALF, OR THREE-QUARTERS, RIGHT OR TO THE RIGHT ON THE LEFT BATTALION, and the movement will be performed as follows:—The left battalion will be wheeled to the right, the markers of its leading company giving the base points, the left marker marking the point of appui. The remaining battalions will be retired diagonally until the inner flanks of their proper leading companies pass at arm distance to the rear of their inner markers, when each battalion will be wheeled in fours on the alignment, being halted, fronted, and dressed, when in position.

## PLATE XXXVII.

**Fig. 1.—A LINE OF QUARTER COLUMNS CHANGING FRONT HALF RIGHT ON THE RIGHT BATTALION.**



**Fig. 2.—A LINE OF QUARTER COLUMNS CHANGING FRONT TO THE LEFT ON THE RIGHT CENTRE BATTALION.**





**3 Changing Front on a Central Battalion.**—Supposing that the brigade is formed of four battalions, and the change of front is to be to the right on No. 3 battalion, the movement will be performed as follows :—The right of No. 3 will be the point of appui ; that battalion and No. 4 will proceed as described in No. 1 of this Section ; Nos. 1 and 2 will proceed as described in No. 2 ; the inner marker of No. 2 battalion marking his point of entry at thirty paces from the point of appui.

MOVEMENTS IN LINE, OR LINE OF COLUMNS.

*S. 6. Naming the Regulating Battalion*

<p>THE BRIGADE WILL ADVANCE. THE — REGI- MENT WILL DIRECT.</p>	}	<p>When a brigade is required to advance or retire in line, or in line of columns, a regulating battalion, or battalion of direction will be named, to which all the rest will conform ; in subsequent movements the same battalion will continue to direct unless another is named.</p>
--	---	--

*S. 7. A Brigade Advancing, or Retiring, in Line.*

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

2. *Advancing in Short Echelon.*—It may sometimes be found more advantageous to advance in short echelon than in line ; the movement is performed on precisely the same principles.

3. *Forming on another Battalion.*—When a battalion in line is ordered to form on another battalion, the commanding officer, when he approaches within 20 or 30 paces, should order markers to the front or rear, as the case may be.

---

S. 8. *A Brigade Advancing, or Retiring, in Line of Columns.*

1. In this movement, the battalion of direction will march by its directing flank ; the remaining battalions will march by the flank nearest to the regulating battalion, preserving their distance from it.

2. When retiring in line of columns the proper leading company of each battalion must be ordered to move in line with that of the regulating battalion, so that the battalions may preserve their relative positions when fronted.

3. When ordered to halt and front, the battalions will halt and front together, throwing out base points.

---

S. 9. *A Brigade Advancing, or Retiring, in Line of Quarter Columns at deploying interval.*

1. When a brigade advances in line of quarter columns at deploying interval, and the right battalion is named to direct, it will march by the right ; the adjutants will accompany the movement at deploying interval, on the left of their respective battalions. The battalion of direction will move perpendicularly to its front ; the remaining battalions will advance, each preserving the interval of thirty paces from the adjutant of the battalion next on his right.

2. When the left battalion is named to direct, the same principle will apply ; the adjutants marking the distant points during the advance, on the right of their battalions.

3. When a central battalion is named to direct, it will act as a right battalion, the battalions on the right keeping



their interval from it; those on the left will preserve their intervals from the adjutant of the battalion next on their right.

In these movements, it is assumed that the regulating battalion moves with its directing flank on the intended brigade point of appui, and that its deployment will therefore be from that flank.

4. When a brigade is ordered to retire, similar arrangements will be made towards the rear, the adjutants moving in line with the leading rank of the battalion of direction. On the words *Halt—Front*, or *Front—Turn*, the adjutants will move up to preserve the intervals in the front alignment, all dressing on the leading company of the battalion of direction. It will usually be found convenient to name the deepest column in the brigade to direct when retiring.

---

*S. 10. A Brigade Advancing, or Retiring, in Line of Columns of Double-companies, at deploying interval.*

1. When a brigade advances in a line of columns of double-companies at deploying interval, if the right battalion is named to direct, the adjutants will accompany the movement at deploying half-battalion interval on the left of their respective battalions. The battalion of direction will move by its right, the senior majors of the remaining battalions will lead their columns so as to preserve the deploying intervals of their right half-battalions, and thirty paces from the adjutants of the battalions next on their right respectively.

2. When the left battalion is named to direct, similar arrangements will be made; the adjutants moving at deploying half-battalion interval on the right of their

respective battalions, and the junior majors leading the columns by the left.

3. When a central battalion is named to direct, its junior major and adjutant will both preserve the intervals, the former on the left, the latter on the right; the remaining battalions will move as in Nos. 1 and 2.

4. When the brigade is ordered to retire, the same arrangements will be made towards the rear, and the points will move as directed in the preceding Section.

*S. 11. A Brigade in Line advancing in Columns from the Flanks of Battalions, or Half-battalions; or in Columns of Double-companies from the Centres of Battalions.*

ADVANCE IN  
COLUMNS FROM  
THE RIGHT  
(OR LEFT) OF  
BATTALIONS.

ADVANCE IN  
COLUMNS FROM  
THE RIGHT  
(OR LEFT)  
OF HALF-  
BATTALIONS.

ADVANCE IN  
COLUMNS OF  
DOUBLE-  
COMPANIES  
FROM THE  
CENTRES OF  
BATTALIONS.

A brigade formed in line may advance in columns from the right (or left) of battalions, or half-battalions, or in columns of double-companies from the centres of battalions; the points being placed as described in the preceding Section.

For battalion movements, see Part III., S. 23.

**S. 12.** *A Brigade retiring in Columns from one Flank of Battalions in rear of the other, or from both Flanks of Battalions in rear of their Centres.*

RETIRE IN  
COLUMNS  
FROM THE RIGHT  
IN REAR  
OF THE LEFT (OF  
FROM THE LEFT  
IN REAR OF THE  
RIGHT) OF BATTALIONS.

RETIRE IN  
COLUMNS OF  
DOUBLE-  
COMPANIES  
FROM BOTH  
FLANKS IN REAR  
OF THE CENTRES  
OF BATTALIONS.

In these movements, the points will be placed as directed in Ss. 9 and 10, and during the retreat they will keep in line with the leading companies; but on the words *Halt-Front*, they will move up into the front alignment, and will be dressed on the leading company of the battalion of direction.

#### MOVEMENTS OF A BRIGADE IN DOUBLE COLUMN.

**S. 13.** *A Brigade advancing in Double Column from the Centre, or retiring in Double Column from both Flanks in rear of the Centre.*

ADVANCE IN  
DOUBLE  
COLUMN FROM  
THE CENTRE.

1. *Advancing.*—A brigade will advance in double column from the centre, in the same manner as a battalion; the two centre companies of the brigade will move to the front, the remainder forming fours inwards, each company in succession turning to the front as it arrives in column in rear of the leading

companies ; see Part III., S. 23. All the directing guides will keep the distances of their own companies without regard to the position of the corresponding companies in the double column, the two leading companies of which, only, are required to keep in line.

When the number of battalions in a brigade is even, the inner companies of the two centre battalions will be considered as the centre, and the interval of 30 paces will be preserved between the columns ; when the number is uneven, the two centre companies of the centre battalion will be considered as the centre of the brigade, without reference to the strength of battalions or number of companies in them.

The brigade-major will move in rear of the guide who leads the column, to superintend the direction.

RETIRE  
IN DOUBLE  
COLUMN  
FROM BOTH  
FLANKS IN  
REAR OF THE  
CENTRE.

2. *Retiring from both Flanks.*—A brigade in line will retire by companies from both flanks in rear of the centre, on the same principles as a battalion. When the half-brigades are of unequal strength, as soon as the weaker half is completely formed into column, the battalions composing it will be ordered by their respective commanders to mark time or halt, until the stronger half is also in column ; the weaker half-brigade will then be ordered to continue its retreat, the directing guide of the leading company preserving his relative position with the stronger half during the march ; in this manner the proper

wheeling distance of companies will be kept, and the two centre companies of the brigade will always be in a line ready to form a base when the column is halted and fronted.

When retiring, the same intervals will be kept as are described in the advance of double columns ; the stronger half-brigade must of course direct.

When a brigade is advancing or retiring in double column, the proper left centre battalion or half-battalion will direct, unless especially ordered to the contrary, as will be the case in retiring, when the right half-brigade is the stronger.

When a brigade in double column forms part of a line with other brigades, its flanks will be marked and the intervals preserved by staff officers, or by the adjutants of the two outer battalions, in precisely the same manner as the deploying intervals of a battalion in column of double-companies are preserved in a brigade. The brigade-major will superintend the direction of the column, and be responsible for the interval of the inner half of the brigade when it is not the regulating brigade.

---

*S. 14. A Brigade in Double Column forming Line to the Front or to a Flank.*

1. *To the Front.*—The single columns composing a double column may deploy simultaneously on the front base of the brigade ; or the leading battalion, or battalions, only, may deploy at once ; the remainder closing to quarter column on their leading companies, moving by the shortest way to those points in the alignment where their inner

flanks will rest, and then deploying ; or their leading companies may at once change direction outwards, move straight on those points, and then form line by companies in succession, as laid down in Part III., S. 27, No. 2.

LINE  
TO THE RIGHT  
(OR LEFT.)

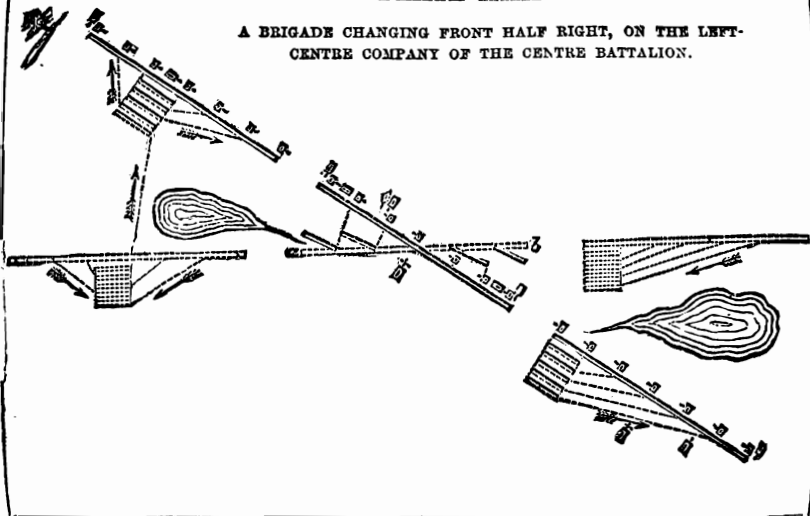
2. *To a Flank at Right Angles.*—A brigade in double column will form line to either flank, in the same manner as a battalion. The flank of formation having been named, and covering corrected from the front, by the brigademajor, the inner column of the brigade will wheel into line, and the companies of the outer column will form upon it in succession, as described in Part III., S. 28, the adjutants marking the outer flanks of battalions.

3. *To a Flank in an oblique Direction.*—If the line is to be formed in an oblique direction to the front of the double column, the column upon that flank towards which line is to be formed, will be moved into the alignment as described in Part III., S. 13, No. 2, the adjutants marking the flanks furthest from the centre of the brigade ; after which they will be wheeled into line ; the outer column will at the same time advance, the leading company wheeling, the remainder changing direction and forming on it in succession, as described in Part III., S. 27, No. 2.



# PLATE XXXVIII.

A BRIGADE CHANGING FRONT HALF RIGHT, ON THE LEFT-CENTRE COMPANY OF THE CENTRE BATTALION.





## ADVANCING OR RETIRING IN COLUMN.

S. 15. *A Brigade advancing in Column from either Flank, or retiring in Column from one Flank in rear of the other.*

ADVANCE  
IN COLUMN  
FROM THE RIGHT  
(OR LEFT).

RETIRE IN  
COLUMN  
FROM THE RIGHT  
(OR LEFT),  
IN REAR OF THE  
LEFT (OR RIGHT).

A brigade will advance in column of companies from either flank, or retire from one flank in rear of the other, on precisely the same principles as a battalion. When advancing, or retiring, wheeling distance, and 30 paces will be preserved between the columns.

## CHANGES OF FRONT, AND POSITION.

S. 16. *A Brigade in Line changing Front on a named Company of a named Battalion.*—Plate XXXVIII.

CHANGE FRONT  
QUARTER, HALF,  
OR THREE-  
QUARTERS,  
RIGHT (OR LEFT),  
OR  
TO THE  
LEFT (OR RIGHT),  
ON N°—  
COMPANY OF —  
REGIMENT.

The brigadier will name the battalion and the company on which he intends the change to be made, and will point out the direction required; the base points will be placed, the distant point or points selected; and the base company will then be wheeled into the new alignment. On the signal from the brigadier, the battalion of formation (*a, b*) will be wheeled into echelon and marched across and formed on the new alignment. The remaining battalions will move into the new alignment by column, column of double-companies, quarter column, or the flank march in fours.

CHANGE FRONT  
TO THE LEFT  
(OR RIGHT), ON  
N°—COMPANY  
OF—REGIMENT,  
THE WHOLE IN  
ECHELON.

If the brigadier directs that the whole shall move in echelon, the commanders will wheel their battalions into echelon, and the new line will be formed as described in Part III., S. 32, the adjutants marking the alignment for their respective battalions.

—

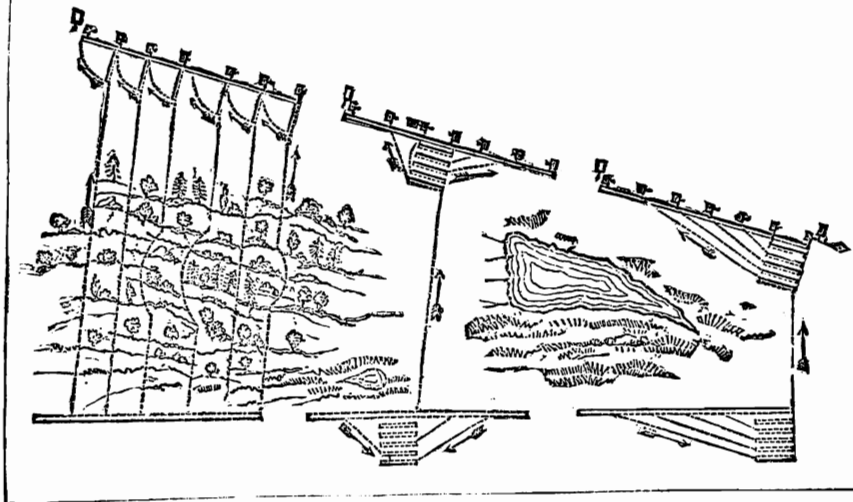
*S. 17. A Brigade in Line changing Position.—*  
Plate XXXIX.

CHANGE POSI-  
TION TO THE  
FRONT, RIGHT  
(OR LEFT)  
FORWARD, OR  
CHANGE POSI-  
TION TO THE  
REAR, RIGHT (OR  
LEFT) BACK: BY  
COLUMNS OF  
DOUBLE-COM-  
PANIES,  
COLUMNS, OR  
QUARTER  
COLUMNS; OR  
BY FOURS.

The mounted points having been placed, and all preparatory interior movements of battalions completed, on the brigade signal, each battalion will proceed direct to its new position, and will deploy, or form line, as it arrives on the ground it is to occupy. Or the battalions may be halted on reaching their several positions, and be deployed, or wheeled into line, simultaneously, on the signal from the brigadier.

Should no formation be specified by the brigadier, each commanding officer will move his battalion into position in such formation as will best suit the ground (See Plate XXXIX.)

—

**PLATE XXXIX.****A BRIGADE IN LINE CHANGING POSITION.**

.....

## DEPLOYMENTS.

*S. 18. A Brigade in Line, or Mass, of Quarter Columns deploying into Line.*

DEPLOY ON THE  
—REGIMENT,  
WHICH WILL  
DEPLOY TO THE  
RIGHT (OR LEFT)  
OR OUTWARDS,—  
COMPANIES TO  
THE RIGHT.

1. The brigade in line of quarter columns may deploy on any named battalion. The brigade caution having been given, the commander of the named battalion will give his battalion caution as laid down in Part III., S. 29. If the deployment is to one flank, a major will mark the point of appui and the adjutant the distant point. If the deployment is to both flanks, the junior major will mark the left of the battalion and the adjutant the right, the senior major marking the point of appui. The companies of the battalion of formation, except the front company, and the remaining battalions, will be ordered to form fours, as required by the commanders.

*Quick—March.*

On the signal from the brigadier, the commanders will give the words *Quick—March*, upon which the battalion of formation will deploy as described in Part III., S. 29; the other battalions will move by the flank march of fours, and deploy when at the proper interval from the preceding battalion, which, as usual, will be marked by a marker of the inner company. The inner flank company of each battalion will be halted and fronted, on a caution from the commanding officer: the remaining companies will be led up into line by the directing guides, and halted by the captains as usual.

L

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

S. 19. *A Brigade in Mass of Quarter Columns changing Position at Deploying Interval, and Deploying into Line.*—Plate XL.

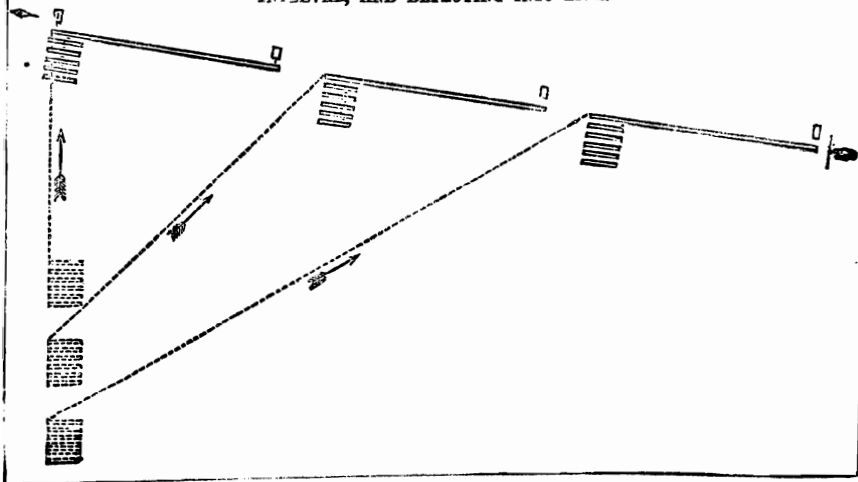
ON DETACHED  
POINTS,  
DEPLOY  
INTO LINE  
OF COLUMNS  
AT DEPLOYING  
INTERVAL,  
TO THE RIGHT  
(LEFT, OR  
OUTWARDS.)

In this movement the leading battalion will march to its place in the new line, and will at once give a base and distant point ; the remaining battalions will form on their markers independently. The brigade-major will place himself at the point of appui, and will cover the points of the battalion of formation in the required direction ; the adjutants of the other battalions will move out to mark the alignment for their respective battalions in the usual manner ; the commanders will lead their battalions to their places in the new alignment by the shortest lines.

The battalions may be ordered to deploy into line in succession, as they come up to their places in the new alignment, or simultaneously, after the line of columns is completed.

## PLATE XL

A BRIGADE IN MASS OF QUARTER COLUMNS CHANGING POSITION AT DEPLOYING  
INTERVAL, AND DEPLOYING INTO LINE.







## THE FLANK MARCH IN FOURS.

*S. 20. The General Application of the Flank March in Fours to the Advance of a Brigade.*

The principles laid down in Part III., S. 20, may frequently be adopted with great advantage in the movements of a brigade, especially where the advance of parts of the line is likely to be interrupted by obstacles. In this movement, a battalion of direction must be named as usual, and a company of that battalion will also be named, by which the rest will march. The battalion least likely to be interrupted by obstacles should be selected to direct. If a single battalion in the brigade has to close to quarter column distance, its full interval in the line must be kept by its mounted officers, in the same manner as in line of columns at deploying interval. The direction of the advance may be changed, by altering the direction of the regulating company, the remaining companies and battalions conforming. During this movement, the companies may at any moment form to the front into line, or battalions may form square.

---

**MOVEMENTS OF DIVISIONS OR LARGER BODIES.***S. 21. Application of Brigade Drill to Divisions, or larger Bodies.*

1. In the explanations contained in the preceding Sections, reference has only been made to a brigade, but the same principles are equally applicable to the manœuvres of divisions or larger bodies, which are performed simply by a succession of brigade movements.

2. The orders of the general commanding a division or line will usually be conveyed to the brigadiers by staff officers: if the whole body is in mass, the general may give his own cautions.

3. In all movements, a brigade must move under the direction of its own brigadier, as a battalion moves under the direction of its own commander. When deploying from mass into line of columns, each brigade will move across in mass (as far as possible by the diagonal march) to the alignment, and will then deploy by command of its brigadier. When a line of columns changes front, each brigade will move independently, on the shortest lines, to its new position; in the same manner that a battalion moves in a change of front in brigade,

---

## SECOND LINES.

## GENERAL RULES.

## I.

*Formation.*—Second lines are usually composed of columns or quarter columns of battalions at deploying interval.

## II.

*Regulating Column.*—Second lines will be directed by the column in rear of the battalion of direction of the first line. The remaining columns of the second line will keep their deploying intervals from the regulating battalion.

## III.

*Distance.*—The distance between lines should be sufficient to prevent any liability to disorder by the sudden retreat of the first line ; it should, in general, be equal to the front of two battalions.

## IV.

*Movements of both Lines to correspond.*—The second line must correspond with the movements of the first, covering the intervals. If the first line makes a change of front, the second line must make a corresponding change, and form parallel to it, on a point placed perpendicularly in rear of the point of appui of the first line.

## V.

*Relieving Front Line.*—When the second line is required to relieve the first, it will be deployed, and the movement performed as described in Part III., S. 8.

---

## POSITION OF ARTILLERY.

*S. 22. Position of a Battery of Artillery, when moving with a Brigade.*

The usual position of a battery of artillery, when in line, is on the right, with an interval of  $22\frac{1}{2}$  yards,  $28\frac{1}{2}$  yards, or  $34\frac{1}{2}$  yards, according to the number of horses in the guns, whether four, six, or eight.

When the battalions are in quarter columns, the battery will be on a flank, as ordered, at a distance equal to the depth of the strongest column in rear of the alignment, unless they are formed for inspection, or review, in which case they will be dressed with the leaders' heads on the alignment. In echelon the battery will be on a flank.

When squares are formed in echelon, and the battery is brought into action, the muzzles of the guns should be in line with the rear of the rear square.

N.B.—A battery should on all occasions keep its full interval, if possible.

It is the duty of the commander of the artillery to keep his battery so well in hand that he may never interfere with deployments, or other movements of the brigade.

Should skirmishers be in front of the battery, and be obliged to retire, they should clear the front of the guns to both flanks, and remain with them as long as they continue in action.

Should the battery be detached from the brigade, a sufficient escort should accompany it ; the escort to be on either flank of the battery.

---

## FIELD MANŒUVRES.

Manœuvres of troops in the field represent the application of the principles acquired at drill.

Officers commanding brigades, or larger bodies, should make a marked difference between parades for drill and those for field manœuvre. In the former, great accuracy should be insisted on ; in the latter, the delay, and fatigue to the men, caused by minutely dressing lines and correcting intervals, should be avoided. Tactics should be studied rather than drill, accidents of ground rather than mere precision.

Exactitude should never be permitted to impede the execution of a movement when rapidity is essential ; nor should too rigid an observance of the regulated battalion intervals be allowed to destroy the elasticity of movement for which those intervals provide. Accuracy of alignment should unhesitatingly be sacrificed where configuration of ground can advantageously be followed in the disposition of troops.

A general should place himself in such a position as will best enable him effectively to handle the force under his command ; and his orders should be circulated from that point.

---

## PART V.

## SHELTER-TRENCH AND PIT EXERCISE.

## GENERAL RULES.

## I.

*Shelter for Troops.*—Taking into consideration the long range, extreme accuracy, and great rapidity of fire of the rifled guns and small arms now in use, it may be desirable to shelter the troops as much as possible from unnecessary exposure, provided this can be done without harassing the men.

## II.

*Advantage of Cover.*—It is self-evident that troops behind cover must have a considerable advantage over an enemy advancing, unprotected, against them. In many cases the features of the ground will be such as to give natural cover to the troops; but it may often be necessary to make artificial cover.

## III.

*When Cover should be made.*—It is impossible to lay down the exact circumstances under which it would be necessary to shelter troops by means of artificial cover; as heretofore, an inferior force may have to strengthen its position by intrenchments, which might even be such as would more properly come under the head of field works; but in the present day it will doubtless also be advisable to provide hasty and temporary shelter for troops, even when in line of battle and prepared to act on the offensive; with this view the trenches should not offer any obstacle to the advance of the troops posted in them.

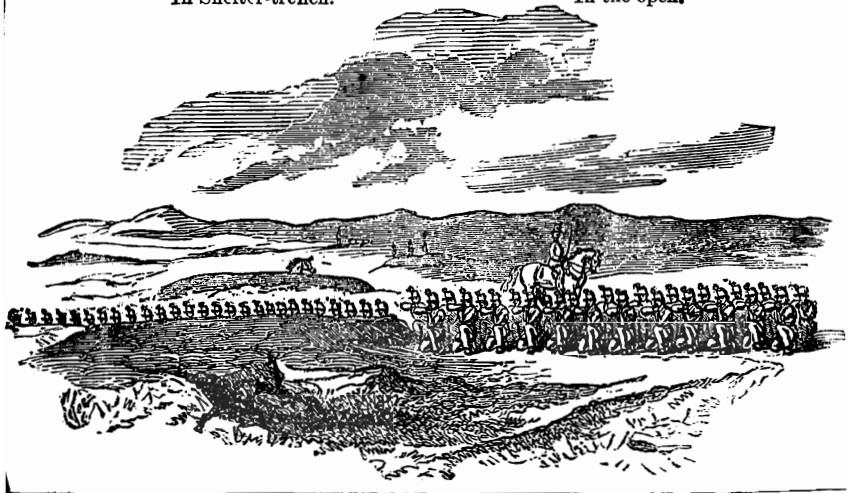
**FILTER-TRENCH EXERCISE**

## PLATE XLI.

LINE IN ACTION: BOTH RANKS KNEELING.

In Shelter-trench.

In the open.





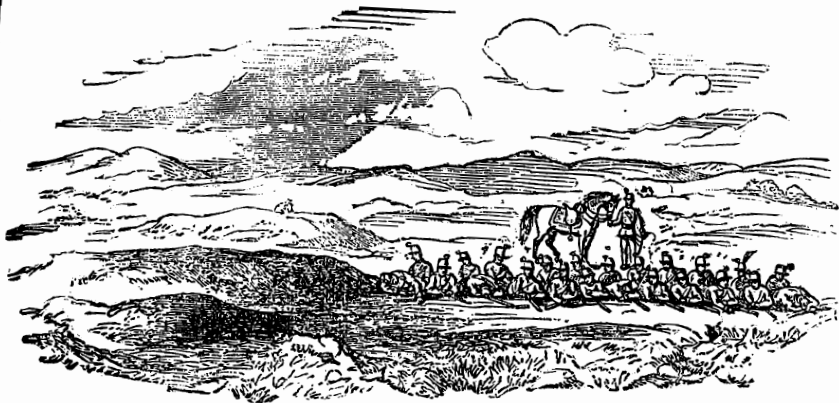


## PLATE XLII.

LINE UNDER FIRE: MEN LYING DOWN.

In Shelter-trench.

In the open.



## IV.

*Amount of Cover necessary.*—A very slight earthen parapet is sufficient to protect men in a great measure from the effects of shrapnel and rifle bullets, besides screening them from view, which in itself is of great advantage. From the latest experiments it has been ascertained that the penetration of rifle balls into newly excavated earth is about 12 inches at 220 yards, and only 21 inches at a range of 10 yards.

## V.

*Shelter-trenches.*—In the shelter-trench and pit adopted into the service, cover is obtained with very little labour, and the trench fulfils the indispensable condition of not offering any impediment to the advance of the troops who occupy it, when they are required to act on the offensive. It must be distinctly impressed upon the men that the object of these shelter-trenches is merely to afford cover from the fire of the enemy, until the moment arrives for advancing against them. The men should be exercised in throwing up these shelter-trenches and shelter-pits, when practicable.

## VI.

*Shelter for Mounted Officers' Horses.*—Occasionally a battalion might be required to cover itself in shelter-trenches, in a situation where natural cover for the mounted officers' horses could not be obtained within a reasonable distance of the battalion; it is therefore necessary to exercise the men in creating cover for the horses, as without it a battalion could not be considered to be properly covered.

## VII.

*Selection of positions for Shelter-trenches.*—Officers and non-commissioned officers should be capable of quickly selecting the most suitable positions for shelter-trenches.

### S. 1. *Issuing Tools to a Battalion.*

A battalion that is to cover itself in shelter-trenches should be provided with tools in the proportion of one to each complete file ; the right files should have shovels, the left files picks. The tools should, in the first instance, be issued to the rear ranks, to obviate the possibility of a blank file taking one up.

1. *When the Tools are laid out.*—The battalion will be formed up in quarter column on one flank of the tools, which are to be laid out, a shovel and a pick alternately, in rows corresponding with the number of companies, and of the files in them : the tool on the right of each row to be a shovel. The intervals between the tools to be two feet (the space allowed for a man in the ranks), and the distances between the rows six paces.

REAR RANKS, SLING—ARMS. LEFT (OR RIGHT) —TURN.	}	The commanding officer will order the rear ranks to sling arms, and to turn towards the tools ; the guides on the named flank will take charge of, and move with the rear ranks.
FILE ON TOOLS. QUICK—MARCH.	}	On the words FILE ON TOOLS, the marker on the flank towards which the men turn, will move out and place himself on the furthest flank of the row of tools for his company. On the word MARCH, the rear ranks will step off, file in rear of their tools, and be halted and fronted by the guides. The guides will see that each man places himself a little to the left of the handle of the tool he is to take up, and that the odd numbers are in rear of shovels, the even numbers in rear of picks.
No --, Halt— Front.	}	

## SHELTER-TRENCH EXERCISE.

No —, *Take up—Tools.* } The guides will then give the command *Take up Tools*, when each man will advance the right foot a short pace, stoop down, and, having taken up his shovel, or pick, in his right hand, will come to attention, holding it at the trail, iron to the front and vertical.

*Right (or Left)* }  
 —*Turn. Quick—* }  
*March. Halt,* } The guides will then march the rear  
*Front—Dress.* } ranks into their position in the battalion.

2. *When the Tools are in heaps.*—If there be not time to lay out the tools, they may be left in heaps, one for each company: the rear ranks will form fours left (or right), and receive their tools while filing past their heaps, the odd numbers passing in front and the even numbers in rear of the heaps: a marker standing at the heap will hand each of the odd numbers a shovel, and a second marker will give each of the even numbers a pick. After the men have passed the heap, they will wheel to the left (or right) about, form single rank, and on reaching the left (or right) of their company, left (or right) form, covering their front rank.

---

### S. 2. *A Battalion marching with Tools.*

In marching, the tools are carried in the right hand at the trail, iron to the front and vertical.

FRONT RANK }  
 SLING—ARMS } During a march, the tools should be  
 TRANSFER— } transferred from one rank to another  
 TOOLS. } from time to time, by word of command;  
 REAR RANK, } this may be done without halting.  
 TRAIL—ARMS. }

---

S. 3. *A Battalion forming Shelter-trenches.*—Plates  
XLI.—XLIV.

On approaching the position of the proposed shelter-trench, the rear rank must have the tools, and the battalion, if in column, must be deployed.

If the battalion be advancing in line, the rear rank will be halted twelve paces in rear of the proposed trench, the front rank continuing to advance until it is in a good position for covering the working party.

If the battalion be retiring in line, the front rank will be halted and fronted, with a similar object, before it reaches the proposed trench; the rear rank continuing to retire until it is twelve paces in rear of the proposed trench.

A guide and two serjeants will remain with the working rank of each company; the captain retaining charge of both ranks.

PREPARE TO  
FORM SHELTER  
—TRENCHES.

*Steady.*

REAR RANK,  
GROUND TOOLS.  
ORDER—ARMS,  
FOURS—DEEP,  
PILE AND PRE-  
PARE FOR WORK,

On the word TRENCHES, the marker on the right of the rear rank of each company, and the marker on the left of the line, will advance to the position of the proposed trench, recover arms, turn to the directing flank, and be placed by a major in the line of the proposed trench. The trench for a battalion should be a continuous line, but it need not be straight; this being determined by the features of the ground.

The markers having been placed in position, the major will give the word *Steady.*

On the words GROUND—TOOLS, each man will advance his right foot a short pace, and lay down his tool in the same position as it was when he took it up. The rear rank will then order arms, and form two deep, the even numbers stepping

**SHELTER-TRENCH EXERCISE.**

2010MM004

## PLATE XLIII.

PLAN OF SHELTER-TRENCH FOR A COMPANY OF THIRTY FILES.

Scale of 10 feet to an inch.



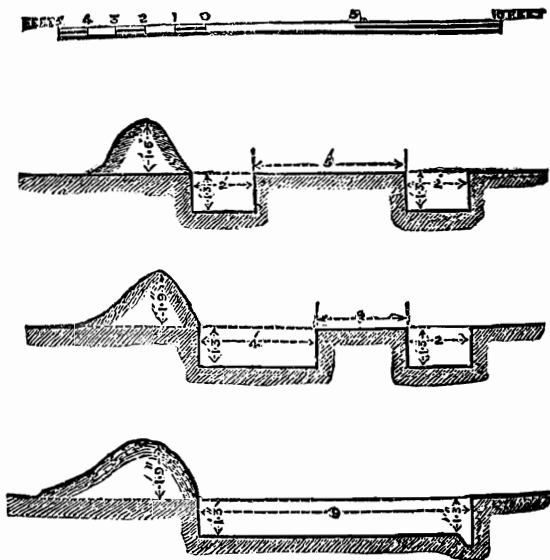




## PLATE XLIV.

## CROSS SECTIONS OF SHELTER-TRENCHES.

Scale of 5 feet to an inch.



(WITHOUT ACCOUTREMENTS OR TUNICS).

*Pile—Arms.*

*Stand—Clear.*

(*Take off Accoutrements and Tunics.*)

*Left (or Right)—Turn.*

*Odd Numbers, 1 to—, From the Right, at Double-Arm Interval—Extend.*

*Trench Men, Take up—Tools. Use on the Extended Files. Double—March.*

in rear of the odd. The guide will pass down the line, and indicate the fours who are to pile arms together. The men will then, if ordered, take off their accoutrements and tunics; having done which, they will turn to the front, still remaining two deep.

As soon as the major has given the word *Steady*, the guide will at once extend from the right, at double-arm interval, sufficient odd numbers of the rear rank (about three-quarters) to occupy the portion to be dug for his company, as indicated by the markers, who will give points as directed in Part II., Gen. Rule XV., No. 1. The guide will see that his men are properly placed in the alignment, and that they occupy the whole length of trench necessary for his company; breaking off, or adding on, a man if requisite.

The men will invariably work in pairs; and on the word of command *Take up Tools*, the even numbers of the rear rank, who are to work with the odd numbers who have been extended, will take up the tools for the pair, one in each hand. The guide will move them forward and cause each man to drive his pick into the ground by the left heel of his comrade, to mark the left of the task that the pair will have to excavate. He will then direct his men to mark the front cutting line of the trench: the portion for the

Commence—  
Work.

two men will be about  $5\frac{1}{2}$  feet along the front, and the trench is to be made 2 feet wide and  $1\frac{1}{4}$  feet deep ; this space is too limited for two untrained men to work in together, therefore only one will work at a time, the man not at work standing one pace in rear.

The men will commence by digging the left of their portion, and will then extend the excavation to the right. The earth thrown out should be formed into a parapet from  $1\frac{1}{4}$  to  $1\frac{3}{4}$  feet high ; any turf, clods, &c., being used as a kind of revetment to its interior (or rear) slope : there should not be any berm, that is, the parapet should be close to the trench. To prevent accidents, the men must be careful not to let any part of their bodies extend into the portion of ground allotted to another pair ; and also, when using their picks, to work straight to the front or rear.

As soon as all the companies have commenced work, the major will give a second word *Steady*, when the markers will break off and assist in superintending the working party.

When the trench has been completed to the width of 2 feet and depth of  $1\frac{1}{4}$  feet, it will afford cover for one rank kneeling in it, and one lying in rear, and may then be considered available ; but it should, if possible, be widened to 4 feet, and will then afford cover inside the trench for both ranks kneeling.

No—,  
Rear Rank,  
Fall in.  
Ground—Tools.  
Put on  
Accoutrements.

As soon as each pair have completed their trench to the width of 2 feet, they will at once proceed to widen it 2 feet more to the rear ; having done which, they will sit or lie down in it.

As soon as all the men of a company (including those employed on the trenches for the supernumerary rank, as hereafter described) have completed their work, the guide will cause the rear rank to fall in, in single rank, in front of their arms : every man having in his right hand the tool that was issued to him. The guide will order the tools to be grounded, and the men to put on their accoutrements.

Fall in.  
Stand to.  
Unpile—Arms.  
Under cover  
in Trench.  
Quick—March.

The guide will order men to fall in, two deep, on their arms ; after unpling their arms, the men will come to the front in single rank ; after which they will be moved up to the trench, and either sit in it or on its reverse (or rear side).

*Supernumeraries' Trenches.*—Only about three-quarters of the rear rank have been detailed for the trench above described : the remainder will be detailed by the guide, as soon as the men have commenced work at the main trench, to make the trenches for the supernumeraries. The number of men available for these trenches will vary with the strength of the company ; if there be only two men, the guide will have a trench 5 feet (two paces) long made in rear of the centre of the company ; if there be four (or more) men, he will have two (or more) such trenches dug, one in rear of the centre of each half-company : these trenches will always be parallel to the main trench, and

seven feet (say three paces) in rear of it, the distance being measured between the front cutting lines of each: the trenches for the supernumeraries will always be 2 feet wide and  $1\frac{1}{4}$  feet deep, but without any parapet, the earth being scattered. When each pair of men have completed their first five feet they will proceed at once to make another length of five feet; it would be an advantage if the supernumeraries' trench extended along the whole rear of the company, but its width need never be more than two feet. When each pair of men have made ten feet of supernumerary trench (which they should have done by the time the main trench is widened to four feet), they will sit or lie down in it, until ordered to fall in with the rest of the men.

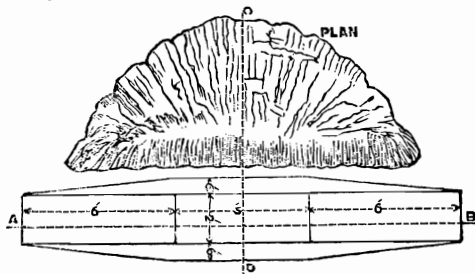
*Charger-Pits.*—Plate XLV.—Occasionally there might not be any natural cover behind which to conceal the mounted officers' horses; in such cases, they might be covered in charger-pits of the dimensions given in the plate; such pits shall be about 20 paces in rear of the main trench, and parallel to it. Four men are required for each pit; and should complete it by the time the main trench has been widened to four feet. The part of the charger-pit where the horse has to stand will be 3 feet deep and 5 feet long with a ramp at each end of 6 feet, making the total length at top 17 feet; the width of the pit to be 2 feet at bottom, and 3 feet at top, the ramp to be 2 feet wide at bottom; the earth excavated to be formed into a parapet extending about 3 feet beyond the pit itself, that is, the parapet should be about 11 feet long; it should be made 3 feet high, the interior slope being revetted with any turf or clods that can be procured; a berm of about 6 inches should be left; the four men will not all be able to work in the pit at the same time, those who cannot, will revet and also increase the parapet from any place in

## SHELTER-TRENCH EXERCISE.

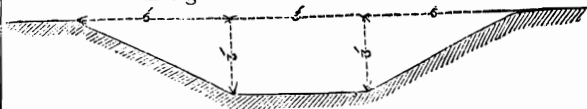
## PLATE XLV.

## CHARGER-PIT.

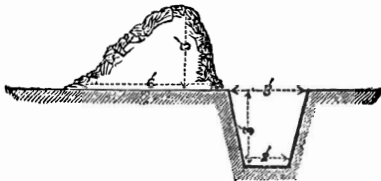
Scale of 5 feet to an inch.



Longitudinal section on A B.



Cross section on C D.







front where earth can be readily obtained. The men having finished the charger-pit, will sit or lie down in it, until the guide gives the words *Rear rank, Fall in*, when they will fall in with the rest of the men.

TAKE POST  
IN TRENCH.  
FRONT RANK,  
RIGHT ABOUT  
—TURN.  
QUICK—MARCH.

*Taking Post in Trench.*—When the whole of the main trench has been completed, the front rank will take post in it by order from the commanding officer; they should jump over the parapet (so as not to damage it); and then, without word of command, come to the front again, close to the front of the trench. On the words TAKE POST IN TRENCH, the rear ranks will rise and step out one pace in rear of the trench, to allow room for the front rank to jump in; when the latter are in, and fronted, the rear rank will step into the trench again and cover their front rank men.

UNDER COVER.

The supernumeraries will stand in the trenches made for them, as nearly as possible in their proper relative positions. On the words UNDER COVER, the front and rear ranks will kneel and conceal themselves in the front trench, and the supernumeraries in their trenches.

Fire will be opened as may be directed; after which the orders will be given, CEASE—FIRE. ORDER—ARMS. THE LINE WILL ADVANCE. QUICK—MARCH. MARK—TIME (to allow the rear rank to close up). FIX—BAYONETS. FORWARD. PREPARE TO—CHARGE. CHARGE. BATTALION—HALT.

N.B. The shelter-trench exercise is invariably to conclude with a charge.

TAKE POST IN  
TRENCH. FRONT  
RANK, RIGHT  
ABOUT—TURN.  
QUICK—MARCH.

*No.—, Rear rank  
Fall in. Ground  
—Tools. Put  
on accoutrements  
Fall in. Stand to  
Unpile—Arms.  
Take Post behind  
Front Rank.  
Quick—March.*

*Taking Post in trench before completion.*—At any period of the operation of forming shelter-trenches after the 2-foot trench has been made, the commanding-officer may order the battalion to TAKE POST IN TRENCH. When this is ordered, the guides will at once direct their rear ranks to fall in in single rank in front of their arms, and ground the tools there; the men will then put on their accoutrements and fall in on their arms; having unpiled, they will take post behind their front rank men, in the trench if there be room, but, if not, lying down in rear of it.

If the trench is to be occupied for any length of time, it should be widened out to the full width of 7 feet; which will allow the men to lie down in it; this additional work should be done by the front rank.

The mode of proceeding would be as follows: the rear rank being in the trench, and the front rank drawn up in front, to cover them.

THE FRONT RANK  
WILL RELIEVE  
THE REAR RANK.  
FOURS—DEEP.  
REAR RANK,  
QUICK—MARCH.  
HALT. FRONT  
RANK, RIGHT  
ABOUT—TURN.  
QUICK—MARCH.

On the words, THE FRONT RANK WILL RELIEVE THE REAR RANK, the rear rank will stand up in the trench. Having formed two deep, the rear rank will pass through the intervals of the front rank by the left, and be halted. The front rank will then be retired, and halted 12 paces in rear of the trench.

PILE AND  
PREPARE FOR  
WORK.

On the words PILE AND PREPARE FOR WORK, the guides will proceed as before when setting the rear rank to work. When the trench has been widened to

7 feet, if there be time, the men should be directed to clear a berm of about 6 inches, to assist the men in getting out of the trench. The men not required for the main trench will lengthen the trenches for the supernumeraries, or cut sods for loopholes, or collect branches to plant on the parapet for a screen. They might also, if the trench be thrown up on grass, cut turfs to cover the parapet, so that it may not be distinguishable at a distance.

#### S. 4. A Battalion returning Tools.

When the tools have to be returned, the battalion, on arriving at the place of deposit, will be formed in quarter column.

FRONT (or REAR) }  
RANK, RIGHT (or } The rank carrying the tools will be  
LEFT) TURN. } ordered to turn to the right or left, the  
guide moving with it.

PREPARE TO }  
DEPOSIT } On the words PREPARE TO DEPOSIT  
TOOLS. } TOOLS, the markers on that flank will  
QUICK-MARCH. } move out and indicate the place where  
the inner flanks of the ranks are to rest,  
which should be 4 paces clear of the  
battalion.

No —, Halt, }  
Front—Dress. } When the rank has cleared its marker,  
Ground-Tools. } the guide will order it to halt, front, and  
Shoulder— } ground tools. When the guide has seen  
Arms. Left } that the tools are correct, he will march  
(or Right)— } the rank back into its position in column.  
Turn. Halt— } It will be advisable that the tools should  
Front, Dress. } be deposited by the rear ranks which  
originally took them up.

*S. 5. Execution of Shelter-trenches for a Battalion, by a small Working Party.*

On many occasions the shelter-trenches for a battalion would be made by a small working party specially detailed for the purpose : in calculating the strength of the working party, it should be borne in mind that the excavation of one cubic yard (27 cubic feet) of earth per hour is not too much to expect from an unskilled labourer, such work being continued for a period of eight hours. The mode of proceeding would be the same as before described ; except that each man would be provided with a pick and a shovel (the former to be carried in his left hand, and the latter in his right), and would have a larger portion to excavate, varying according to the nature of the soil, and the time in which the work is to be done.

In four hours, a man should be expected to execute the following amounts :—

From 8 to 16 paces of supernumeraries trench.

From 4 to 8 paces of main trench, if 4 feet wide.

From 2 to 4 paces of main trench, if 7 feet wide.

One or two men should excavate a charger-pit in the same time.

When men are to be extended at greater intervals than double arm, the best mode is that adopted for extension on parallels : the men will be formed in single rank in parties of 25, and marched in column to the rear of one flank of the line on which they are to be extended ; if the extension is to be to the left, the words of command will be,—BY SUCCESSIVE COMPANIES, RIGHT—TURN, LEFT—WHEEL, and, when the leading man is one pace in rear of the line, LEFT—WHEEL, RIGHT—FORM, IN EXTENDED ORDER, AT (say 4) PACES INTERVAL. The officer should pace along the line, and halt at every four paces, when the man whose portion he had paced should, with his left hand, drive his

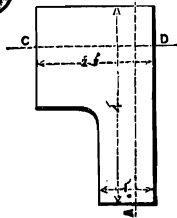
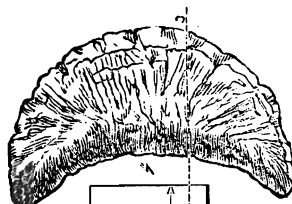
**SHELTER-TRENCH EXERCISE.**

## PLATE XLVI.

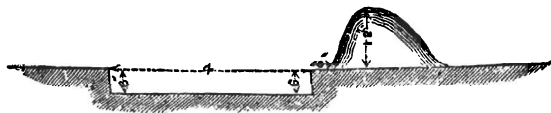
## SHELTER PIT.

Scale of  $2\frac{1}{2}$  ft. to an inch.

Plan.



Longitudinal section on A B.



Cross section on C D.

pick into the ground at the line, to mark the left of his task ; place his shovel on the ground in rear of the line, blade to the left ; and lie down until ordered to commence work. A non-commissioned officer should follow the officer for the purpose of assisting to place the men. If the party be armed, each man will place his rifle, etc., on the ground three paces in rear of the left of his task.

*S. 6. Making Shelter-pits.*—Plate XLVI.

Men skirmishing should be able to make cover for themselves ; if tools be provided as proposed, each group of fours will have one pick and one shovel. In most instances the men will only have to improve natural cover, but it may be necessary to dig small pits which may be called shelter-pits in contradistinction to the larger pits required at sieges, etc., which are called rifle-pits. Each shelter-pit should be for one man only. A plan and section of a shelter-pit, which can be made in about five minutes, are given in Plate XLVI. ; the depth need not be uniform, but should be about 10 inches where the man's body will be, and about 6 inches in the other parts. After a little practice, each man will soon ascertain the exact form of pit that suits him.

*S. 7. Filling-in Trenches, etc.*

It is recommended that the trenches should never be filled in on the day on which they have been made, nor by the men as a battalion ; but that a fatigue party should be sent out for the special purpose of levelling them. Defaulters might be employed on this duty. In one hour, a man should be expected to fill in the following lengths :—

Eight paces of supernumeraries trench.

Four paces of main trench, 4 feet wide.

Two paces of main trench, 7 feet wide.

Two men should fill in a charger pit in one hour.

## PART VI.

---

 ADVANCED AND REAR GUARDS,  
 PIQUETS, AND OUTPOSTS.
 

---

## ADVANCED AND REAR GUARDS.

S. 1. *Advanced Guards.*

1. *General Intention of Advanced Guards.*—Advanced guards are formed in front of a column, or of the columns of an army, for the purpose of covering and concealing the movements and formation of the main body; feeling the way through a country; and gaining intelligence of the enemy, and giving timely notice of his vicinity or approach, in order that the main body may have time to prepare for making, or repelling, an attack.

2. *The Strength and Composition of Advanced Guards.*—Advanced guards are sometimes pushed a considerable distance in advance of the column, for the purpose of seizing a post, or of anticipating the enemy on some important point; their strength and composition must, therefore, depend upon the distance they are required to precede the main body, the object contemplated, the nature of the country, and a variety of other circumstances which can only be appreciated on the spot.

3. *Formation of an Advanced Guard on a Road.*—When a column is marching along a road, the advanced guard will be composed of one or more companies, divided as described in Part III., S. 50. The detached files must



carefully examine all houses, enclosures, &c., within their reach ; but should more distant objects present themselves, patrols must be detached from the advanced party for their particular examination.

A signal party should, if possible, accompany the advance guard or patrol for the purpose of sending back, by means of the Army and Navy Signal Code, immediate intelligence of the presence of an enemy, and information as to his strength, position, and movements.

4. *Precise Rules cannot be laid down.*—No absolute rules can be laid down for the conduct of an advanced guard, in the various circumstances of falling in with an enemy : the officer in command of the guard must, therefore, depend on his own intelligence, allowing nothing to escape his personal observation. The following directions, however, will be found useful in cases of the more frequent occurrence.

5. *Approaching a Village.*—An advanced guard, on approaching a village, must proceed with great caution, if feeling for an enemy. The advanced party and the support on the road must be halted at a considerable distance from the village, while strong flanking parties are sent round the outskirts to threaten the rear. The corporal's party on the road may then move on, in single files, with a considerable interval between them, followed by the rest of the advanced party, as may be deemed expedient ; the support will move forward when it has been ascertained that the place is not in the occupation of the enemy.

6. *Entering a Defile or Hollow-way.*—The head of an advanced guard must never enter a defile, or hollow-way, without previously occupying the heights on either side by flanking parties. When the heights are thus crowned, the advanced section on the road will send on a single file

which will be followed by others in succession, near enough to keep the preceding one in view, the flanking parties on the heights continuing to precede the centre until the defile is passed, when they will gradually fall back to their former stations, and the whole will move forward in the original formation.

7. *The Flanks of all objects to be turned*.—As a rule, the flanks of every object capable of affording concealment to an enemy, will be turned, and the rear threatened before the front is approached ; by this means the enemy will generally be discovered, and dislodged without loss.

8. *Ascending a Hill*.—On coming to a hill, the flank files will first move in both directions round the base ; a leading file will then ascend, creeping up when near the top so as not to show itself upon the summit, but making its observations from behind the brow : it will then signal to the rest of the party whether the enemy is in sight or not.

9. *Woods, Ravines, Morasses, &c., to be examined*.—All woods, ravines, morasses, &c., must be carefully examined before they are passed, lest an enemy should be left concealed in them, and the advanced guard cut off.

10. *Patroles*.—All houses, copses, enclosures, &c., that are too distant to be inspected by the advanced guard, should be examined by patroles, which may consist of a subaltern's party, a serjeant and twelve, or a corporal and six, according to circumstances ; the rules laid down for advanced guards apply equally to patroles.

11. *A good view of the country to be obtained*.—All heights from which a view of the surrounding country can be obtained, should be ascended by the advanced files of the guard, or by the patroles. The top of a church, a tower, a mound, &c., afford good positions for observations. The

men thus employed must take care that they are not seen by the enemy.

12. *Preconcerted Signals.*—The leading files of an advanced guard, or patrol, should be instructed to give immediate intelligence of the presence of an enemy, by some preconcerted signal. One man of the leading file holding up his cap on a rifle may signify that a small body of the enemy is in sight; both men so holding up their caps, that the enemy is near in force. A rifle held up horizontally, may signify that no enemy is in sight.

A signal party should, if possible, accompany the advance guard or patrol for the purpose of sending back, by means of the Army and Navy Signal Code, immediate intelligence of the presence of an enemy.

13. *Conduct in Case of Attack.*—If the front of an advanced guard formed on a road is attacked, the detached files will at once fall back on the advanced party; the commanding officer of the guard will then use his discretion in ordering the support to move up and reinforce the advanced party, or the latter to fall back on the support, according to the nature of the ground, the strength of the attacking force, and the distance he may be from the main body; remembering always that his principal duty is to give time for the column to prepare to receive the enemy, without unnecessarily exposing his own men. A patrol should never commit itself in action, if it can be avoided.

14. *Advanced Guards to be re-formed after dislodging the Enemy.*—No advanced guard or detached party of any kind, after carrying a post, should ever be permitted to advance in pursuit without re-forming. The men should re-form rapidly, and wait for further orders.

15. *Advanced Guards to be provided with Axes and Intrenching Tools.*—Every advanced guard should be provided with a proportion of axes and intrenching tools.

16. *Formation of an Advanced Guard on a Plain.*—An advanced guard, on a plain, is simply a line of skirmishers with a support, and, if far distant from the main body, with a reserve. When the leading files of an advanced guard on a road come out on a plain, they will halt and lie down; the flanking files will move up and lie down in line with them at their usual intervals of 100 yards. The remainder of the advanced party, as it comes up, will extend from its centre. The skirmishers thus formed will advance, correcting their intervals from the centre on the march; the support will follow the skirmishers. This formation will occasionally be found useful when the leading files have discovered an enemy, without having been themselves observed.

An advanced guard, thus extended, may resume its original formation by the leading files moving on, and the remainder halting till they have gained their proper distances, and then following in succession, the rest of the advanced party closing on its centre.

---

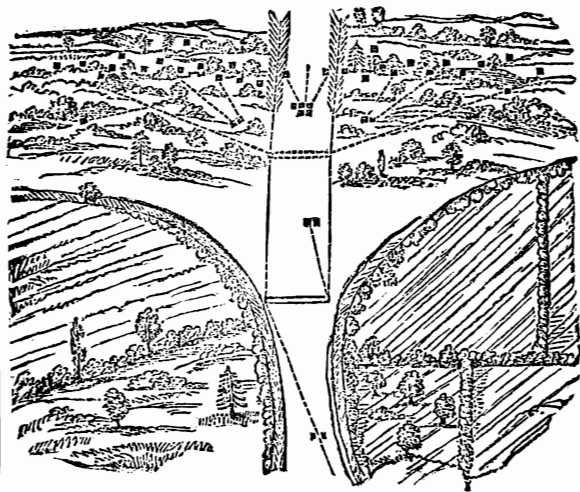
### S. 2. Rear Guards.

1. *General Intention of Rear Guards.*—A rear guard is an advanced guard reversed: it covers the retreating column from any sudden attack in the rear, and prevents the enemy from stealing round, and gaining the flanks of the main body; it should be kept closer to the main body than it is usual to keep an advanced guard. The prevention of straggling is also an important part of the duties of a rear guard.

2. *Preparations for Retreat are made in the Rear.*—All preparations for retreat, before the enemy, should be made in the rear. For example, a line, before falling back, will extend its skirmishers behind it, concealed from view as much as possible, and with supports, and reserves if neces-

## PLATE XLVII.

AN ADVANCED GUARD COMING OUT ON A PLAIN AND  
EXTENDING.



**312 PART VI.—ADVANCED AND REAR GUARDS, &c.**

sary, ready to sustain them; these become the rear guard. In many cases an intended retreat is concealed under a demonstration of attack; the retreat being effected, the troops so employed will naturally become the rear guard.

3. *Formation of Rear Guards.*—Rear guards will be formed as described in Part III., S. 54.

4. *Strength and Composition of a Rear Guard.*—The strength and composition of a rear guard can only be determined on the spot, according to the force and vicinity of the enemy, the nature of the country, and the degree of resistance that may probably be required, to give the column time to surmount any obstacles or difficulties in the route. The object being to secure the retreat from interruption or annoyance, resistance will generally cease when that end is gained; but, when the pursuit is close, every hedge-row, copse, or defile becomes a post, which a rear guard must defend with obstinacy to the last.

5. *Rear Guards to be well provided with Axes and Intrenching Tools.*—Every rear guard should be well provided with axes and intrenching tools, to enable it to block up defiles and bridges, to break up the road, and throw impediments in the way of a pursuing enemy.

6. *The Rear Guard to be informed of all Obstacles in the Route, and reinforced when necessary.*—When a retreating column meets with obstacles in its route, or has to pass a bridge or defile, an officer will be sent back to apprise the rear guard of the circumstance, in order that it may be prepared to hold the enemy in check, during the delay which must ensue; when hard pressed, it will generally be advisable to halt a detachment at any defile or bridge the column may have passed, to make preparations for defence, to protect the rear guard in passing over, and afterwards to assist it in maintaining the post as long as may be practicable or expedient. Posts of this description may often

be defended until dark, and thereby afford the greatest relief to the retreating column.

7. *Flanking Parties to be constantly on the alert.*—While the rear guard is disputing any point, the flanking parties must be particularly on the alert, to notice any attempt the enemy may make to turn its flanks, by a ford for example, when the stand is made at a bridge. It may always be presumed that a pursuing enemy will lose no opportunity of stealing round the flanks of his opponents.

## PIQUETS.

### S. 3. *Piquets and their Sentries.*

1. *Use of Piquets.*—All armies, or smaller bodies of troops, in camp or bivouac, must be protected by piquets.

2. *Description of Piquets.*—Piquets are of two descriptions, outlying and inlying, varying in strength according to circumstances. The outlying piquet is thrown forward a considerable distance in front of the camp or cantonments with connecting sentries, and having sentries advantageously posted for hearing and observing any alarm in front, and communicating, when necessary, by patrols with the advanced posts; the inlying piquet usually remains in camp accoutred, and ready to turn out, and support the outlying piquet at a moment's warning.

3. *Principal Duties of an Outlying Piquet.*—The principal duties of an outlying piquet are to secure the safety and repose of the camp, to prevent reconnoissances being made by the enemy, and to gain intelligence of his movements, and even of his intentions, by patrolling, by careful watching, by examining the peasantry of the country, and by all those indications with which every officer ought to



be familiar, such as the strengthening of the enemy's posts, unusual bustle or movement in his lines, the sound of troops or artillery on the march at night, the diminution or the increase of fires, &c., &c.

4. *How Piquet Duties are furnished.*—Piquets in the field may be taken by brigades, the different regiments furnishing one or more companies, as may be required, a field officer of the day being in charge of the whole; or an entire regiment may be employed on piquet duty under its own officers.

5. *Piquets to be extended as Skirmishers.*—Outlying piquets will be posted with a complete chain of double sentries in front, on the principle of skirmishers extended to cover a line. When they are posted near the main body, the piquets only will be necessary in rear of the line of sentries, but when distant, a reserve will also be required, and, if the line is of considerable extent, more than one reserve may be requisite. The post of the field officer of the day will usually be with the reserve.

6. *Piquets to be divided into Reliefs.*—In order that each piquet may be able to relieve its sentries periodically, it must be divided, when on duty, into three reliefs; one relief only will be extended on sentry, the other two will remain in support. Sentries should be relieved every hour during the night.

7. *Detached Parties.*—If the chain of sentries should be so far extended as to make it inconvenient to relieve them all from the piquet in support, one or two small parties, forming intermediate supports to the chain, and under the command of officers, or non-commissioned officers, may be detached to convenient situations for the purpose of furnishing the sentries. This principle may be extended at the discretion of the commander, so as to have each sentry supported at a distance of ten, twenty, or thirty paces in rear, by the group of four from which he is to be relieved,

one of whom will be a non-commissioned officer, or selected soldier, in charge. When thus closely observed and supported, a single instead of a double sentry will suffice.

8. *Piquet Sentries.*—Piquet sentries, except the connecting sentries between the front line and parties in rear, must be double, unless under the circumstances suggested in paragraph 7.

9. *Positions, and Conduct, of Day and Night Sentries.*—Piquet sentries by day should be placed on heights and in commanding positions, whence they may see all the country in their front without exposing themselves to view; but at night they must be placed lower down, so as to have the highest ground before them, and so be able to see any approaching party against the sky without being themselves discovered. By day, it is not necessary to leave more sentries on duty than are sufficient to watch thoroughly the country in their front; each sentry should be able to see the files on his right and left, as well as the intermediate country between them; at night, or in thick weather, a greater number will be required, and one man of each file should always remain on his post, looking out vigilantly to his front, while the other patrols to his right, till he comes up to the sentry next to him: in this manner they will alternately relieve each other. Sentries will also patrol to their front, to a distance of twenty or thirty yards.

When sentries hear people approaching them by night, they must challenge them, order them to halt, and allow only one person to advance until satisfied that they are friends. By day, sentries must not allow more than one stranger at a time to approach their posts on any pretence.

10. *Line of Sentries.*—In selecting the line for the chain of sentries, care must be taken not to extend it too much,—to post the men in the most advantageous situations for observing the roads and country in front, and to keep them

as much concealed from the view of the enemy as the nature of their duty will admit. It is very desirable that every elevated spot, which overlooks the communications in the rear, shall be taken within the chain of sentries ; but if this cannot be effected without extending the sentries too far, a party must be sent to occupy the height during the day, and care must be taken to support and ensure the retreat of this party if attacked. Sentries must be so placed, moreover, as to secure one another from being cut off, and at such distances as to prevent any enemy from passing unperceived between them during the night. Sentries should never be posted near any copse or cover from which a sudden rush might be made upon them ; but all woods, ravines, &c., in the neighbourhood of the post, must be watched, and occasionally visited by patrols, to prevent the enemy from assembling a body of troops, unobserved, in the vicinity.

11. *Flanks to be protected.* — The flanks of a line of piquet sentries should be thrown a little back, and if not protected by the nature of the country, a detached party under the command of an officer should be posted in the most favourable position to prevent the flank from being turned.

12. *Connecting Sentries.* — Communication should be kept up by means of single sentries, between the front line of sentries and the piquets ; also between the piquets and the reserve.

13. *Officers to examine Ground.* — Officers going out on piquet duty must examine all the country over which they pass on their way from the camp, and note favourable positions for disputing the ground in case they are driven in by the enemy.

14. *Posting a Piquet.* — When an officer in charge of a piquet arrives on the position he is to occupy, he will first

## 318 PART VI.—ADVANCED AND REAR GUARDS, &amp;c.

look to the immediate safety of his own party, and place sentries on its flanks and front : he will then send a file to the most elevated spot in the vicinity, to get a good view of the surrounding country, and will proceed himself, with a patrol, to examine all objects near him capable of concealing an enemy. Having thus secured himself from surprise, he will proceed to throw out his chain of sentries, and communicate with the posts or piquets on his right and left.

15. *When Piquets are attacked.*—When piquets are attacked, the same rule will be observed as in all other skirmishing ; the detached officers' parties will not run in on the main body, but will support the skirmishers ; when compelled to retire, they will, if possible, retreat on the flank of the main body, and thereby afford mutual support to each other. When a sentry is satisfied that the enemy is moving on to the attack, he should fire at once, at whatever range the enemy may be.

16. *An Officer to strengthen his Post.*—An officer ought to strengthen his post, when practicable, by constructing abattis, breastworks, &c. : when the defence of a bridge or ford is entrusted to him, he ought invariably to throw up something of the kind to protect his men, and impede the advance of the enemy. An officer ought not, however, without permission, to block up a main road with other materials than such as are easily removed.

17. *A Piquet must not shut itself up without Orders.*—A piquet ought not to shut itself up in a house, or an enclosure, with the intention of defending itself to the last extremity, unless particularly ordered to do so, or unless circumstances may render it necessary at the moment, for the preservation of the party, in the expectation of support.

18. *Under what Circumstances a Piquet shall retire.*—A piquet may with safety defend its front as long as its flanks are not attacked ; but as soon as the enemy attempts to surround the post, the piquet must begin to retire.

19. *Flags of Truce.*—On the approach of a flag of truce, one sentry will advance, and halt it at such distance as will prevent any of the party who compose it from overlooking the piquet posts. The other sentry will report the circumstance to the officer commanding the piquet, who will, according to his instructions, either detain the flag of truce at the outpost, until he has reported to the field officer of the day, or will forward the party blindfolded to the camp, under an escort. If the flag of truce is merely the bearer of a letter or parcel, the piquet officer must receive it, and instantly forward it to head-quarters. The flag of truce having taken a receipt, will be required forthwith to depart, and none of the piquet must be suffered to hold any conversation with this party.

20. *Precautions to be taken when Fires are allowed.*—When a piquet is permitted to have a fire, it should always be as much as possible concealed from observation; the alarm post of the piquet, in the event of an attack at night, should invariably be fixed at a short distance in the rear of the fire, so as to prevent the piquet from being seen, when drawn up, and to compel the enemy to expose himself while passing the fire, should he advance.

21. *Advanced Piquets to be under Arms an Hour before Daylight.*—Piquets will get under arms in the morning an hour before daylight; and if everything appears quiet in front, the officer will, as soon as he can discern objects distinctly, proceed to occupy the same posts that he held the day before; but he must previously send forward patrols to feel his way, and should any change be remarked in the enemy's posts or position, he will report it immediately to the field officer of the day.

22. *When advanced Piquets should be relieved.*—As attacks are most commonly made about daybreak, a desirable accession of force will be always obtained by relieving the piquets at that hour.

23. *Arrival of the Relief.*—When the new piquet has arrived, the officer commanding it will accompany the officer of the old piquet along the chain of posts, and this officer will give the relieving officer every information in his power relative to the position and strength of the enemy's posts.

24. *Duty of the Officer of the old Piquet.*—When the sentries are relieved, and the weather is sufficiently clear to ascertain that there is no indication of an attack, the officer who has been relieved will send a written report to the field officer of the day, fall back upon the reserve piquet, and march to camp in the same order as when he advanced; but if the advanced piquets should be attacked before he arrives in camp, he will instantly march to their support.

25. *Patrolling.*—Without patrolling, however active and alert the sentries, the service of the outpost never can be properly performed. The mode of conducting patrols, their strength, and the distance to which they may be sent, are all necessarily dependent on the ever-varying local circumstances in which piquets may be placed; but it may be laid down as a general rule, that, when near the enemy, a patrol should be sent out once between every relief during the night.

26. *Vigilance, Silence, and Circumspection indispensable in patrolling.*—Vigilance, silence, and circumspection must be strictly enjoined upon all patrols: no noise must on any account be made, and when anything is to be communicated, it should be done in a whisper.

It is not possible to lay down exact rules for conducting patrols in every case that may occur on service, but one or two of the most usual modes of carrying on this important duty may be briefly adverted to.

27. *Patrolling in front of the Line of Sentries.*—The patrole, on leaving the piquet, should, when practicable, communicate in the first instance with the next post upon the right (or left), and patrole cautiously along the whole front of the line of sentries, just near enough to see them, and, having communicated with the next post upon the left (or right), return again to the piquet by the rear of the chain. The sentries must not be thrown off their guard by the frequent appearance of these patroles, but be taught to expect an enemy in all who approach them: some preconcerted signal, or interchange of countersign in a low tone, should be used, and this should be changed at every relief.

28. *Patrolling when the Enemy's Posts are distant.*—Patroles must also be sent along the roads in the direction of the enemy's posts, to such distance as may be deemed expedient. These patroles must be preceded by feelers, intelligent men selected for that duty, whom no sound will escape. A patrole must above all things avoid unnecessary firing, or, in other words, giving false alarms: on hearing the approach of footsteps, the feelers should instantly fall back to the patrole; and should the sounds indicate the advance of a larger body than a patrole, one or two men should be sent back with all haste to inform the officer of the piquet, who will make immediate preparations for defence. The patrole will retire steadily, and unobserved, if possible, upon the piquet; but if perceived and overtaken by the enemy, an incessant fire must be maintained, in order to warn the camp that the enemy is coming on in force. If, however, the piquets know their duty, and are judiciously drawn up for the defence of the roads, it will be extremely difficult for an enemy, however strong, having failed in his plan for taking the advanced posts by surprise, to make head, under all the disadvantages of a night attack against men who know the ground, and whose plans have

## 322 PART VI.—ADVANCED AND REAR GUARDS, &amp;c.

been previously concerted for disputing those points in their line of retreat.

29. *Patroles to avoid exchanging Shots with the Enemy.*—On falling in with an enemy's patrole in advance of the chain of sentries, it will always be most prudent to retire at once without exchanging shots, which would only tend to harass and disturb the troops in the rear.

30. *A strong Patrole to be sent out just before Day-light.*—A strong patrole will always be sent some distance on towards the enemy's posts just before day-break ; this patrole must proceed with redoubled caution, for fear of falling in with the enemy's columns, waiting for daylight to attack.

31. *The principal Object of Piquets in case of Attack.*—In the event of an attack, the commander of a piquet must bear in mind that his great object is to gain sufficient time to enable the main body in his rear to get under arms and prepare for action. The points he is to dispute in falling back having been previously selected, few cases can occur in which it will not be possible to attain that end without endangering the safety of his piquet ; but in an extreme case, he must remember that it is his duty to sacrifice himself, rather than be driven in upon the main body, before it has had time to form.

32. *Outlying Piquets pay no Compliments.*—Outlying piquets pay no compliments, but when approached by a general officer, the field officer of the day, or by any armed party, they will fall in and stand to their arms.

**Sentries on out-post duty pay no compliments.**

---



## PART VII.

## MISCELLANEOUS SUBJECTS.

## INSPECTIONS OR REVIEWS.

*S. 1. Inspection or Review of a Battalion.*

*Formation*—The battalion will be drawn up in line at open order, as explained in Part III., S. 3, and a camp colour will be placed at 80 or 100 paces in front of its centre.

GENERAL  
SALUTE.  
PRESENT—  
ARMS.

ROYAL  
SALUTE.  
PRESENT—  
ARMS.  
SHOULDER—  
ARMS.

*Receiving the General.*—1. When the reviewing general arrives in front of the centre of the battalion, at a distance of about 50 or 60 paces, he will be received with a salute, the men presenting arms, the colours flying, the band playing, and the drums beating. The officers will recover swords with the first motion of the rifles, pause on the second motion, and with the third will come down to the salute as described in Part II., S. 9.

2. To members of the Royal Family, and persons entitled to that honour, the colours will be lowered.

3. On the word ARMS, the men will shoulder; the officers will recover swords with the first motion of the rifles, and carry swords with the second motion.

*Riding down the Ranks.*—The general, accompanied by the commanding officer of the regiment, will then ride down the front of the line; commencing on the right, he will pass round the left flank and return along the rear, the men standing with shouldered arms. While he is going round the battalion, the band will play until he returns to the right of the line; the colours will be held steady, gathered in under the right hand.

SLOPE—ARMS.	{	<i>Taking Close Order.</i> —The battalion will take close order while the general is proceeding to the camp colour placed in front of the centre of the line. Bayonets will remain fixed.
CLOSE—		
ORDER.		
MARCH.		
BREAK INTO COLUMN TO THE RIGHT. RIGHT— WHEEL, QUICK— MARCH. <i>Halt, Front, Dress.</i>	}	<i>Breaking into Column.</i> —The battalion will break into column to the right, and the pioneers, band, and drums will move to the head of the column, the pioneers forming in a single rank in front, the band forming in two ranks next, and the drums in two ranks in rear of them; Part III., Plate IX., Fig. 2.

*Points for Marching past.*—Four points will be placed by the adjutant to mark the ground, as described in Part II., S. 9, one point six paces from the right of the line, one at six paces from the left of the line; the two points marking the saluting base will be covered in a line four paces from the camp colour, at which the general will usually place himself to see the companies march past.

*Marching Past.*

*Marching past in Column.*—1. On the words MARCH PAST. QUICK—MARCH, the column will step off and march past, each company moving as directed in Part II., S. 9.

2. When marching past the reviewing general, the lieutenant-colonel will be about eight paces in front of the right centre section of the leading company, the senior major in front of the left centre section, a little in rear of him ; the other mounted officers will follow in rear of the column at six paces distance, the junior major on the right, the adjutant on the left. All the mounted officers will salute as they approach the general. The lieutenant-colonel, after he has saluted, will move out and place himself near the general, and remain there till the column has passed ; the major proceeding in command of the battalion.

3. Officers, whether mounted or dismounted, will never salute more than once.

4. The band will commence playing as soon as the leading company has completed its second wheel. When it arrives in front of the general, it will turn to the left, wheel to the right, and halt and front opposite to him, continuing to play until the rear of the column has passed.

5. The colours, carried by the two senior ensigns, will be placed as described in Part III., S. 1, No. 6, and will change flank during the second wheel. On the saluting line, the colours will not be cast loose, nor will they be lowered.

6. The staff officers, excepting the adjutant, do not march past ; but the musketry instructor will march past with the company to which he belongs.

7. The serjeant-major will march past in his usual place in rear of the colour party ; the staff-serjeants will not be required to march past.

BATTALION--HALT.

LEFT WHEEL

INTO—LINE.

QUICK—MARCH.

*Halt—Dress.*

*Eyes—Front.*

When the battalion arrives on its original ground, it will be halted and wheeled into line.

Or, the battalion, the ranks having been closed after the general salute, may march past as follows :—

QUARTER-

COLUMN,

BY THE RIGHT,

ON N<sup>o</sup> 1.

FOURS

—RIGHT,

QUICK—MARCH.

MOVE TO THE

RIGHT IN FOURS.

FOURS—RIGHT.

QUICK—MARCH.

LEFT—WHEEL.

FORWARD.

HALT, FRONT.

ADVANCE IN

COLUMN.

N<sup>o</sup> 1 : *Shoulder*

—*Arms.*

*Quick—March.*

N<sup>o</sup> 2 : *Shoulder*

—*Arms.*

*Quick—March.*

*&c.*

N<sup>o</sup> 1. *Halt.*

N<sup>o</sup> 2. *Halt.*

*&c.*

Quarter column by the right having been formed on No. 1, the column will move to the right by fours; on reaching the 1st point, it will wheel to the left (in fours), receiving the word FORWARD as it completes the quarter circle. On the word FORWARD, the officers will take their places for marching past, by the rear of their companies. The column will be halted and fronted on the saluting base, the right markers at once taking up the covering. The commanding officer will then give the usual caution to advance in column; on which the captain of No. 1 will bring his company to "The Shoulder," and march it off. The officers will salute as already laid down. When the leading company has passed the 3rd point the depth of the column at quarter distance, the major will halt it; each of the other companies in succession will be halted by its captain as it closes to six paces from the company in its front.

## INSPECTIONS OR REVIEWS.

BATTALION,  
 COUNTERMARCH.  
 RANKS, RIGHT AND  
 LEFT—TURN.  
 QUICK—MARCH.  
 HALT—FRONT,  
 DRESS. UNFIX—  
 BAYONETS.  
 MARCH—PAST.  
 BY THE LEFT,  
 QUICK—MARCH.  
 BATTALION,  
 COUNTERMARCH.  
 RANKS, RIGHT  
 AND LEFT—TURN.  
 HALT—FRONT,  
 DRESS.  
 MARCH PAST IN  
 DOUBLE TIME.  
 BY THE RIGHT,  
 DOUBLE—MARCH.

The lieutenant-colonel will countermarch the column, unfix bayonets, and give the caution to march past; he will then march it off, the men moving at "The Trail."

When the rear company has passed the 2nd point, the commanding officer will countermarch the column, and halt it. He will then march it past in double time; officers returning swords on the caution.

In these countermarches, the guides will not change their flanks.

Instead of countermarching, the battalion may be ordered to change ranks.

LEFT—WHEEL.  
 FORWARD.  
 QUICK.  
 BY THE LEFT.

LEFT—WHEEL.  
 FORWARD.  
 LINE TO THE  
 LEFT ON  
 THE REAR  
 COMPANY.

When the column reaches the 3rd point, the commanding officer will wheel it to the left, and when square, break it into quick time; the officers drawing their swords. When the column reaches the 4th point, it will be again wheeled to the left, getting the word FORWARD when square. When the rear company has passed the point six paces, the column will be ordered to form line to the left on the rear company (Part III., S. 26, No. 2).

Should the battalion not be required to double past, it will be wheeled to the right on reaching the 2nd point after the first countermarch, and again on reaching the

1st point, receiving the word FORWARD when square. When the rear company has passed the point six paces, line will be formed on the rear company to the right.

*Manual and Firing, and Bayonet, Exercise.*

ORDER—ARMS.  
STAND AT-EASE.  
MANUAL AND  
FIRING EXERCISE.  
TAKING THE  
WORD FROM  
THE SENIOR  
MAJOR.

ATTENTION.  
SHOULDER—  
ARMS.  
FOR MANUAL  
EXERCISE,  
OPEN—ORDER.  
MARCH.

1. After having directed the men to order arms, the commanding officer will give the annexed caution, and then move to the rear of the line, the senior major moving out to the front to take command.

2. The senior major will call the battalion to attention, give the words SHOULDER—ARMS, and open the ranks. On the word ORDER, the right guides will fall back into the supernumerary rank (which will step back two paces as usual), their markers replacing them; the captains will step back with the supernumerary rank. On the word MARCH, the rear ranks will step back two paces as usual.

3. The junior major and adjutant, the colours (which will be kept at the order and furled), and the pioneers, band, and drums will remain, throughout the manual and firing exercises, posted as in close order.

4. The major will put the battalion through the manual and firing review exercise, as directed in the *Rifle Exercises*, S. 10 (the right guides remaining in the supernumerary rank when the line takes close order). After which he will fall back to his place in line, the right guides resuming

their posts at the same time. The junior major will then put the battalion through the bayonet exercise. The commanding officer will now take the orders of the reviewing general regarding the remainder of the inspection.

*Advancing in Review Order.*—At the end of the review, if required to do so by the general, the battalion will be formed in line at open order, with fixed bayonets, on its original position, and on the command, ADVANCE IN REVIEW ORDER, QUICK-MARCH, it will advance, the band and drums playing, till within 30 or 40 paces of the reviewing general, when it will be halted and ordered to salute, in the same manner as when receiving the general; after which it will be directed to slope arms, and will wait for orders.

### S. 2. Review of Two or more Battalions.

When two, or more, battalions are inspected together, they may be formed in line with intervals of twelve paces between them, and proceed in the same manner as a single battalion, observing the additional directions that are given with respect to regiments in brigade. Or they may be formed, should the reviewing general think proper, in a line of columns, or columns of double-companies, at intervals of twelve paces.

In this section the commands are printed as in Part IV.

*Formation in Columns.*—1. The troops will be formed in a line of battalion quarter columns. Bayonets to be fixed.

OFFICERS AND  
COLOURS WILL  
TAKE POST  
IN REVIEW  
ORDER.

2. On the word *Front*, from their commanders, the officers of each battalion will recover their swords, and on the word *March* they will move up to the front, and place themselves two

*Officers and  
Colours to the  
Front.  
Quick—March.*

paces in front of the column, the colours being in the centre, and the officers sized from flanks to centre, and at equal distances from each other, the adjutant on their left.

3. The commanding officer will be three paces in front of the colours, the majors two paces in front of the line of officers, dividing the distances between the commanding-officer and the flanks ; the paymaster, surgeons, and quartermaster will be in rear of the battalion, the staff serjeants in rear of them.

4. The general officer commanding will place himself in front of the centre of the line, the generals of divisions will be in front of the centre of their divisions, and the brigadiers in front of the centre of their brigades ; their distances from the line will depend on the strength of the body of troops, and will be determined by the general commanding. When no orders are given, brigadiers will be twenty paces in front of the commanding officers ; the brigade staff will be two paces in rear of the general, the brigade major on the right. The general officer of the division will be twenty paces in front of the brigadiers ; the staff as follows :—

LIEUTENANT-GENERAL.

COL. COM<sup>G</sup>. R.E.      A. Q. M. G.      A. A. G.      COL. COM<sup>G</sup>. R. A.  
D. A. Q. M. G      D. A. A. G.      B. M<sup>R</sup>. R. A.

AIDES-DE-CAMP.

5. The reviewing general will be saluted without opening ranks ; the men presenting arms, the officers saluting, the colours flying or being lowered, according to regulation, and the bands playing. After the salute the troops will be ordered to shoulder arms, and the general will go down the line.

OFFICERS AND  
COLOURS WILL  
TAKE POST.

6. On the command *Officers and Colours take Post*, the officers of each battalion will turn outwards from the centre, the



*Officers and Colours take Post Quick—March.* } ensigns carrying the colours turning to the left; and on the words *Quick—March*, the whole will move back to their places in column.

7. When the bands of a brigade have been practised together, they should form as one band thirty paces in rear of the centre of the line, the pioneers of the brigade ten paces in their front, and before marching past, they will both move to the head of the leading column.

8. When troops are drawn up in line for inspection or review, after the salute has been paid to the reviewing officer, the generals of divisions, brigadiers, and officers commanding battalions, will post themselves upon that flank of their divisions, brigades, or battalions, to which he repairs, where they will receive him, and accompany him to the extent of their respective commands; after which they will resume their original posts.

When troops are reviewed in line of columns, the generals of divisions and the brigadiers, only, will accompany the reviewing general to the extent of their respective commands; the commanding officers of battalions remaining at their posts,

9. The commanding officers of artillery and engineers are, as a general rule, to receive the reviewing or inspecting officer at the head of their respective commands, but may immediately afterwards join the general staff. Field officers of artillery and engineers in command will not, however, be required to take the head of single batteries or companies under their own captains, but will join the staff. When the captains themselves are the senior officers of their respective arms at a review, their positions will be determined by the general in command.

*Marching Past.*

1. *Marching past in Quarter Columns.*—Points will be placed by a staff officer in the same manner as they are placed for a single battalion.

<p>MOVE TO THE RIGHT IN FOURS.</p> <p><i>Fours—Right.</i> <i>Quick—March.</i></p>	}	<p>On the caution from the general or brigadier, MOVE TO THE RIGHT IN FOURS, the commanders will order their battalions to form fours to the right; and on his signal they will give the words <i>Quick—March.</i></p>
---	---	--

Each battalion in succession, when it has reached the 1st point, will wheel to the left (in fours) by word of its commander; when the column reaches the 2nd point, it will receive the words *Front—Turn, Shoulder—Arms.* Troops armed with the short rifle will march past at “The Trail.” At every succeeding angle, each battalion will wheel to the left in double time, receiving the words *Forward—Quick, by the Left*, when that pace will not check the battalion in rear; an interval of thirty paces being preserved between the columns. Troops armed with the long rifle, when they have passed the general, will be ordered to slope arms.

When marching past in quarter-column the mounted officers only will salute; and each general of a division or the brigadier, if a single brigade is being reviewed, will move out after he has saluted, and place himself near the reviewing general whilst his column is passing.

The leading column, and the remaining columns in succession, will be wheeled into line, and halted, as they arrive at their places in the alignment.

2. *Marching past in Columns.*—When it is required to march past in column, each quarter column may be halted when it has wheeled into the saluting base, and ordered to advance in column, as described in §. 1.

3. *Marching past in Columns of Double-companies.*—When a brigade, or division, drawn up in line of quarter columns is to march past in double-companies, the following method will be adopted:—The battalions will move to the right in fours, and wheel to the left at the double, in succession, as they reach the 1st point, receiving the word FORWARD when square, and QUICK when that pace will not check the battalion in rear. When about half way to the 2nd point, the first battalion will form double-companies, thus:—the commanding officer will order the left companies to mark time, and the right companies to close, when clear, to six paces, on No. 1; the left companies will receive the word *Forward* from their captains, so as to join the right companies; the officers and colours will take their places for marching past, as in column. On arriving at the saluting base, the column will get the word *Front—Turn: by the Right*; having advanced its own depth and twelve paces, it will be ordered to mark time, and halted when correctly aligned. The second battalion will wheel, and form double-companies in like manner, and will move into mass of quarter columns of double-companies in rear of the first battalion. The third and remaining battalions will wheel only so far that the word *Forward* will bring them to the left rear of the mass; and will form in mass in like manner. Mass having been formed, the commanding officer of the leading battalion will bring it to “The Shoulder,” and direct the captain on the right of the front double-company to march it off; each of the remaining double-companies following at company distance. The double-companies will march past by their right, in quick time; the

officers will salute, and the commanding officer will move out, as when marching past in column. Double-company distance will be maintained between battalions.

When past the saluting point, column at half-company distance will be formed by the left companies moving in rear of the right; the major giving the word LEFT COMPANIES, MARK—TIME, HALF RIGHT—TURN, DOUBLE, and the captains of those companies, *Front Turn—Quick*: after which, the column will be closed on the march to quarter distance; and the brigade will be closed to mass on the leading battalion, that battalion halting and countermarching. Each of the remaining battalions, as it arrives at twelve paces from the battalion in its front, will countermarch, halting when the movement is completed.

4. *Marching past in Mass of Quarter Columns.*—The brigade will then march past in mass, 30 paces distance being preserved between battalions.

5. *Marching past in line of Quarter Columns.*—1. After marching past as above, the brigade will be formed into a line of columns, with intervals of twelve paces between battalions, in the following manner:—The leading battalion will pass the 2nd point, and when its rear company has gained six paces from that point, will move to the right in fours; when it has gained the spot where it is to rest on the left of the line of columns, it will receive the words, *Front—Turn. Countermarch. Ranks, Right and Left—Turn. Front—Turn*; on which markers will run out to give the base for the line of columns. Having changed front, the battalions, except the rear battalion, will be marched up to the markers in succession from the right. The rear battalion, having passed clear of the flag, will countermarch on its own ground.

The brigade will then march past in line of columns. In marching past in this formation, the band will move straight on, ceasing to play when it reaches the 3rd point. The dressing of each company will be by the corresponding company of the battalion nearest the saluting point. The left guides will align themselves with the front rank.

Commanding officers will be in front of the centre of their leading company, all other mounted officers in rear of the column ; the whole dressing correctly by the right.

---

*Advancing in Review Order.*—At the end of the review, if required to do so by the reviewing general, the columns (or columns of double-companies) will be formed on their original grounds in review order, the officers' and colours in front, as described in the first part of this Section : if in columns of double-companies, the colours will pass out by the centre. The line of columns will then advance, the bands and drums playing, and when at a convenient distance from the reviewing general, which must vary according to the extent of the line, they will be halted and ordered to salute as described in paragraph 5 of the first part of this Section ; after which they will be ordered to slope arms, and will wait for orders.

---

#### ORDER OF MARCH AT ROYAL REVIEWS.

1. Detachment of Life Guards, or other cavalry, preceded by an officer of the Quartermaster-general's staff.
2. The Sovereign's led horses.
3. Aides-de-camp to the Commander-in-chief.
4. Aides-de-camp to the Sovereign.
5. Deputy Adjutant-general, Deputy Quartermaster-general, and the Equerries to the Sovereign in waiting.

N

6. Adjutant-general, Military Secretary to the Commander-in-chief, Quartermaster-general.
7. Commander-in-chief.
8. Princes of the blood.
9. The SOVEREIGN.
10. Gold Stick in waiting, and Master of the Horse, if present.
11. Foreign General officers, General officers and colonels on the Staff in successive order, according to rank and seniority.
12. General officers, not upon the Staff.
13. Equerries and attendants upon the Foreign Princes.
14. Assistant Adjutant-general, Assistant Quartermaster-general, and Assistant Military Secretary at Headquarters.
15. Deputy Assistants of the Adjutant and Quartermaster-general's Staff.
16. Brigade Majors, and personal Staff of General officers present.
17. Royal carriages.
18. Detachments of cavalry.

#### ORDER OF MARCH AT DIVISIONAL REVIEWS.

1. Deputy Assistant Quartermaster-general.
2. Aides-de-camp.
3. Brigade Major, Royal Artillery ; Deputy Assistant Quartermaster-general ; Deputy Assistant Adjutant-general.
4. Officer commanding Royal Engineers ; Officer Commanding Royal Artillery.
5. Assistant Quartermaster-general ; Assistant Adjutant-general.

Officers not of the general staff must avoid interfering with the above order of procession ; and, as crowding round a reviewing general in any situation is obviously objection-

able, all officers not specified above are to avoid pressing to the spot to which the commander-in-chief or reviewing officer may have moved. When troops are marching past at a Royal review, the staff will fall in on each side of the band, facing the saluting point.

On occasions of review, inspection, state or other ceremonial, at which the commander-in-chief is present, the officer in the immediate command of the troops assembled will deliver his field state to the commander-in-chief, to the adjutant-general, and to the quartermaster-general (or, in their absence to their respective deputies), when he has passed in review and previously to his taking post near the commander-in-chief or reviewing general. When the troops assembled are to be inspected or reviewed by the Sovereign, or by any other Royal personage, the commander-in-chief (if present) will himself deliver a state of the troops to that Royal Personage.



## ROUTE MARCHING.

### *S. 3. The Order of March.*

1. The success of military operations depends in a great measure upon the compact and well-regulated order of march observed by an army in its several parts or columns.

2. Troops may march, either in columns of companies, half-companies, or sections, in quarter columns formed in mass or line, or in fours, according to circumstances and the nature of the country.

3. The rear companies, half-companies, or sections of a battalion or more considerable column, will follow every turn, and conform to any increase or diminution of front,

which the head may make, at the same point as the leading company; each company acting in succession under the direction of its captains.

4. Troops marching on a road will observe the rule of the road.

5. In route marching, the baggage should be in the rear. No impediments whatever should be permitted in the line of march; the artillery will generally be formed between the divisions or brigades of an army. When the admission of a portion of the baggage of an army into the line of march becomes unavoidable, it should be placed between the brigades, never between the battalions of a brigade.

---

#### *S. 4. Places of Officers.*

1. All officers are to remain constantly in their places during the march, unless required to move as stated in paragraph 5.

2. The majors, when marching at ease, will march in rear of their respective half-battalions; if there is only one major, his post is in the rear of the battalion.

3. The captains, when marching at ease, are to march in rear of their companies, a guide leading.

4. Commanding officers of corps, assisted by their adjutants, will move from one part to another as occasion requires their presence, for the preservation of order, and particularly for the prevention of unnecessary defiling.

5. In like manner, the majors and officers of companies will move, when required, to any part of their half-battalions or companies.

---



*S. 5. Marching off, Marching at Ease, and passing Words of Command.*

1. On all occasions, when marching out of camp or quarters, or when moving after a regular halt upon the march, each corps will march off by word of command, and with music, unless particularly ordered to the contrary.

2. The men must be perfectly silent, dress, and keep the step, as if moving on parade, until the word MARCH AT EASE, is given by the commanding officer of the regiment, and repeated by the captains.

3. All words of command addressed to men marching at ease must be preceded by the word *Attention*, upon which, the men will slope (or trail) their arms, and take up the step; perfect order and silence being resumed until the word is again given to march at ease.

4. The words ATTENTION and MARCH AT EASE, coming from the commanding officer of the battalion, unless they are given as a command to the whole battalion, will be repeated by all the captains, who must speak loud enough to be heard distinctly, at least by the captain next to them in column, as they will have to take the command from each other in succession.

5. When marching at ease, the ranks may be opened and the files loosened; but each rank, section, or company must be kept perfectly distinct, and every man must remain in his place.

6. When a major or captain wants to send any notice to the commanding officer of the battalion, or to any company or section, the word must be passed by the officers, or officers and serjeants only.

---

*S. 6. Halting when on the March.*

1. Whenever the bugles sound the halt, the head of each battalion will halt and stand fast, although it may not be closed up to the preceding one; but the following companies of each battalion must close up to half or quarter distance, unless the column is entering an alignment, or making any other movement preparatory to a formation to a flank.

2. When it is intended that the whole column should close up, the head will be halted without sound of bugle, and the word of command, QUARTER, HALF, OR WHEELING DISTANCE, will be passed from front to rear; when the rear is closed up, the bugle of the rear battalion will sound the halt as a notice.

---

*S. 7. Defiling, and increasing and diminishing Front.*

1. Columns on the line of march should always move with as large a front as the ground will admit of. No battalion, company, or section is, at any time, to defile or diminish its front, or attempt in any way to avoid any bad spot in the road, unless the preceding battalion or company has done so.

2. Whenever defiling is necessary, it must be executed with order and precision, as in manœuvring at a field day, by the proper word of command, preceded by the word *Attention*.

3. When a battalion or company comes to a defile, stream or bad place in the road, where it might be more convenient for the men to defile individually, the officers must be on the alert, to keep their men from so doing.

4. Whenever a stream, ditch, bank, or other obstacle is to be crossed, it will be generally found that, instead of defiling or diminishing the front, the very contrary should be done, not only by causing the files of each section to open out gradually before they arrive at the ditch or obstacle, but even by increasing front to half-companies or companies.

5. When a bad place is to be passed the majors and captains will go to the head of their respective half-battalions and companies, to see that any orders which may have been given are obeyed with regularity and steadiness. They will remain at the spot till the whole of their half-battalions or companies have passed, and will then resume their stations in their rear, and give the words *March at Ease*.

6. It has been proved that the defiling of one battalion on the march, even if done with as much promptitude as is practicable on such occasions, causes a delay of ten minutes; the defiling of a brigade, consisting of three battalions, would therefore cause a delay of at least half an hour. In the winter, when obstacles such as pools of water are frequent, and the day short, a column which is constantly defiling without cause will not arrive at its quarters till after dark.

7. This order respecting defiling is, therefore, as much calculated to provide for the ease and comfort of the men, as it is essential for the due performance of the movements of an army.

---

#### *S. 8. Regulations concerning Stragglers.*

1. No man is to remain behind or quit the ranks for any purpose whatever, without permission from the captain of his company.

2. Officers are never to give permission to any man to

quit the ranks excepting on account of illness, or for some other absolutely necessary purpose.

3. The officers must be particularly careful to prevent the men leaving the ranks for water. When water is required the regiment or column will be halted.

4. Men who obtain permission to fall out for any other cause than illness, must invariably leave their packs and arms, to be carried by the section they belong to, until they return.

---

*S. 9. Hurry and Stepping-out to be prevented.*

1. It is of the greatest importance that the men should never be hurried on the march ; they are to be instructed that they are never to step out beyond the regular step, still less to double unless by word of command.

2. When the proper distances of companies, or sections, cannot be preserved without an alteration in the step, it must always be effected by making the head of each battalion or company step short, instead of allowing the others to step out. Companies must invariably be kept intact, and the leading company of each battalion will, when necessary, step short until the last company of the battalion has closed up, even though a large interval should be thereby occasioned between it and the preceding battalion.

3. When the head of a company, suppose No. 4, cannot keep up without overstepping, or leaving its own sections at too great a distance, the officer commanding it must call out "No. 4 cannot keep up," which must be repeated by the officers or serjeants on the flanks of the leading sections of the companies in front of No. 4 until it comes up to the commanding officer, who will shorten the step at the head of the column, unless he perceives that some obstacle, ascent, or difficult ground in front will give time

to No. 4 to close up; in the meantime No. 4, if no answer is returned to the notice of its having lost distance, will continue at the regular step.

4. In like manner, if the head of a battalion cannot keep up with the preceding battalion, the commanding officer will forward a notice to the head of the column, detaching files at the same time, to preserve the communication.

5. When obstacles delaying the march are frequent, it may be desirable, in order to avoid loss of time, that each company, after passing an obstacle, should march on at the usual pace, without shortening its step, as the following company may overtake it at the next obstacle or ascent, but the leading section of a company should never be allowed to march on until the rear section has completely passed and closed up. The distance between companies may be occasionally increased with advantage, but each company in itself must be kept intact.

---

#### SINGLE RANK AND SKELETON DRILL.

##### *S. 10. Battalion Drill in Single Rank.*

When there is not a sufficient number of men to form a complete battalion, the companies may be formed, for practice, in single rank; in like manner, a battalion may be divided into two, each formed in single rank, for the purpose of practising brigade movements.

---

##### *S. 11. Skeleton Drill.*

1. The following method of forming a skeleton battalion, for the instruction of officers and non-commissioned officers, will be adopted when a sufficient number of men cannot be collected to form a battalion in single rank.

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

3. The ropes may be made to represent any number of files, the space for each (namely 24 inches) being marked by a small piece of red cloth. Short pieces of wood should be fastened across the ends of the ropes, to enable the men to hold them.

4. When there are a sufficient number of men, several skeleton battalions may be formed, with which all the manœuvres of a brigade may be practised.

---

GUARDS.

*S. 12. Guard Mounting, and trooping the Colour.* \*

For guard mounting, the men will be told off into guards of equal strength by the adjutant of the day, and formed in column with unfixed bayonets; the senior serjeant of each guard taking command of it. The cavalry (if any are present) will be in front.

The guards will be wheeled into line by the adjutant of the day, a serjeant being on the left of the line. The colour will be placed at a distance of about two guards in front of the left of the line, in charge of a serjeant with double sentries. The walk of these sentries will be at right angles to the line, and their front inwards; all their movements must correspond, the man nearest the line, who will be the front rank man of the file, giving the time; they must turn outwards together when at three paces from the colour, and inwards when at ten paces from it, always turning towards the front, right (or left) about, as the case may be; these

## GUARDS.

sentries will order arms, stand at ease, come to attention, and shoulder, with the men in the line.

The men of the right file of the first guard will always be mounted as sentries on the colour, and they will resume their places while that guard is wheeling to the left after receiving the colour, as will hereafter be described; the serjeant will also join that guard.

The band will be formed in front of the right of the line, at right angles with it, turned inwards opposite the colour; the drums will be in front of the left of the line, a short distance in front of the colour, turned towards the band.

The guards will take open order by command of the adjutant, and will be handed over by him with shouldered arms to the town, or brigade, major. The adjutant will then take post on the right of the line.

The town, or brigade, major will inspect the guards and take command.

NON-COM-  
MISSIONED  
OFFICERS  
COMMANDING  
GUARDS—TO  
THE FRONT.

All the serjeants commanding guards will recover arms and move out two paces in front of the line, the right-hand men of the rear ranks of guards filling up the intervals left by their commanders.

QUICK—  
MARCH.  
  
INWARDS—  
TURN.

The serjeants will step off in quick time, and when near the saluting base on which the guards are to march past, they will receive the words INWARDS—TURN, on which the serjeant in the centre will halt, and turn about, bringing his rifle to "The Shoulder." The remaining serjeants will turn inwards, and will halt and turn towards the line as they reach the centre serjeant, shouldering arms as they turn.

ORDER—ARMS.      { The guards and serjeants will then be  
STAND—AT          { directed to order arms and stand at  
EASE.                { ease.

The drums will beat the assembly, marching across the parade; they will march through the intervals of the band, and halt and front in rear of it. As the assembly commences, the officers for duty will fall in, three paces in front of the serjeants, and about three paces from each other, with carried swords; the town, or brigade, major will then deliver the parole and countersign to the commanders of guards, and point out the guards they are respectively to command. When sufficient officers are present for duty, there should be a captain, lieutenant, and ensign or other officer to carry the colour, with the right guard, which will form the escort to receive the colour; when there are not sufficient officers, the captain and ensign only will be with the first guard, in front of the second files from the right and left, and the lieutenant commanding the second guard will take command of the escort when it goes for the colour, moving, together with the ensign, in front of the centre of the first guard.

GUARDS—  
ATTENTION.  
SHOULDER—  
ARMS.

{ The town, or brigade, major having called the guards to attention, and ordered them to shoulder arms, will give the detail of the duties to the field officer of the day, and hand over the parade to him.

The field officer of the day will then proceed as follows with the guard mounting, having previously asked permission to do so, if a senior officer is on the parade.

OFFICERS AND  
NON-COM-  
MISSIONED  
OFFICERS,  
OUTWARDS—  
TURN.

{ The officers and serjeants will turn outwards, the former recovering swords, the latter their rifles.



## GUARDS.

**TAKE POST IN  
FRONT OF  
YOUR RESPEC-  
TIVE GUARDS.  
QUICK—  
MARCH.**

The officers and serjeants will step off and will halt and turn towards the line, the officers opposite their proper posts in line, the serjeants opposite the right of their guards; the former will carry their swords, and the latter shoulder their rifles, as they halt.

**TO YOUR  
GUARDS.**

On the word MARCH, the officers and serjeants will step off in slow time, recovering their swords and rifles, as they take the first pace. The band will play a slow march as the officers and serjeants march to the line, and cease playing as the latter arrive at their places. When the officers arrive at three paces from the line they will mark time; the senior serjeants of guards will mark time when on the right of their guards; the remainder will move through the line to the supernumerary rank.

**SLOW—  
MARCH.**

**HALT—FRONT.**

The officers and serjeants will halt and front, the former carrying their swords, the latter shouldering their rifles.

**ORDER—  
ARMS. FIX—  
BAYONETS.  
SHOULDER—  
ARMS.**

**OFFICERS  
AND NON-COM-  
MISSIONED  
OFFICERS,  
INSPECT YOUR  
GUARDS.**

The officers and non-commissioned officers commanding guards will pass down the front rank, and back between the ranks, inspecting the men, and will then resume their positions in front of the line, the remaining non-commissioned officers stand fast.

COLLECT THE  
REPORTS.

The adjutant of the day will ride down the front of the line of officers, and, having received the reports of the officers and non-commissioned officers commanding guards, will make his report to the field officer of the day, and then place himself on the left of the front rank, six paces from it.

The field officer will take his post nine paces in front of the centre of the line, with his back to it.

## TROOP.

The band and drums will play a slow march from the right to the left of the line, and on arriving near the colour, they will change front, halt, and cease playing.

## SLOPE—ARMS.

The guards will slope arms by command of the field officer, the sentries on the colour supporting at the same time.

The band and drums will then play a quick march from left to right, change front, halt, and cease playing when in front of the right of the infantry.

The "Drummers' call" will beat. On the first tap of the call, the captain and lieutenant of the right guard will recover swords and turn inwards, the ensign who will be in front of the centre of the company will step back one pace; during the call, the captain will move across in quick time and place himself in front of the right file of the second guard, and the lieutenant will place himself two paces in front of the ensign, both carrying their swords. The band will be placed in front of the first guard, and the serjeant major, with his sword drawn, four paces in rear of the centre file.

The field officer will then give the commands **SHOULDER—ARMS. ESCORT FOR THE COLOUR, STAND FAST; REMAINDER, ORDER—ARMS, STAND AT—EASE**; the sentries on the colour remaining with shouldered arms.

ESCORT FOR  
THE COLOUR,  
CLOSE—  
ORDER, MARCH.

The escort will take close order, the officers remaining in front.

QUICK—  
MARCH.  
*Left—Wheel.*  
*Forward.*

The escort, preceded by the band playing the "British Grenadiers," will move out the distance of a guard and a half from the line, then wheel to the left, and march straight to the colour; the officer commanding the escort will halt his guard at rather more than wheeling distance from the colour and will open the ranks.

*Halt.*  
*Open—Order.*  
*March.*

The band, when near the colour, will wheel to the left, cease playing, halt, and turn about.

GUARDS—  
ATTENTION.  
SHOULDER—  
ARMS.

The field officer of the day will call the guards to attention, and shoulder arms.

The serjeant-major will move in quick time, by the left flank, to the front, receive the colour, and return towards the escort; the ensign will move out four paces in front of the lieutenant, passing by his right, and having saluted and returned his sword, will receive the colour from the serjeant-major, place it in his belt, and turn about; the escort will then be ordered to present arms, the serjeant-major saluting, the remaining serjeants porting arms and turning outwards; the band will play "God save the Queen;" the sentries will also present arms.

*Shoulder—*  
*Arms.*

The escort will shoulder arms, the ensign will resume his post in rear of the lieutenant, passing by his left; the serjeant-major will move to the rear of the guard, still keeping his sword drawn, and the band will front.

*Left—Wheel,*  
*Slow—March.* { The escort will step off in slow time and wheel to the left, preceded by the band playing the “ Grenadier’s March ;” the sentries and serjeant who had charge of the colour joining the escort. }

When the band approaches the left of the line it will cease playing, turn to the right, and wheel to the left about, passing between the officers and front rank, and the front and rear ranks.

The drummers will move in rear of the rear rank. The band and drums will mark time until the escort reaches them.

*Right—*  
*Turn,*  
*Left—Wheel.* { The lieutenant, when at four paces from the line of officers will give the words *Right—Turn, Left—Wheel,* and on the leading file of the escort arriving at the left file of the front rank of the line, will again give the words *Left—Wheel.*

*Left—Wheel.* { As soon as the lieutenant has given the second word *Wheel,* the field officer of the day will order the guards to present arms, and the band will recommence playing.

The lieutenant of the escort, will move along the front of the line of officers, abreast of the second file from the right of the escort ; the ensign carrying the colour following him, abreast of the centre of the escort.

The front rank of the escort will file between the ranks of the guards ; the rear rank, one pace behind the rear ranks of the guards.

When the head of the escort arrives at the right of the remainder of the line, the captain will take the place of the lieutenant, and move on with the guard, the lieutenant will mark time when at his original post, and the ensign

will move on, passing him by the proper front ; when the escort has cleared the remainder of the line, the lieutenant will give the words *Halt—Front, Dress, Eyes—Front*, after which the captain will give the words *Present Arms* ; the band ceasing to play before the escort is halted.

The band will form upon the right of the line of infantry.

SHOULDER- { The field officer will then order the  
ARMS. } guards to shoulder arms.

If a general officer is present, the field officer will order a general salute.

After this, the guards will take close order ; the colour taking post in rear of the fourth file from the left of the right guard, the serjeant-major placing himself in rear of it, and one serjeant on each side.

The guards will then break into column, and march past in quick time (or, if required, in slow and quick time), the colour changing flank during the second wheel.

Having arrived on the original alignment, the guards will be halted and wheeled into line, and will then be directed to order arms and stand at ease.

The markers of guards will be called to the front by the town, or brigade, major, and when they are properly covered in column, he will call the line to attention, and order it to turn to the left and form guards. The guards having been formed, the field officer of the day will resume command of the parade.

FOURS—  
RIGHT.  
TO YOUR  
RESPECTIVE  
GUARDS.  
QUICK—MARCH. { On these commands from the field officer, the guards will form fours to the right and march off to their posts ; except those of less than four files, which will move to the front in line, or turn to the right and move in file, according to the order of the garrison.

When the guard mounting parade is dispensed with, the guards may be ordered to mount from their regimental private parades, or may be assembled in column on the usual garrison parade, and then be wheeled into line and inspected by the town, or brigade, major, who will also march them off to their posts.

—

*S. 13. Relieving Guard.*

<i>New Guard, Halt—Dress. Open—Order. March.</i>	}	The new guard, with bayonets fixed, will be halted about fifteen paces from the old guard, dressed, and directed to take open order.
<i>Old Guard, Present—Arms:</i>	}	The old guard, drawn up at open order on its parade, will receive the new guard with the prescribed salute.
<i>New Guard, Present—Arms.</i>	}	The new guard will return the salute.
<i>Old Guards, Shoulder—Arms. New Guard, Shoulder Arms.</i>	}	After which, both guards will be ordered to shoulder, and the commander of the old guard will hand the duplicate of his guard report to the commander of the new guard.
<i>Old Guards Order—Arms. Stand at—Ease. New Guard, Order—Arms. Stand at—Ease.</i>	}	The guards will order arms and stand at ease.

The guard will then be told off and the first relief sent out ; while the relief is going round, the commander will take over the property in charge of the guard, according to the list in the old guard report.

- Old Guard,*  
*Attention.*  
*Shoulder—Arms.*  
*New Guard,*  
*Attention.*  
*Shoulder—Arms.*
- { When the reliefs have returned, and all the men of the old guard have fallen in, both guards will be called to attention, and ordered to shoulder arms.
- Old Guard.*  
*Close—Order.*  
*March.*
- { The old guard will then take close order.
- Old Guard,*  
*Fours—Right (or*  
*Right—Turn).*  
*Quick—March.*  
*New Guard,*  
*Present—Arms.*
- { The guard on marching off may form fours (or turn) to either right or left, the new guard presenting arms.
- New Guard.*  
*Shoulder—Arms.*  
*Close—Order.*  
*March.*
- { When the left of the old guard is clear of the ground on which it stood, the new guard will shoulder arms and take close order.
- Guard.*  
*Fours—Right.*  
*Left—Wheel.*  
*Quick—March.*  
*Left—Wheel.*
- { The new guard will form fours to the right and wheel to the left; when its leading files arrive at the left of the ground on which the old guard was formed, it will again wheel to the left.
- Halt—*  
*Dress. Order—*  
*Arms. Stand at—*  
*Ease. Attention.*  
*Shoulder—Arms.*  
*Right—Turn.*  
*Dismiss.*
- { When the new guard is on the ground which was occupied by the old guard, the commander will order it to halt, front, order arms, and stand at ease. He will then read the orders of the guard to his men, after which he will dismiss them in the usual manner; when the first relief comes in, the orders must be read to the men who have been on sentry.

In situations where the new guard cannot advance in line towards the front of the old guard, it will move up in fours, or files, and will be halted and fronted opposite to the latter, or if necessary on its left, in the same line, leaving an interval between them of four or six paces.

---

#### S. 14. *Marching Reliefs.*

Reliefs of less than four men will be formed in single rank, when of four men or upwards, they will be formed in two ranks, and may be marched in line on open ground; but in streets, or in narrow places, reliefs should always be marched in single rank, or files. When marching in line, the corporal will be on the right of his relief; when in single rank or files, he will be on the proper front of the rear file; he will carry his arms advanced, with his bayonet fixed.

When the first relief of a new guard is sent out, a corporal belonging to the old guard will accompany it, to bring in the relieved sentries. If the relief moves in line, he will be on the left flank; if in single rank or files, he will be in front, leading the single rank, or front rank of files. As soon as all the sentries are relieved, the corporals will change places, and the corporal of the old guard will take command.

---

#### S. 15. *Relieving, or Posting Sentries.*

On the approach of a relief, a sentry will place himself with shouldered arms in front of his sentry box. The corporal of the relief will proceed as follows:—

Shoulder— Arms.            }	At about ten paces from the sentry.
---------------------------------	-------------------------------------



<i>Relief—Halt.</i>	}	At about six paces from the sentry.
<i>Sentries, Port—Arms.</i>		The old sentry, and the man who is to relieve him, will port arms, the latter moving out from the relief and placing himself at one pace from the former, turning towards him ; the old sentry will then give over his orders, the corporal referring to the board of orders to see if they are correctly given.
<i>Pass.</i>	}	On this word, the old sentry will take one pace to his left, and then move to his place in the relief, turning to the rear, and the new sentry will take one pace to his front.
<i>Shoulder— Arms. Front. Relief, Quick—March. Support— Arms.</i>		The sentries will then be ordered to shoulder arms and front.
	}	The relief will be marched on, and when it has proceeded about ten paces will be ordered to support arms.

The proper front of a sentry's post, and the extent of his walk, should be pointed out to him when he is posted.

Sentries walking backwards and forwards on their posts, must do so in a brisk and soldier-like manner ; they must on no account quit their arms, lounge, or converse with any one, nor must they stand in their sentry boxes in good or even in moderate weather. Sentries are permitted to support arms (or to sling, or trail, with the short rifle), or to order their arms and stand at ease ; but they are not to slope them unless specially allowed to do so.

#### S. 16. *Sentries paying Compliments.*

On the approach of an officer, when he is at least fifteen paces distant, a sentry, if on the march, will halt, front, and shoulder arms ; if standing at ease with ordered arms, he

will come to attention and shoulder. To field officers and other officers of the army and navy entitled to the salute, he will present arms.

To all armed parties, whether they are commanded by an officer or not, a sentry will present arms, and the party will return the compliment, when marching at the slope or support, by shouldering arms, but when marching at the trail, by advancing arms if armed with long rifles, or shouldering arms if armed with short rifles. Parties with side arms are to be considered as armed parties.

To all unarmed parties a sentry will shoulder arms, unless they are commanded by field officers, in which case he will present; in return, the commander of the party will give the word *Eyes right*, or *Eyes left*, as the case may be, and having passed him, *Eyes front*.

Parties marching with arms at the secure, and parties with side arms, will pay and return compliments as unarmed parties.

Sentries will not present arms to any officer after sunset; but as long as they can discern an officer, they will come to their front on his approach, and stand steady with shouldered arms till he has passed.

Sentries in their sentry boxes will salute by coming smartly to attention.

For sentries on outpost duty, see Part VI., S. 3, No. 32.

---

#### S. 17. *Sentries Challenging.*

When it gets dark, the sentries will challenge in the following manner:—On the approach of any person the sentry will port arms and call out in a sharp tone, *Halt. Who comes there?* when on a post where a sudden rush could be made upon him, he will at once come to the charge; if the person approaching gives a satisfactory reply the sentry will say *Pass friend: All's well*, remaining at the

port or charge, till he has passed. If the person approaching answers ROUNDS, the sentry will demand *What rounds?* and after the reply GRAND (OR VISITING) ROUNDS, when there is no countersign, he will say *Pass grand (or visiting) rounds: All's well*, shouldering his arms at the same time, and presenting as they pass if they are grand rounds; but when there is a countersign he will say *Stand grand (or visiting) rounds: Advance one and give the countersign*, at the same time coming down to the charge; in this position he will receive the countersign, and if it is correct will say *Pass grand (or visiting) rounds*, and proceed as above described.

If the sentry is on or near the guard-room door, he will proceed as described in S. 19.

---

#### S. 18. *Instruction of Recruits as Sentries.*

Recruits should be instructed in their duties as sentries. The instructor will post them in different parts of the barrack yard, giving each of them some particular orders to attend to, and will teach them what is laid down in the preceding Section.

---

#### S. 19. *Guards Turning out.*

When guards turn out they will fall in with shouldered arms at open order, and will pay the compliments laid down in the "Queen's Regulations;" guards will not turn out after sunset, except on the approach of a body of troops, in case of alarm, or to receive grand or visiting rounds.

The following form will be observed when a guard is visited by the field officer or captain of the day, called grand or visiting rounds. On the approach of the rounds the sentry at, or near, the guard-room door will port arms, and

challenge, *Halt*. *Who comes there?* the officer will answer, GRAND (OR VISITING) ROUNDS, as the case may be; the sentry to give the words *Guard turn out*, the guard will then turn out, and if there is no countersign, as soon as it has fallen in, the commander will call out *Advance grand (or visiting) rounds: All's well*; to grand rounds he will present, to visiting rounds he will remain at the shoulder.

If there is a countersign to be given, a corporal or sergeant will be sent out with the right, or left, file of the guard according to the position of the rounds; he will move next to the front rank man; when at about ten paces from the rounds he will order his men to halt and port arms, and will then repeat the challenge *Who comes there?* GRAND (OR VISITING) ROUNDS. *Stand grand (or visiting) rounds: Advance one and give the countersign*; the officer, or the non-commissioned officer accompanying the rounds, will then advance and give the countersign, the two men of the file charging bayonets as he advances; the non-commissioned officer of the escort will go back and repeat the countersign to the commander of the guard, who (if the word is correct) will call out, *Advance grand rounds (or visiting rounds): All's well*. The non-commissioned officer of the escort, having returned to his men, will then order them to shoulder arms, turn inwards, and step back three paces each. The rounds will pass between them. If they are grand rounds, the escort will be ordered to present; the guard will also present to grand rounds as they approach. As soon as the rounds have passed, the escort will be ordered by a non-commissioned officer to shoulder (if they have presented), turn inwards, march back, and fall in on the flank of the guard, taking up "the present arms," if the rest of the guard are at the present; the guard will then be dismissed, as described in Part I, S. 54.

---

## FUNERALS.

## FUNERALS.

*S. 20. Funeral Parties.*

The party appointed for the escort, according to the rank of the deceased, will be drawn up two deep, with opened ranks and unfixed bayonets, facing the house or marquee where the corpse is lodged. Small parties that are to march in files will be formed with their files extended at one side pace from each other. When the corpse is brought out, the officer commanding will proceed as follows :—

**PRESENT—ARMS.** As usual.

**REVERSE—  
ARMS.** { As detailed in the *Rifle Exercises S, 4.*  
The officers' swords are reversed under  
the right arm, the point of the sword  
downwards, the hilt being grasped with  
the right hand.

The ranks will then be closed.

Large funeral parties will march by companies, half-companies, or sections, which will be placed at the head of the procession ; when the column is formed, the ranks will again be opened, and the files will be extended to one side pace distance from the right.

In small parties, after the men have reversed arms they may be turned either to the left or right, and moved to the head of the procession, both ranks wheeling about, if necessary.

**SLOW—  
MARCH.** { The party will move off in slow time  
followed by the music, with drums  
muffled, playing the dead march.

The remainder of the procession will be formed as follows :—

### THE CORPSE.

**PALL BEARERS OF EQUAL RANK WITH THE DECEASED ON EACH SIDE OF THE CORPSE.**

**CHIEF MOURNERS.**

**OFFICERS, OR NON-COMMISSIONED OFFICERS, TWO AND TWO, ACCORDING TO RANK, THE JUNIORS IN FRONT.**

COMPANIES (OR  
HALF-  
COMPANIES),  
RIGHT (OR LEFT)  
—TURN, LEFT (OR  
RIGHT)—WHEEL.  
HALT. RANKS,  
INWARDS—  
TURN. FRONT  
RANK, FOUR  
PACES STEP  
BACK. SLOW  
—MARCH.

When the head of the procession arrives near the spot where it is to meet the clergyman, if the escort is formed in companies, half-companies, or sections, they will be ordered to turn to the left and wheel to the right. When the wheels are completed the escort will be halted, the ranks turned inwards, and the front rank ordered to step back four paces, or more if necessary, forming a lane for the corpse to pass through.

If the party is formed in files, the ranks will incline outwards, and will then be halted and turned inwards.

REST ON  
YOUR ARMS  
REVERSED.

As detailed in the *Rifle Exercises*, S. 4.

STAND AT-  
EASE.  
ATTENTION.

As detailed in the *Rifle Exercises*; the head being turned so as to look towards the corpse. The corpse, and the remainder of the procession, having passed through the lane, the word ATTENTION will be given, on which the soldiers will raise their heads.

REVERSE—  
ARMS.

As detailed in the *Rifle Exercises*, S. 4.

RANKS RIGHT AND LEFT—	}	The ranks will then be turned towards the grave and move in slow time, the front rank inclining towards the rear rank till at 2 paces distance from it ; the escort will be halted and fronted, in open order, near the grave and turning towards it.
TURN. SLOW—		
MARCH.		
HALT—FRONT.		
REST ON YOUR ARMS REVERSED.	}	As before described.
STAND AT--EASE.		

The funeral service will be performed, after which the escort will proceed as follows :—

ATTENTION.	}	As already described.
PRESENT— ARMS.		
SHOULDER— ARMS.	}	As detailed in the <i>Rifle Exercises, S. 4.</i>
WITH BLANK CARTRIDGE, READY.		
FIRE THREE VOLLEYS IN THE AIR.		
PRESENT.	}	As usual.

Fire, elevating the muzzle in the air.

After firing three rounds, the men will be directed to order arms, fix bayonets, shoulder arms, and the ranks will be closed. The escort will then be marched back to camp or barracks in fours, sections, or half-companies, in quick time.

In marching back, the music is not to play, or the drums to beat, until the party is entirely clear of the burying ground.

*N.B.*—In the funerals of general officers, the arrangements of the prescribed number of pieces of cannon, and of the different troops, must be made under the superintendence of the general officer commanding the whole, and must necessarily depend on local circumstances.

**PRESENTATION OF COLOURS.***S. 21. Presentation of Colours.*

The regiment will be drawn up in line in review order, as directed in S. 1, except as regards the colour party, band, and drums.

The place for the colour party will be preserved by three non-commissioned officers. The old colours, with the four serjeants of the colour party and double sentries, will be in front of the left of the line, and the band and drums formed, as for trooping, (S. 12.) The ensigns of the colour party, who should not be the two seniors, will be with the escort (the right company).

The new colours, cased, will be in rear of the centre, in charge of the two senior colour serjeants.

The old colours will be trooped.

On reaching the right of the line, the old colours will take post in front of the escort, which will then advance about ten paces, wheel to the left, and in that order proceed to the left of the line; the band will follow, playing "Auld lang syne." The escort will return to its place by the rear; the old colours, cased, being removed, or remaining in rear, under the charge of colour serjeants.

The regiment will then form three sides of an oblong, the 2nd or 3rd companies from the flanks being wheeled up, and the outer companies moving up in fours and forming line on them.

The drums will be piled in the centre; the new colours will be brought up from the rear by the two colour serjeants in charge, and placed against the pile of drums one on each side, the Queen's colour on the proper right. The senior



major and senior ensign will then take charge of the Queen's colour, the junior major and next senior ensign of the regimental colour. These officers will uncase the colours and replace them against the drums.

The consecration will then proceed. (A form of prayer for this ceremony may be procured at the Chaplain-general's office.)

After the consecration the senior major will hand the Queen's colour to the person presenting the colours, from whom the senior ensign will receive it, going down on the right knee; the regimental colour will in like manner be handed by the junior major and received by the second senior ensign; both ensigns will then rise.

Any addresses will then be made.

The line will be reformed, the outer companies moving in fours as before; and the colour party, with the new colours (unfurled), having formed, turned towards the centre, the ranks will be opened and the colours received with a general salute. The colour party will then march in slow time to its place in line, the band playing "God save the Queen."

The ranks will then be closed, and the line will break into column to the right, and march past. The old colours if still on the ground, will be in rear of the column.

## BUGLE SOUNDS.

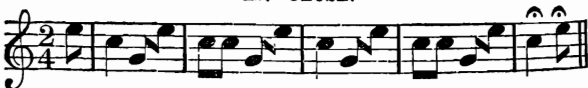
One G sounded on the bugle will denote the right of the line. Two G's the centre. Three G's the left.

The G or G's preceding any sound will denote the part of the line to which it applies. For instance; two G's before the Extend, will signify, to extend from the centre. One G followed by the Close, to close to the right. One G followed by the Incline, to incline to the right. Three G's followed by the Wheel, to wheel to the left.

## I. EXTEND.



## II. CLOSE.



## III. ADVANCE.



## IV. RETIRE.



## V. HALT.



The Halt annuls all previous Sounds except the Fire.

## VI. FIRE.



## VII. CEASE FIRE.



## VIII. ASSEMBLE.



## IX. INCLINE.



A double incline will signify a direct turn to the flank indicated.

## X. WHEEL,



The calls IX. and X. must be preceded by the distinguishing G's.

## XI. THE ALERT.



## XII. PREPARE FOR CAVALRY.



## XIII. QUICK.



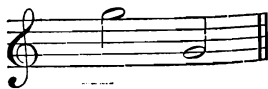
## XIV. DOUBLE.



## XV. LIE DOWN.



## XVI. RISE.



## RULES TO BE OBSERVED BY TROOPS IN PASSING OVER PONTOON BRIDGES.

---

When large bodies of troops have to pass a river, and circumstances will permit, three bridges should be made, one for the Infantry, another for Cavalry, and the third for the reserve Artillery, and wagons, which accompany the force.

In passing a bridge, infantry should break step and all music cease. Cavalry should dismount; the trot is strictly forbidden. If the bridge sways dangerously or becomes very unsteady, the column should be halted, and not allowed to resume its movement until the swaying has ceased and the bridge become steady.

Carriages should never be halted on a bridge, unless under absolute necessity.

Columns of infantry, artillery, or wagons and cavalry, should not be allowed to be mixed together in crossing a bridge.



---

---

*APPENDIX TO THE FIELD EXERCISE.*

---

RIFLE EXERCISES  
AND  
MUSKETRY INSTRUCTION.  
HORSE GUARDS, SEPTEMBER, 1870.

---

---





## RIFLE EXERCISES.

---

Sec.	Page.
1 MANUAL EXERCISE FOR THE LONG RIFLE - -	7
2 MANUAL EXERCISE FOR THE SHORT RIFLE - -	39
3 MANUAL EXERCISE FOR THE LONG AND SHORT RIFLE IN TWO RANKS, AND PILING ARMS - -	64
4 FUNERAL EXERCISE - - - -	66
5 PAYING COMPLIMENTS WITH ARMS - -	68
6 DISMISSING A COMPANY - - - -	68
7 THE FIRING EXERCISE - - - -	71
8 PREPARING FOR CAVALRY - - - -	86
9 A FEU-DE-JOIE - - - -	90
10 REVIEW EXERCISE - - - -	91
11 MANNER OF INSPECTING ARMS ON PARADE - -	92
12 RIFLE EXERCISES FOR SERJEANTS - -	93
13 BAYONET, OR SWORD-BAYONET EXERCISE - -	94

---

# MUSKETRY INSTRUCTION.

---

	<b>Page.</b>
<b>PART I.—DUTIES, INSTRUCTORS, &amp;c.</b>	125
<b>II.—INSTRUCTION OF THE RECRUIT</b>	131
Table of preliminary drills and practices to be executed	132
<b>III.—ANNUAL COURSE FOR THE TRAINED SOLDIER</b>	135
Table of preliminary drills	143
Cavalry course	144
Royal Engineers' course	144
Periodical examination of the trained soldier	145
<b>IV.—PRELIMINARY DRILL</b>	146
1. Cleaning arms in four lessons	146
No non-commissioned officer or private to be allowed to remove his lock from the stock, &c., until reported qualified to do so	153
How to ascertain the strength of the springs of the lock	154
2. Theoretical principles, in four lessons	154
Lectures to be delivered on the history of small arms, &c.	176
3. Aiming drill	176
4. Position drill in three practices	179
„ to be executed at other times than when the annual course is proceeding	184

<b>PART IV.—PRELIMINARY DRILL—cont.</b>	<b>Page</b>
5. Blank firing - - - - -	185
6. Judging distance drill - - - - -	187
<b>V.—PRACTICE - - - - -</b>	<b>194</b>
1. <b>BALL FIRING - - - - -</b>	<b>194</b>
Targets, signals, &c. - - - - -	194
Number of rounds, distances, &c., for each class - - - - -	202
Qualification for passing from one class to another - - - - -	206
<b>a. Firing singly :</b>	
1st period - - - - -	207
2nd period - - - - -	207
3rd period - - - - -	208
<b>b. Volley firing - - - - -</b>	<b>208</b>
<b>c. Independent firing - - - - -</b>	<b>209</b>
<b>d. Skirmishing - - - - -</b>	<b>210</b>
Further instruction of third-class shots at the final classification - - - - -	211
How to establish the "figure of merit," and to estimate very good,—good,—moderate,—and bad shooting - - - - -	212
General officers to see at their half-yearly inspections a squad execute independent firing - - - - -	212
Practices to be executed when rifles are not sighted to 800 yards, or when the full extent of range is not available - - - - -	213
<b>ORDERS to be observed on rifle ranges - - - - -</b>	<b>215</b>

## VI

PART V.—PRACTICE— <i>cont.</i>	Page
2. JUDGING DISTANCE PRACTICE . . . . .	218
How to determine the best judging distance company . . . . .	223
Judging distance practice to be executed at other times than when the course is proceeding . . . . .	224
“ VI.—INSTRUCTIONS FOR THE USE OF THE STADIO- METER . . . . .	224
“ VII.—PRIZES FOR GOOD SHOOTING . . . . .	230
“ VIII.—RETURNS, WITH INSTRUCTIONS FOR THEIR PRE- PARATION . . . . .	237
Number of returns allowed for a battalion	237
“ IX.—THE SELECTION, INSPECTION, AND LAYING- DOWN OF RIFLE RANGES . . . . .	251
“ X.—EXPERIMENTS WITH SMALL ARMS . . . . .	259
“ XI.—INSTRUCTIONS FOR INSPECTORS OF MUSKETRY . . . . .	264
List of articles authorised for a battalion . . . . .	275
MUSKETRY INSTRUCTION OF DEPOTS . . . . .	277
LIST OF FORMS . . . . .	278

---

---

---

RIFLE EXERCISES.

---

---

***Notes.***—The Parts and Sections referred to are those  
the *Field Exercise and Evolutions of Infantry* : 1870.

# RIFLE EXERCISES.

---

## GENERAL DIRECTIONS.

### I.

*Names of Parts of the Rifle.*—Recruits, before they commence to learn the Manual and Firing Exercises, must be taught the names of the different parts of the rifle, as shown in plate I.

### II.

*Formation of Squad.*—Soldiers will be formed in squads of single rank to learn the Manual and Firing Exercises by Numbers and in Quick Time; after which they will practise in two ranks what they have learned in one rank: as directed in Part I., Ss. 36, 41.

### III.

*Instructor to have Rifle.*—The instructor should always be provided with a rifle when at drill, in order that he may be able to show the recruit the required positions and movements.

### IV.

*The Rifle to be used with care.*—The rifle must be carefully handled, as any rough usage will injure it.

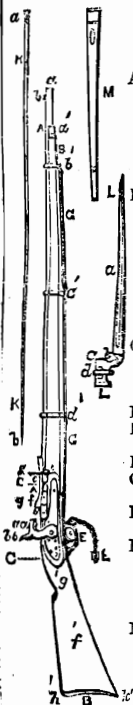
### V.

*How to carry the Rifle.*—Rifles, when unloaded are to be carried with the hammer down on the nipple; when loaded, they are to be carried at half-cock.

## PLATE I.

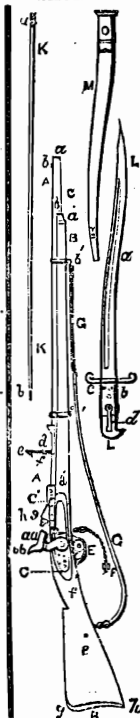
## NAMES OF PARTS OF THE RIFLE.

## LONG RIFLE.



- A.A. Barrel.**  
*a.* Muzzle.  
*b.* Fore sight.  
*c.* Back sight. } *d.* Flap sight. } *e.* Slide.  
*f.* Nipple-lump.  
*g.* Breech-block.
- B.B. Stock.**  
*a'*. Nose cap.  
*b'*. Upper band.  
*c'*. Middle band.  
*d'*. Lower band.  
*e'*. Projection.  
*f'*. Butt. { *g'*. Small. }  
                   { *h'*. Heel. }  
                   { *k'*. Toe. }
- CC. Lock.**  
*aa.* Hammer.  
*bb.* Comb of hammer.
- D.** Trigger.  
**E.** Trigger-guard or guard.  
**F.** Snap-cap.  
**GG.** Sling.
- KK. Rod.** { *a.* Head or jag. }  
                   { *b.* Point. }
- LL. Bayonet.**  
*a.* Blade.  
*b.* Bend.  
*c.* Socket.  
*d.* Locking ring.
- M.** Scabbard.

## SHORT RIFLE.



- A.A. Barrel.**  
*a.* Muzzle.  
*b.* Fore sight.  
*c.* Catch.  
*d.* Back sight. } *e.* Flap sight. } *f.* Slide.  
*g.* Nipple-lump.  
*h.* Breech-block.
- B.B. Stock.**  
*a'*. Nose cap.  
*b'*. Upper band.  
*c'*. Lower band.  
*d'*. Projection.  
*e'*. Butt. { *f'*. Small. }  
                   { *g'*. Heel. }  
                   { *h'*. Toe. }
- CC. Lock.**  
*aa.* Hammer.  
*bb.* Comb of hammer.
- D.** Trigger.  
**E.** Trigger-guard or guard.  
**F.** Snap-cap.  
**GG.** Sling.
- KK. Rod.** { *a.* Head or jag. }  
                   { *b.* Point. }
- LL. Sword.**  
*a.* Blade.  
*b.* Hilt.  
*c.* Guard and ring.  
*d.* Spring.
- M.** Scabbard.

The side of the rifle on which the lock is placed is called the lock side.





## PLATE II.



THE ORDER.



THE SHOULDER.

## MANUAL EXERCISES.

**S. 1. Manual Exercise for the Long Rifle.**1. *By Numbers.*

## I.

*The Order.*—The recruit will first fall in as directed in Part I., S. 24 ; the rifle will then be placed perpendicularly at his right side, the butt on the ground, its toe in line with the toe of the right foot ; the right hand to be placed flat on the outside of the stock, thumb on the sling, the barrel to be pressed to the hollow of the shoulder.

When the rifle has been properly placed at “The Order,” the recruit will be instructed always to fall in on parade, or for drill, with it in that position.

## II.

*Fix-*

*Fixing Bayonets.*—On the word *Fix*, by a sharp turn of the wrist bring the thumb of the right hand round the rear of the barrel, and grasp the rifle, thumb between the stock and the thigh ; at the same time seize the socket of the bayonet with the left hand, knuckles to the front, thumb to the rear, fingers pointing to the ground, left elbow to the rear.

*Bayonets.*

On the word *Bayonets*, push the muzzle of the rifle a little forward ; at the same time draw the bayonet, and as soon as the point clears the scabbard turn it up, keeping the elbow down and the upper part of the arm close to the body. Place the socket of the

bayonet on the muzzle (the flat part of the blade to the front), and when it falls on the block of the foresight, turn it with the thumb from left to right, and press it home; then, with the thumb, turn the locking ring in the same direction under the block of the foresight. Lastly, drop the left hand to the side, and bring the rifle to "The Order" (No. I.).

## III.

*Shoulder—*

*The Shoulder from the Order.*—On the word *Shoulder*, grasp the rifle as in the first motion of "Fixing Bayonets" (No. II.).

*Arms.*

On the word *Arms*, give the rifle a cant upwards with the right hand, and seize it below the lower band, keeping the barrel close to the shoulder.

*Two.*

Bring the rifle with the right hand to the left side, and seize it with the left hand, which will grasp the inside of the butt with the first two joints of the fingers: the forefinger to be half an inch from, the thumb in front of, the heel, the wrist slightly turned out, the fingers to rest lightly against the thigh. The rifle will rest against the hollow of the left shoulder, the fore part of the butt nearly even with the front of the thigh. As the left hand seizes the rifle, the right will be dropped to the side.

## IV.

*Present—Arms.*

*The Present Arms.*—Turn the lock the front, and seize the rifle with the right

PLATE III.



THE PRESENT ARMS.



*Two.*

hand under the guard, without moving it from the shoulder; thumb and fingers to be round the stock, arm close to the body.

Without moving the head, raise the rifle with the right hand perpendicularly in front of the centre of the body, and place the left hand smartly on the sling, the wrist on the trigger-guard, the fingers pointing upwards, the thumb close to the forefinger (its point in line with the mouth); the left elbow to be close to the butt, the right elbow and butt close to the body.

*Three.*

Bring the rifle down close in front of the centre of the body, sling to the front, as low as the right hand will admit without constraint, and grasp it with the left hand, the little finger touching the projection above the lock-plate, thumb between stock and barrel; the right hand lightly holding the small of the butt, fingers slanting downwards; at the same time place the hollow of the right foot against the left heel, both knees straight. The weight of the rifle to be supported by the left hand.

## V.

*Shoulder-  
Arms.*

*The Shoulder from the Present Arms.—*  
By a turn of the right wrist, bring the rifle to the left side, and seize it with the left hand as directed in the second motion of "The Shoulder from the Order" (No. III.); fingers of the right hand to

Two. } remain under the hammer (first two joints round the stock), thumb between the stock and barrel, arm close to the body: at the same time bring the right foot to its original position.  
 Drop the right hand to the side.

## VI.

Port-Arms. } *The Port.*—Seize the small of the butt with the right hand, arm close to the body.

Two. } Bring the rifle to a slanting position in front of the body, lock to the front, the barrel crossing opposite the point of the left shoulder; and meet it at the same time with the left hand immediately below the lower band, thumb and fingers round the rifle; the left wrist to be opposite the left breast, both elbows close to the body.

## VII.

As a Front Rank, } *The Charge.*—Turning on the heels, Charge— point the right foot to the right, the Bayonets. left full to the front, and bring the rifle down to nearly a horizontal position at the right side, with the muzzle inclining a little upward; the right wrist to rest against the hollow of the thigh below the hip, the right hand to grasp the small of the butt, the thumb and fingers of the left hand to be round the rifle.

As a Rear Rank, } Remain steady at "The Port."  
 Charge—  
 Bayonets.



PLATE IV.



THE PORT.



## PLATE V.



THE CHARGE.



THE ADVANCE ARMS.



## VIII.

- Shoulder Arms.* { *The Shoulder from the Charge, as a Front Rank.*—Bring the rifle to the left side, and seize it with the left hand, as directed in the second motion of “The Shoulder from the Order” (No. III.), turning at the same time to the front; the right hand remaining as described in the first motion of “The Shoulder from the Present Arms” (No. V.).
- Two.* { Drop the right hand to the side.
- Shoulder—Arms.* { *The Shoulder from the Port as a Rear Rank.*—Bring the rifle with the right hand to the left side, and seize it with the left hand as directed in the second motion of “The Shoulder from the Order” (No. III.), the right hand remaining as described in the first motion of “The Shoulder from the Present Arms” (No. V.).
- Two.* { Drop the right hand to the side.

## IX.

- Advance—Arms.* { *The Advance Arms.*—Turn the lock to the front and seize the rifle as in the first motion of “The Present Arms” (No. IV.).
- Two.* { Carry the rifle, close in to the body, to the right side with the right hand, and seize it with the left hand close above the lower band; at the same time seize the guard with the thumb and forefinger of the right hand at the full extent of the arm, remaining fingers under the hammer.
- Three.* { Drop the left hand to the side.

## X.

- Order—*  
*Arms.* { *The Order from the Advance Arms.*—  
Seize the rifle with the left hand, little  
finger in line with the point of the right  
shoulder, arm close to the body.
- Two.* { Extend the fingers and thumb of the  
right hand, and lower the rifle with the  
left hand until the butt touches the  
ground ; the left arm and rifle to be kept  
close to the body.
- Three.* { Drop the left hand to the side.

## XI.

- Advance.* { *The Advance Arms from the Order.*—  
On the word *Advance*, grasp the rifle as in  
the first motion of “Fixing Bayonets”  
(No. II.).
- Arms.* { On the word *Arms*, raise the rifle by a  
cant with the right hand, and lay hold of  
it as in the second motion of “The Ad-  
vance Arms” (No. IX.).
- Two.* { Drop the left hand to the side.

## XII.

- Shoulder—*  
*Arms.* { *The Shoulder from the Advance Arms.*—  
Seize the rifle with the left hand, little  
finger in line with the right elbow, and raise  
it about one inch, without moving the  
barrel from the shoulder ; at the same  
time slip the thumb of the right hand  
under the hammer, bringing the fingers  
under the guard, both arms to be close to  
the body.
- Two.* { By a turn of the right wrist, bring the  
rifle up to the left side, seizing it with

**MANUAL EXERCISE FOR THE LONG RIFLE.**

2010MM004

## PLATE VI.



THE SUPPORT.



THE SLOPE.



- the left hand as in the second motion of "The Shoulder from the Order" (No. III.), the right hand remaining as described in the first motion of "The Shoulder from the Present Arms" (No. V.)
- Three.* { Drop the right hand to the side.

## XIII.

- Support-Arms.* { *The Support.*—Raise the rifle about one inch, and seize the small of the butt with the right hand, fingers and thumb round the stock, arm close to the body.
- Two.* { Bring the left arm under the hammer, fingers of the left hand extended, with the thumb close to the forefinger; the hammer to rest on the arm midway between the wrist and elbow; the elbow to be kept close to the body.
- Three.* { Drop the right hand to the side.

## XIV.

- Shoulder-Arms.* { *The Shoulder from the Support.*—Seize the small of the butt as directed in the first motion of "The Support" (No. XIII.)
- Two.* { Drop the left hand and grasp the butt as in the second motion of "The Shoulder from the Order" (No. III.), but with the elbow a little bent.
- Three.* { Drop the right hand smartly to the side, at the same time allowing the left arm to sink to its full extent.

## XV.

*Slope-  
Arms.*

*The Slope.*—Without moving the upper part of the arm, raise the rifle until the guard is pressed gently against the hollow of the shoulder and the lower part of the arm becomes horizontal; the toe of the butt to point to the centre of the left thigh.

## XVI.

*Shoulder-  
Arms.*

*The Shoulder from the Slope.*—Drop the left arm gently to its full extent.

## XVII.

*Order-Arms*

*The Order from the Shoulder.*—Seize the rifle with the right hand close above the lower band, keeping the elbow as close to the body as possible.

*Two.*

Bring the rifle down to the right side, allowing the little finger to slip behind the barrel as it descends, and place the butt quietly on the ground at "The Order" (No. I.).

*Three.*

Place the right hand on the stock, &c., as directed in No. 1.

## XVIII.

*Unfix-  
Bayonets.*

*Unfixing Bayonets.*—On the word *Unfix*, grasp the rifle as in the first motion of "Fixing Bayonets" (No. II.)

On the word *Bayonets*, push the muzzle a little forward, and lay hold of the rifle with the left hand immediately above the upper band, thumb and fingers round the stock and barrel, arm close to the body.

Raise the right hand and seize the socket of the bayonet between the forefinger and thumb, fingers closed in the hand, knuckles to the front, arm close to the body. With the second joint of the forefinger of the right hand, turn the locking ring to the left, then extend the fingers under the bend, raise the bayonet, turn it to the left, and remove it from the muzzle. Drop the point of the bayonet towards the scabbard, inclining the palm of the hand to the front as it falls, and place the little finger on the top of the socket; at the same time, force the muzzle of the rifle back to the hollow of the right shoulder with the left hand, which is immediately to be removed and placed on the top of the scabbard to guide the bayonet in, the elbow to the rear and as close to the body as possible. Lastly, drop the arms to their position at "The Order" (No. I.).

Of the foregoing motions, Nos. IV.—XVIII. are performed in the "Review Exercise." See Section 11.

### XIX.

*Slope*—

*The Slope from the Order.*—On the word *Slope*, grasp the rifle as in the first motion of "Fixing Bayonets." (No. II.)

*Arms.*

On the word *Arms*, carry the rifle to the left side, and seize it with the left hand as directed in the second motion of "The Shoulder from the Order."

## RIFLE EXERCISES.

24

*Two.* { (No. III.) at the same time dropping  
the right hand to the side.  
Raise the rifle to "The Slope."  
(No. XV.)  
XX.

*Order—  
Arms.* { *The Order from the Slope.*—Drop the  
left arm to its full extent, and seize  
the rifle with the right hand as directed  
in the first motion of "The Order from  
the Shoulder." (No. XVII.)

*Two.* {  
*Three.* { As detailed in No. XVII.  
XXI.

*Trail—  
Arms.* { *The Trail.*—On the word *Trail*, grasp  
the rifle as in the first motion of "Fix-  
ing Bayonets." (No. II.)  
On the word *Arms*, give the rifle a  
cant upwards with the right hand, seiz-  
ing it below the lower band, and bring  
it to a horizontal position at the full  
extent of the arm, fingers and thumb  
round the rifle.

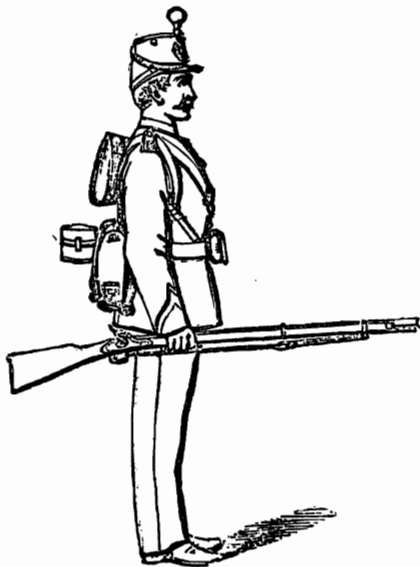
## XXII.

*Order—Arms.* { *The Order from the Trail.*—Bring the  
rifle to a perpendicular position at the  
right side, allowing it to slip through  
the fingers to the ground at the position  
described in "The Order" (No. I.)

Arms must never be trailed with fixed bayonets, except  
by the front rank before charging.

In the foregoing exercises, great care must be taken to  
preserve the squareness of the body, and to avoid raising  
or sinking either shoulder.

PLATE VII.



THE TRAIL.

P



## XXIII.

*Advance-Arms.* }  
*Two.* } As detailed in No. XI.

## XXIV.

*Trail-Arms.* { *The Trail from the Advance Arms.*—  
 Seize the rifle with the left hand, little  
 finger in line with the right elbow, arm  
 close to the body.  
*Two.* { Raise the right hand, and seize the  
 rifle below the lower band; then bring it  
 to the position described in “The Trail”  
 (No. XXI.), at the same time dropping  
 the left arm to the side.

## XXV.

*Advance-Arms.* { *The Advance Arms from the Trail.*—  
 Bring the rifle to a perpendicular posi-  
 tion, and seize it with the left hand close  
 above the lower band, at the same time  
 raising it slightly and seizing it with the  
 right hand, as in the second motion of  
 “The Advance Arms” (No. IX.).  
*Two.* { Drop the left hand to the side.

## XXVI.

*Sling-Arms.* { *The Sling.*—Raising the rifle slightly,  
 turn the sling to the right.  
*Two.* { Seize the rifle with the left hand below  
 the lower band, and turn the sling to the  
 rear over the right shoulder; at the  
 same time quitting the right hand.  
*Three.* { Seize the sling over the right shoulder  
 with the **right** hand; and, with both  
 hands, bring the rifle down to the  
**sling**, butt close behind the shoulder

**B. M.**

- Four. { muzzle pointing to the ground about six inches in front of the right toe.  
Seize the rifle with the right hand, and drop the left to the side.

## XXVII.

- Advance-Arms. { *The Advance Arms from the Sling.*—  
Raise the muzzle perpendicularly, turning the sling to the right, and meeting it with the left hand below the right.  
Two. { Bring the rifle to the side, turning the sling to the front, and seize it with the right hand at "The Advance Arms" (No. IX.).  
Three. { Drop the left hand to the side.

## XXVIII.

- Order-Arms. }  
Two. } As detailed in No. X. {  
Three. }

## XXIX.

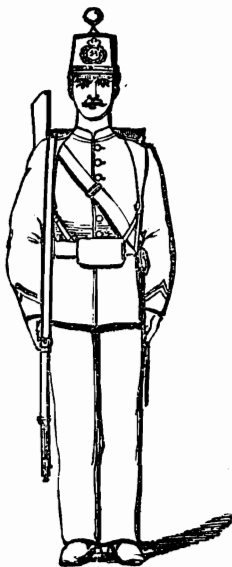
- Ground-Arms. { *Ground Arms.*—On the word *Ground*, grasp the rifle as directed in the first motion of "Fixing Bayonets" (No. II.).  
On the word *Arms*, turn the rifle on the heel, lock to the rear, raise it off the ground, and give the butt a cant to the rear; sink the body, bending both knees, and place the rifle flat on the ground, the lock upwards, muzzle inclined to the right front, hammer in line with the heels; rise at once, and return to the position of attention.

## XXX.

- Take up-Arms. { Sink the body as in grounding arms, take up the rifle, and come to "The Order" (No. I.).



PLATE VIII.



THE SLING.





## PLATE IX.



STAND AT EASE.



THE SECURE.

## XXXI.

*The Short Trail.*—Grasp the rifle with the right hand, and raise it from the ground, keeping the barrel to the shoulder.

## XXXII.

*Stand at—* { *The Stand at Ease from the Order.*—  
*Ease.* { As detailed in Part I., S. 2.

*The Secure.*—For the protection of the rifle in wet weather, the soldier will be allowed to carry it as follows :—

The rifle to be under the left arm, butt to the rear, the hammer to be close up under the armpit, the barrel slanting downwards, and inclining to the right front ; the rifle to be firmly grasped with the left hand, which is to be rather lower than the hip ; left elbow a little to the rear. On the word *Change Arms*, the rifle to be carried under the right arm in like manner.

2. *In Quick Time.*

The recruit having been thoroughly instructed in the Manual Exercise by Numbers, will be taught to perform it in Quick Time ; the foregoing words of command being given without the numbers, and executed as above detailed, resting a pause of quick time between each motion. A pause of slow time should be made between the first and last part of each command, except in fixing bayonets, when longer time should be given.

3. *Motions of the Rifle performed on the March.*

The recruit will learn to perform the following motions of the rifle while marching ; they may be taught at first while he is marking time. Each motion should be done as the left foot comes to the ground.

When soldiers standing in line with unfixed bayonets step off from "The Order," they will come to "The Trail?"

as they take the first step ;—when standing in a line with bayonets fixed, or in file, they will come to “The Advance Arms ;” returning, in each case, to “The Order” as they halt, or halt and front ;—when marching in line or to a flank in fours with trailed arms, and ordered to turn into file, or form two deep, they will come to “The Advance Arms” as they turn, or form, and will trail again on turning into line or forming fours.

Soldiers will not, as a general rule, be marched off from “The Order” in field movements ; but will be brought to “The Slope” before stepping off, except when required to move at “The Shoulder.”

Soldiers marching with sloped arms, when halted, will remain at “The Slope ;” except after forming or wheeling into line, in which case they will come to “The Shoulder” as they halt, returning to “The Slope” on receiving the word *Eyes Front* ; or on halting after a charge in line, when they will come to “The Shoulder.”

When soldiers are marched off from “The Shoulder,” they will step off, remaining at “The Shoulder ;”—when marching in slow time with shouldered arms, and ordered to break into quick time, they will slope arms as they take the first pace in that time ;—when marching in quick time with sloped arms, and ordered to take up the slow time, they will remain at “The Slope.”

When a soldier marching with sloped arms is ordered to turn to the right (or left) about, he will come to “The Shoulder” on the first pace of the turn, and will slope again on the fourth, the pace on which he steps off in his new direction ;—when with trailed arms, he will bring his rifle to a perpendicular position by a turn of the wrist on the first pace of the turn, and trail again on the fourth pace.

When soldiers standing with sloped arms are required to turn about, they will come to “The Shoulder” as the

foot is drawn back, returning to "The Slope" when they have completed the turn.

When ordered to mark time from the halt, the foregoing rules will apply.

When men standing with ordered arms are directed to form fours, to close to the right or left, to step back, or to take any named number of paces to the front, they will come to "The Short Trail."

Skirmishers, supports, and reserves, if unloaded, move at "The Trail."

Arms are never to be carried at "The Trail" when loaded.

*Quick-March.* { *From the Halt at Ordered Arms.*—On  
or { the word *Quick*, grasp the rifle as in the  
*Quick. Mark-* { first motion of "Fixing Bayonets"  
*Time.* { (No. II.). On the word *March* (or  
{ *Mark-Time*) step off (or commence mark-  
{ ing time) and bring the rifle to "The  
{ Trail on the first pace.

*Advance-Arms.* { *The Advance Arms from the Trail.*—  
{ As on the halt.

*Trail-Arms.* { *The Trail from the Advance Arms.*—  
{ As on the halt.

*Change-* { *Changing Arms at the Trail.*—Raise the  
*Arms.* { rifle to a perpendicular position at the  
{ right side, carry it to the left side, and  
{ pass it into the left hand; then lower it  
{ to "The Trail," at the same time drop-  
{ ping the right hand to the side.

*Change-Arms.* { Change the rifle back to the right side  
{ in a similar manner.

*Squad-Halt.* Halt, and come to "The Order."

*Shoulder-Arms.*—As already described.

*Slow-March.*  
or  
*Slow. Mark-*  
*Time.* { Step off (or commence marking time),  
remaining at "The Shoulder."

*Break into*  
*Quick Time.*  
*Quick.* { Break into quick time and come to  
"The Slope."

*Fix-Bayonets.* { *Fixing Bayonets.*—Bring the rifle down  
as in trailing arms, but with the barrel  
slanting upwards in front of the right  
breast, fix bayonets as at the halt, then  
return at once to "The Slope."

*Shoulder-*  
*Arms.* { *The Shoulder from the Slope.*—As on  
the halt.

*Support Arms.*     *The Support.*—As on the halt.

*Shoulder-*  
*Arms.* { *The Shoulder from the Support.*—As  
on the halt.

*Slope-Arms.*     As on the halt.

*Change-Arms.* { *Changing Arms at the Slope.*—Pass the  
left hand up quickly and seize the small  
of the butt, fingers and thumb round  
the stock; at the same time seize the  
butt with the right hand, two first  
joints of the fingers round the stock,  
thumb in front of the heel; raise the  
rifle to a perpendicular position, carry  
it across the body and place it on the  
right shoulder, then drop the left hand  
to the side.

*Change-Arms.* { Carry the rifle back to the left shoulder  
in a similar manner.





## PLATE X.



THE ORDER.



THE SHOULDER.

*Charging.*—Soldiers marching in quick time will be taught to charge as follows :—

- |  |   |   |
|--|---|---|
| <i>As a Front Rank,<br/>Prepare to Charge.<br/>Charge.</i> | } | Bring the rifle to "The Trail," without losing the square position of the body or the regularity of the step. |
| <i>Charge.</i>   | } | Bring the rifle to the position of "The Charge," and break into double time.                                  |
| <i>As a Rear Rank,<br/>Prepare to Charge.<br/>Charge.</i>  | } | Continue to move at "The Slope."  |
| <i>Charge.</i>   | } | Break into double time, continuing at "The Slope."  |
| <i>Squad-Halt.</i>   | } | Halt, and come to "The Shoulder," both as a front and rear rank.  |

## S. 2. *Manual Exercise for the Short Rifle.*

### 1. *By Numbers.*

#### I.

*The Order.*—The recruit will first fall in as directed in Part I., S. 24. The rifle will then be placed perpendicularly at his right side, the butt on the ground, its toe in line with the toe of the right foot. The right arm to be slightly bent; the right hand to seize the rifle between the bands, thumb pressed against the thigh, fingers slanting towards the ground.

When the rifle has been properly placed at "The Order," the recruit will be instructed always to fall in on parade, or for drill, with it in that position.

## RIFLE EXERCISES.

## II.

*Shoulder-  
Arms.*

*The Shoulder from the Order.*—Give the rifle a cant upwards with the right hand, catching it with the left hand in line with the elbow ; at the same time seize the guard with the forefinger and thumb of the right hand, at the full extent of the arm, the remaining fingers under the hammer ; the upper part of the barrel to rest in the hollow of the shoulder.

*Two.*

Drop the left hand to the side.

## III.

*Present-  
Arms.*

*The Present Arms.*—Seize the rifle with the left hand at the lower band, raising it a few inches by slightly bending the right arm, without moving the barrel from the shoulder ; then slip the thumb of the right hand under the hammer, and the fingers under the guard slanting downwards ; both arms close to the body.

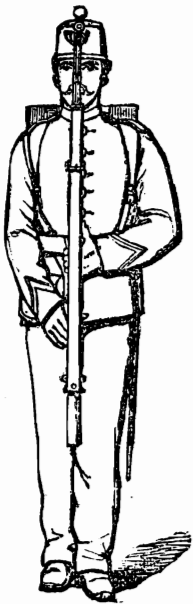
*Two.*

Without moving the head, raise the rifle with the right hand perpendicularly in front of the centre of the body, lock to the front ; at the same time place the left hand smartly on the stock, the wrist on the trigger-guard, fingers pointing upwards, thumb close to the forefinger (its point in line with the mouth) ; the left elbow to be close to the butt, the right elbow and butt close to the body.

*Three.*

Bring the rifle down close in front of the centre of the body, guard to the front, as low as the right hand will admit

PLATE XI.



THE PRESENT ARMS.



THE SUPPORT.

**RIFLE EXERCISES.**

2010MM004

without constraint, and grasp it with the left hand, the little finger touching the projection above the lock-plate, thumb between stock and barrel, the right hand lightly holding the small of the butt, fingers slanting downwards; at the same time place the hollow of the right foot against the left heel, both knees straight. The weight of the rifle to be supported by the left hand.

## IV.

*Shoulder—*  
*Arms.* { *The Shoulder from the Present Arms.*—Bring the rifle to the right side, and seize it with the right hand as directed in the first motion of “The Shoulder from the Order” (No. II.), the left hand remaining to steady it to its place, arm close to the body; at the same time bring the right foot to its original position.

*Two.* { Drop the left hand to the side.

## V.

*Support—*  
*Arms.* { *The Support.*—Bring the butt across, till the lock is in front of the centre of the body, back of the hand to the front, the barrel resting on the right arm; and place the left hand on the right.

## VI.

*Shoulder—*  
*Arms.* { *The Shoulder from the Support.*—Bring the rifle to “The Shoulder” (No. II.), and at the same time drop the left hand to the side.

i. M.

## RIFLE EXERCISES.

## IV.

*Order-Arms.* { *The Order.*—Seize the rifle with the left hand little finger in line with the point of the right shoulder ; arm close to the body.

- {  
*Two.* { Bring the rifle down in the left hand nearly to the ground, keeping the arm and rifle close to the body ; then seize it with the right hand between the bands as described in “The Order” (No. 1.), and place the butt quietly on the ground, dropping the left hand at the same time to the side.

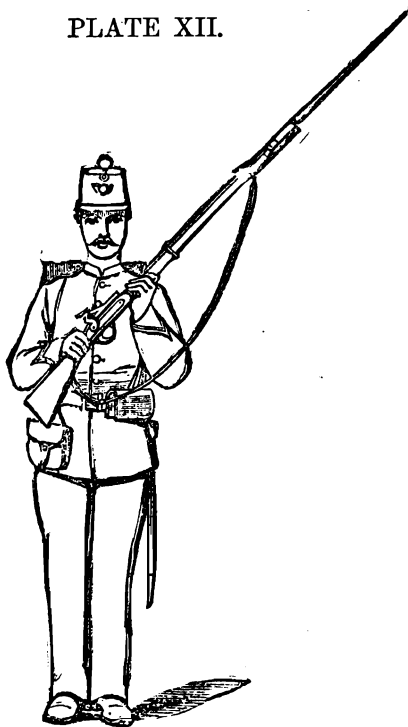
## VIII.

*Fix-Swords.* { *Fixing Swords.*—Place the rifle with the right hand between the knees, guard to the front, and seize the scabbard with the left hand, turning the handle of the sword towards the right front ; then seize the handle with the right hand, knuckles downwards, and draw the sword to the front ; turn the point upwards when it is well clear of the body, and seize the rifle with the left hand above the upper band. Place the back part of the handle against the lock side of barrel, knuckles to the right, arm close to the body, and slide the spring on to the catch, and the ring on to the muzzle ; lastly, seize the rifle with the right hand between the bands, drop the left hand to the side, and return to “The Order” (No. 1.).



**MANUAL EXERCISE FOR THE SHORT RIFLE.**

## PLATE XII.



THE PORT



## PLATE XIII.



THE CHARGE.



THE SLOPE.

## IX.

*Shoulder-  
Arms.* }  
*Two.* } As detailed in No. II.

## X.

*Port-Arms.* {  
*Two.* { *The Port.*—Seize the rifle as in the first motion of “The Present Arms” (No. III.).  
Bring the rifle to a slanting position in front of the body, lock to the front, the barrel crossing opposite the point of the left shoulder, seize it at the same time with the thumb and fingers of the right hand round the small of the butt, the thumb and fingers of the left hand remaining round the rifle ; the left wrist to be opposite the left breast, both elbows close to the body.

## XI.

*As a Front  
Rank,  
Charge-  
Swords.* { *The Charge.*—Turning on the heels, point the right foot to the right, the left full to the front, and bring the rifle to nearly a horizontal position at the right side, with the muzzle inclining a little upwards ; the right wrist to rest against the hollow of the thigh below the hip, the right hand to grasp the small of the butt, the thumb and fingers of the left hand to be round the rifle.

*As a Rear  
Rank, Charge-  
Swords.* } Remain steady at “The Port.”

## XII.

*Shoulder-  
Arms.* { *The Shoulder from the Charge as a Front Rank.*—Raise the rifle to a per-

- pendicular position at the right side, and seize it with the right hand as directed in the first motion of "The Shoulder from the Order" (No. II.), turning at the same time, to the front, the left hand remaining in its place, arm close to the body.
- Two.* Drop the left hand to the side.
- Shoulder-Arms.* *The Shoulder from the Port as a Rear Rank.*—Bring the rifle with the left hand to the right side, and seize it with the right hand as directed in the first motion of "The Shoulder from the Order" (No. II.), the left hand remaining in its place, arm close to the body.
- Two.* Drop the left hand to the side.

## XIII.

- Slope-Arms.* *The Slope.*—Seize the rifle as in the first motion of "The Present Arms" (No. III.).

- Two.* Carry the rifle on to the left shoulder, and seize it with the left hand, the first two joints of the fingers grasping the inside of the butt, the forefinger half an inch from the heel, the thumb in front of the heel, the muzzle slanting to the rear, and the guard pressed gently against the hollow of the shoulder. The upper part of the left arm to be close to the side, the lower part of the arm to be horizontal, the toe of the butt to point to the centre of the left thigh; the right hand holding the small of the butt, thumb and fingers round the stock, arm close in to the body.
- Three.* Drop the right hand to the side.

## XIV.

- Shoulder* } *The Shoulder from the Slope.*—Seize the small  
*-Arms.* } of the butt with the right hand, fingers and  
 thumb round the stock, arm close in to the  
 body.  
*Two.* } Bring the rifle to the right side, and seize  
 it as directed in the first motion of “*The*  
*Shoulder from the Order*” (No. II.); the  
 left hand to seize the rifle close above the  
 lower band to steady it to the shoulder.  
*Three.* } Drop the left hand to the side.

## XV.

- Order-* }  
*Arms.* } As detailed in No. VII.  
*Two.* }

## XVI.

- Unfix-* } *Unfixing Swords.*—Bring the rifle with the  
*Swords.* } right hand between the knees, guard to the front.  
 Place the left hand on the guard of the sword,  
 knuckles to the front, and seize the handle with  
 the right hand, knuckles to the front, fingers  
 pointing downwards, forefinger on the spring.  
 Tighten the knees on the rifle, press the spring,  
 and gently raise the sword upwards; when clear  
 of the muzzle drop the point, with the edge to  
 the front, towards the scabbard, raising the  
 right elbow as it falls; at the same time seize  
 the scabbard with the left hand, and guide the  
 sword into it. Lastly, seize the rifle with the  
 right hand between the bands, and come to  
 “*The Order*” (No. I.), taking the time from  
 the right.

Of the foregoing motions, Nos. III.—XVI. are performed in the “*Review Exercise.*” See Section 11.

## XVII.

*Slope—Arms.*

*The Slope from the Order.*—On the word *Arms* give the rifle a cant upwards with the right hand, and seize it behind the back-sight; then carry it to the left side and seize the butt with the left hand, the first two joints of the fingers grasping the inside of the butt, the forefinger half an inch from, the thumb in front of, the heel: at the same time drop the right hand to the side.

*Two.*

Raise the rifle until the guard presses gently against the hollow of the shoulder; muzzle to point to the rear.

## XVIII.

*Order—Arms.*

*The Order from the Slope.*—Drop the left arm to its full extent, and seize the rifle with the right hand between the bands.

*Two.*

Carry the rifle to the right side and come to "The Order" (No. I.).

## XIX.

*Trail—Arms.*

*The Trail.*—Give the rifle a cant upwards with the right hand, seizing it close behind the back-sight, and bring it to a horizontal position at the full extent of the arm, fingers and thumb round the rifle.

## XX.

*Shoulder—Arms.*

*The Shoulder from the Trail.*—Bring the rifle to a perpendicular position, and seize it with the left hand close above the lower band, at the same time raising it slightly, and holding it as directed in the first motion of "The Shoulder from the Order" (No. II.).

*Two.*

Drop the left hand to the side.



## PLATE XIV.



THE TRAIL.





## PLATE XV.



THE SLING.

## XXI.

- Trail-Arms.* { *The Trail from the Shoulder.*—Seize the rifle with the left hand, little finger in line with the right elbow, arm close to the body.
- Two.* { Seize the rifle with the right hand close behind the back-sight; then bring it down to “The Trail,” at the same time dropping the left hand to the side.

## XXII.

- Order-Arms.* { *The Order from the Trail.*—Bring the rifle to a perpendicular position at the right side, allowing it to slip through the fingers to the ground at “The Order” (No. I.).

Arms must never be trailed with fixed swords, except by the front rank before charging.

## XXIII.

- Shoulder-Arms.* } As detailed in No. II.
- Two.* }

## XXIV.

- Sling-Arms.* { *The Sling.*—Raising the rifle slightly, turn the sling to the right.
- Two.* { Seize the rifle with the left hand below the lower band, and turn the sling to the rear over the right shoulder; at the same time quitting the right hand.
- Three.* { Seize the sling over the right shoulder with the right hand; and, with both hands, bring the rifle down to the sling, butt close behind the shoulder, muzzle pointing to the ground about six inches in front of the right toe.
- Four.* { Seize the rifle with the right hand, and drop the left to the side.

Q

## XXV.

- Shoulder—Arms.* } *The Shoulder from the Sling.*—Raise the muzzle perpendicularly, turning the sling to the right, and meeting it with the left hand below the right.
- Two.* } Bring the rifle to the side, turning the sling to the front, and seize it with the right hand at “The Shoulder.” (No. II).
- Three.* } Drop the left hand to the side.

## XXVI.

- Order—Arms.* } As detailed in No. XI.
- Two.* }

In the foregoing exercises, great care must be taken to preserve the squareness of the body, and to avoid raising or sinking either shoulder.

## XXVII.

- Ground—Arms.* } *Ground Arms.*—Turn the rifle on the heel, lock to the rear, sink the body, bending both knees; and place the rifle flat on the ground, the lock up, muzzle inclining to the right front, hammer in line with the heels; rise at once, and return to the position of attention.

## XXVIII.

- Take-up—Arms.* } Sink the body as in grounding arms, take up the rifle, and come to “The Order?” (No. I.).

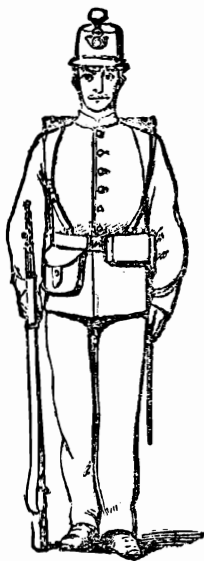
## XXIX.

- The Short Trail.*—Raise the rifle from the ground, keeping the barrel close to the shoulder.

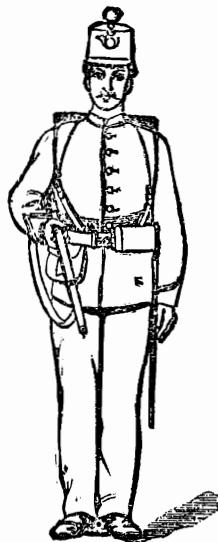
## XXX.

- Stand at--Ease.* } *The Stand-at-Ease from the Order.*—Push the muzzle of the rifle to the front

PLATE XVI.



STAND AT EASE.



THE SECURE.





with the right hand, arm close to the side ; at the same time carry back the right foot as described in Part I., S. 2:

*The Secure.*—For the protection of the rifle in wet weather, the soldier will be allowed to carry it as follows :—

The rifle to be under the right arm, butt to the rear, the hammer to be close up under the armpit, the barrel slanting downwards and inclining to the left front ; the rifle to be firmly grasped with the right hand, which is to be rather lower than the hip ; right elbow a little to the rear. On the word *Change Arms*, the rifle to be carried under the left arm in like manner.

### 2. *In Quick Time.*

As described in S: 1, No. 2.

### 3. *Motions of the Rifle performed on the March.*

The recruit will learn to perform the following motions of the rifle while marching ; they may be taught at first while he is marking time ; each motion to be done on the left foot, as described in S. 1., No. 3.

When soldiers standing in line with unfixed swords step off from “The Order,” they will come to “The Trail” as they take the first step ;—when standing in line with swords fixed, or in files, they will come to “The Shoulder” ; returning, in each case, to “The Order,” when they halt or halt and front ;—when marching in line or to a flank in fours with trailed arms, and ordered to turn into file, or form two deep, they will come to “The Shoulder” as they turn or form, and will trail again on turning from file into line, or forming fours ;—when they halt and front from file they will order.

When soldiers standing with shouldered arms receive the command *Slow* (or *Quick*) *March*, they will step off, remaining at "The Shoulder;" when the word is *Double March*, they will come to "The Slope."

When soldiers marching with sloped arms and unfixed swords are halted, they will come to "The Order;" when swords are fixed, to "The Shoulder."

When a soldier marching with trailed arms is required to turn to the right (or left) about, he will bring his rifle to a perpendicular position by a turn of the wrist on the first pace of the turn, and will trail again on the fourth, the pace on which he steps off in his new direction;—if at "The Slope," he will bring the rifle to a perpendicular position on the first pace of the turn, and slope again on the fourth pace.

The above rules will equally apply when the soldier is ordered to mark time from the halt.

When men standing with ordered arms are directed to form fours, to close to the right or left, to step back, or to take any named number of paces to the front, they will come to "The Short Trail."

Soldiers will never be marched off from "The Order," when their arms are loaded, but will be directed to slope, except when required to move at "The Shoulder."

Skirmishers, supports, and reserves, if unloaded, move at "The Trail."

<i>Quick-March.</i>	}	<i>From the Halt with ordered Arms.—</i>
or		
<i>Quick. Mark-</i>	}	Step off (or commence marking time), bringing the rifle to "The Trail" as the first step is taken.
<i>Time.</i>		
<i>Shoulder-</i>	}	<i>The Shoulder from the Trail.—As on</i>
<i>Arms.</i>		
<i>Trail-Arms.</i>	}	<i>The Trail from the Shoulder.—As on</i>
		the halt.

## MOTIONS OF THE SHORT RIFLE ON THE MARCH. 63

- Change—Arms.* { *Changing Arms at the Trail.*—Raise the rifle to a perpendicular position at the right side; carry it to the left side, and pass it into the left hand, then lower it to “The Trail,” at the same time dropping the right hand to the side.
- Change—Arms.* { Change the rifle back to the right side in a similar manner.
- Shoulder—Arms.* As already taught.
- Slope—Arms.* As on the halt.
- Change—Arms.* { *Changing Arms at the Slope.*—Pass the left hand up quickly and seize the small of the butt, fingers and thumb round the stock; at the same time seize the butt with the right hand, two first joints of the fingers round the stock, thumb in front of the heel; raise the rifle to a perpendicular position, carry it across the body and place it on the right shoulder, then drop the left hand to the side.
- Change—Arms.* { Carry the rifle back to the left shoulder in a similar manner.
- Squad—Halt.* Halt, and come to “The Order.”
- Charging.*—Soldiers will be taught to charge as follows:—
- Fix—Swords.* As already taught.
- Shoulder—Arms.* As already taught.
- Quick—March.* Step off at the shoulder.
- As a Front Rank. Prepare to Charge.* { Bring the rifle to “The Trail” without losing the square position of the body or the regularity of the step.

<i>Charge.</i>	{	Bring the rifle to the position of "The Charge," (No. XI.) and break into double time.
<i>As a Rear Rank, Prepare to Charge. Charge.</i>	{	Bring the rifle to "The Slope" as on the halt.
	{	Break into double time, continuing at "The Slope."
<i>Squad-Halt.</i>	{	Halt and come to "The Shoulder," both as a front and rear rank.

*Fixing Swords on the March.*—When soldiers are required to fix swords while marching with trailed arms, they will change the rifle into the left hand, then draw the sword with the right hand, bringing it out of the scabbard between the left arm and the body, inclining the barrel of the rifle upwards, muzzle opposite the left breast, and fix the sword as on the halt; this done, they will carry the rifle with the left hand to the right side, seize it at "The Shoulder," and drop the left hand to the side, continuing to move on with shouldered arms.

If marching with sloped arms, and ordered to fix swords, the soldiers will first bring their rifles to "The Trail;" they will then proceed as above described.

### *S. 3. Manual Exercise for the Long and Short Rifle, in Two Ranks, and Piling Arms.*

1. *Manual Exercise in Two Ranks.*—When recruits have been taught all the motions of the Manual Exercise, either singly or in squads in single rank, they will be practised in squads of two ranks.

2. *Movements performed at Open and Close Order.*—The Manual Exercise is performed with the ranks at open order. Before troops formed in line are required to salute by presenting arms, they will take open order; but not when they salute in quarter column.

3. *Distance between Ranks with trailed Arms.*—When a squad in two ranks standing with ordered arms is required to step off without shouldering or sloping, the rear rank men will make their first pace a short one, to give sufficient room for their rifles when trailed. When ordered to trail on the march, the rear rank will step short two paces. When the squad is halted, the rear rank will regain its distance by taking a long pace as it comes to the halt. When ordered to trail at the halt, the rear rank will step back a short pace; resuming its distance on coming to “The Order.” When ordered to shoulder arms from “The Trail” on the march, the rear rank will lengthen its pace to regain its distance.

4. *Motions of both Ranks the same.*—The motions of the rifle in the Manual Exercise are performed in the same manner by both ranks, excepting in “The Charge.”

5. *Piling Arms.*—In addition to the motions of the rifle taught in single rank, the squad in two ranks, at close order, will be taught to pile arms as follows.

*Pile-*

On the word *Pile*, the rear rank will step back a pace of nine inches, and the front rank men draw back the right foot ready to turn to the right about.

*Arms.*

On the word *Arms*, the front rank will turn about, bringing their rifles with them at the short trail; the whole will then place the butts of their rifles between their feet, locks from them; after which the right file rear rank and the left file front rank will incline their rifles towards each other, and cross rods. This done, the front-rank man of the right file will with his left hand seize the rifle of the front-rank man of his left file by the muzzle, bearing it from him, and with

- his right hand lock rods by passing his own by the left of the rods and to the right of the muzzles of the other rifles; lastly, the left file rear rank will lodge his rifle between the muzzles of the rifles of the front rank, sling uppermost. When there is an odd file, each man of the file will lodge his rifle against the pile nearest his right hand.
- Stand-clear.* } Ranks will step back a pace of nine inches, and turn to the directing flank.
- Stand-to.* } Ranks will turn inwards, and close on their arms by taking a pace of nine inches forward.
- Unpile-* } On the word *Unpile*, seize the rifle with the right hand under the top band, the front rank men at the same time drawing back their right feet ready to turn to the right about.
- Arms.* } On the word *Arms*, the men will unlock the rods without hurry, by inclining the butts inwards, and come to "The Order." The front rank will then *front*, and the rear rank close on it by taking a pace of nine inches forward.

In piling arms on parade, the word *Break-off* will be given after *Stand-clear*. On again falling in, the men will place themselves as they stood before breaking off.

It is necessary to be careful in piling and unpling arms, to prevent damage being done to the rods and sights.

S. 4. *Funeral Exercise.*

The men will be drawn up at open order, bayonets unfixed.

- Shoulder--Arms.* }  
*Present--Arms.* } As usual.

*Reverse-  
Arms.*

Throw the rifle out to the front to the full extent of the left arm, give the butt a cant with the right hand towards the body, bringing the butt inside the left arm, and turning the muzzle straight over to the front; seize the rifle with the right hand under the lower band, barrel to the front, muzzle pointing down, guard as high as the chin, and seize the hammer with the left hand without moving the rifle, arms close to the body.

*Two.* Give the rifle a cant under the left arm, bringing the muzzle to the rear, sling uppermost, and with the right hand behind the body seize the rifle.

*Rest on  
your Arms  
reversed.*

Quit the rifle with the right hand, and bring it to a perpendicular position, the muzzle placed upon the toes of the left foot. The right and left hands, open, to be placed upon the butt end of the rifle.

*Stand at-Ease.*

*Attention.*

The soldiers' heads will lean on the breast.  
On the word *Attention*, the soldiers will raise their heads.

*Reverse-  
Arms.*

Lay hold of the rifle with the right hand under the lower band, fingers round the barrel, and raise it under the left arm, muzzle slanting to the rear; seize the hammer at the same instant with the left hand, move the right hand smartly to the rear of the body, and grasp the rifle.

## RIFLE EXERCISES.

*Rest on your  
Arms reversed.*

As before described.

*Present  
Arms.*

1st. Seize the rifle with the left hand at the swell, thumb in front, back of the hand towards the body.

2nd. Seize the small of the butt with the right hand, the back of it to the left, thumb pointing down.

3rd. Turn the rifle with the butt close to the outside of the right arm, inclining the muzzle to the front, to the position of "The Present Arms."

*Shoulder-  
Arms.  
Close—Order.  
March.  
Order—Arms.  
Stand at—Ease.*

As usual.

S. 5. *Paying Compliments with Arms.*

When a non-commissioned officer, or soldier, passes or addresses an officer, he will do so at "The Shoulder" (or "Advance Arms" with the long rifle); with the left arm brought across the body, and the hand, fingers extended, meeting the sling of the rifle in line with the right elbow.

S. 6. *Dismissing a Company.*

*Right—Turn.*

*Dismiss.*

On the word *Dismiss*, the men will port arms, at the same time taking a side pace outwards by ranks; after a pause they will break off.

After breaking off, the men must leave the parade in a quiet and orderly manner, carrying their rifles at "The Advance Arms" (or "Shoulder" with the short rifle).



**FIRING EXERCISE.**

2010MM004

## PLATE XVII.



AS A FRONT RANK,  
READY.



AS A REAR RANK,  
PRESENT (1st Motion).

S. 7. *The Firing Exercise.*

The recruit having acquired a thorough knowledge of the Manual Exercise, will next be taught the Firing Exercise. The squad to fall in at "The Order."

The recruit will be instructed :—

- 1stly. To load and fire standing.
- 2ndly. To load and fire kneeling.

Each of these exercises will be taught :—

- 1stly. By Numbers.
- 2ndly. In Quick Time.

Except where it is otherwise specified, the instructions apply equally to the long and the short rifle, and to the front and rear rank.

Squads are not to be instructed in the Firing Exercise by Numbers, standing or kneeling, except in single rank.

1. *To Load and Fire standing by Numbers, from "the Order."*

Caution,—*Firing Exercise by Numbers, as a Front (or Rear) Rank.*

*At — yards  
Ready.*

Turn on both heels half right, carrying the rifle round with the body; and, with the long rifle, place the thumb of the right hand behind the barrel to seize it. The right foot to point to the right, the left to the front, eyes to look to the front.

*Two.*

Advance the left foot, moving the body with it, ten inches to the left front (viz., six to the front, and eight to the left), toes to point to the front; at the same time, bring the rifle to a horizontal position at the right side, with the

## RIFLE EXERCISES.

small of the butt just in front of the hip, grasping the stock with the left hand between the lower band and the projection in front of the lock plate, thumb between stock and barrel, and half cock with the thumb of the right hand, fingers between the trigger-guard. The left elbow to be kept close to the body as a support for the rifle. —the right hand to hold the small of the butt lightly, thumb resting on the comb of the hammer, with the elbow to the rear.

As a rear rank, the left foot to be advanced six inches, the body moving with it, and the butt four inches above the hip.

*Three.*

Placing the thumb of the right hand on the thumb-piece of the breech-block, and the forefinger along the nipple-lump (the remaining fingers closed in the hand), open the breech by a sharp turn of the wrist, carry the hand to the pouch, take hold of a cartridge at the rim with the forefinger and thumb, and put it into the barrel, pressing it well home with the thumb; then close the breech firmly by canting the breech-block sharply home with the fingers. Lastly, carry the hand to the small of the butt, and hold it lightly with the fingers behind the trigger-guard, thumb pointing to the muzzle:—this is termed the “Ready” position.

*Four.*

Adjust the back-sight, —full-cock with the thumb, fingers behind the trigger-

guard,—and fix the eyes steadfastly on some object in front. Thumb to point to the muzzle after cocking.

When the feet are at right angles, as detailed in the 2nd motion, care must be taken not to increase the angle by turning the toes of the right foot to the rear, which might alter the proper position of the right shoulder in firing.

The back-sight will be adjusted as follows :—With the forefinger and thumb of the right hand, move the sliding bar until the top is even with the line, or at the place on the flanges showing the distance named ; then, if necessary, raise the flap carefully, preventing it from springing up with a jerk, and afterwards carry the hand back to the small of the butt.

When men are required simply to load, the command will be *Load*, and they will perform the first three motions of the “*Ready*.” when the word *Ready* is given to men already loaded, they will proceed with the fourth motion. In giving the command *Ready*, some distance should always be named ; if the distance be omitted, the soldier must judge it for himself, and adjust his sight accordingly.

*Present.*

Bring the rifle smartly to the shoulder, pointing the muzzle a few inches below the object on which the right eye is fixed, and place the forefinger round the trigger like a hook, but without pressing it, that part between the first and second joint to rest on it.

The centre of the butt to be pressed firmly to the shoulder with the left hand—the top of the butt to be even with the top of the shoulder—the left elbow to be under the rifle as a support—the right elbow to be raised nearly square with

## RIFLE EXERCISES.

(but not too high) and well in front of the right shoulder; to form a bed for the butt—the right hand to hold the small of the butt lightly, thumb pointing to the muzzle—the left eye to be closed. This motion is to be performed without moving the left hand from its grasp, or bending the body, or raising the heels.

*Two.*

Raise the muzzle steadily, until the top of the fore-sight is brought in a line with the object through the notch of the back-sight, pressing the trigger at the same time without the least motion of the hand, eye, or arm, until the hammer falls, still keeping the eye fixed on the object.

*Three.*

Bring the rifle to a horizontal position at the right side,—shut down the flap of the back-sight, if raised, without moving the sliding bar,—half-cock,—open the breech,—and, holding the breech-block firmly with the forefinger and thumb, by the thumb-piece and nipple-lump, draw it back as far as possible with a jerk, raising the muzzle of the rifle slightly in doing so, to remove the empty cartridge-case—let the breech-block go back, and at the same time cant the rifle sharply over to the right by a turn of the wrist, to allow the case to fall out, bringing the rifle again to the horizontal position,—then close the breech and carry the hand to the “*Ready*” position.

When the word *Ready* is given to men at the 3rd motion of the "*Present*," they will proceed with the 3rd and 4th motions of the "*Ready*."

As the first motion of the "*Present*" will not be learned without practice and much care, the instructor will frequently give the command *As you were*, when the recruit will bring the rifle to the right side without moving any part of his body but his arms, or his eyes from the object to be aimed at. The instructor will then point out the defects observed. By this means the recruit will soon be accustomed to get into the position readily, and will acquire a full command of his rifle with the left hand.

The squad will also be brought back to the "*Ready*" by the command *As you were* after the 1st and 2nd motions of the "*Present*," for the instructor to explain the motion that follows next in order: the recruits maintaining the erect position of the body, and keeping the eyes fixed on the object they are to aim at.

Particular attention is to be given to the following points in the "*Present*." The body is to be firm and upright,—the butt to be pressed firmly into the hollow of the shoulder, so as to resist the recoil on the explosion of the powder,—the rifle to rest solidly on the left hand, and to be firmly grasped, but without rigidity of muscle,—the back-sight to be upright. In aiming, and pressing the trigger, the breathing to be restrained. The right eye to continue fixed on the object after snapping, to ascertain if the aim has been deranged by the movement of the trigger or body. The position of the head with reference to the butt, when taking aim, must depend entirely on the elevation used. With small elevation, the butt must be brought to the head by raising the shoulder, or the cheek must be so placed on the butt, by bending the head a little forward (not sideways), as to get the eye fixed on the object through the

R. M.

notch of the back sight; as the distances increase, the head must be raised or the shoulder lowered.

Too much pains cannot be taken to ensure that the soldier takes a deliberate aim at some object whenever he brings the rifle to the "*Present*;" for this purpose, small bulls-eyes are to be marked on the barrack wall.

2. *To Order Arms from the third position of the "Present" standing.*

*Order—Arms.* { On the word *Arms*, turn on the right heel to the front; at the same time bring the left foot back to the right, seize the rifle with the right hand close in front of the left, and come to "*The Order*," as detailed in the *Manual Exercise*.

3. *To come to the "Ready" standing by Numbers from "The Shoulder," "The Slope," or "The Order."*

*By Numbers,  
as a Front (or  
Rear) Rank.  
At — yards.  
Ready.*

*From "The Shoulder"  
or "The Slope,"  
with the Long Rifle.*

Turn on both heels half right; at the same time seize the rifle with the right hand at the small of the butt.

*From "The Shoulder,"  
with  
the Short Rifle.*

Turn on both heels half right; at the same time seize the rifle with the left hand under the lower band, bending the right arm slightly to do so.

*Two,  
Three,  
Four.*

{ Proceed as detailed in the 2nd, 3rd, and 4th motions of the "*Ready*" (No. 1.)



From "The Order.

<p>By Numbers, as a Front (or Rear) Rank. At—Yards. Ready. Two. Three. Four.</p>	}	<p>Proceed as detailed in the "Ready" (No. I.).</p>
--	---	---

4. To Fire a Volley Standing, and Order.

Caution,—By Numbers, as a Front (or Rear) Rank, Fire a Volley and Order.

<p>At—yards. Ready. Two. Three. Four.</p>	}	<p>As before detailed.</p>
---	---	----------------------------

<p>Present. Two. Three.</p>	}	<p>As before detailed.</p>
-------------------------------------	---	----------------------------

}	<p>As before detailed : then rest a pause of slow time — and, taking the time from the right, turn on the right heel to the front, and order.</p>
---	---

5. To Half-cock Arms when at the Ready.

<p>Half-cock— Arms.</p>	}	<p>Place the thumb of the right hand on the comb of the hammer, and the fore- finger on the trigger, and draw back both until the sear is disengaged from the full bent of the tumbler,—then let the ham- mer gently down until it passes the half bent, and (removing the forefinger from the trigger) draw it back to the half bent again,—shut down the flap of the</p>
-----------------------------	---	--

back-sight if raised,—and carry the hand to the “Ready” position.

6 *To Ease-springs when at the Half-cock.*

*Ease-springs.*

Place the thumb of the right hand on the comb of the hammer, and the forefinger on the trigger, and draw both back until the sear is disengaged from the half bent of the tumbler,—then let the hammer gently down (removing the forefinger from the trigger) on the nipple,—and carry the hand to the “Ready” position.

*To unload Arms.*

*Unload—Arms.*

When at the “Ready” position, open the breech,—draw the breech-block back as far as possible by a jerk, raising the muzzle of the rifle slightly in doing so to withdraw the cartridge; let the breech-block go back, and at the same time cant the rifle sharply over to the right to allow the cartridge to fall into the hand:—then shut the breech with the fingers, bringing the rifle again to the horizontal position,—return the cartridge to the pouch,—and carry the hand to the “Ready” position. When at the “Ready” half-cock, then proceed as above detailed.

8. *To Load and Fire standing, in Quick Time.*

The recruit having thoroughly learned the Firing Exercise by Numbers, standing, will next be taught to perform it in Quick Time by the following words of command, which are to be executed as before detailed, resting a pause of quick time before each motion.

<i>Caution.—Firing Exercise, as a Front (or Rear) Rank.</i>	
<i>At—yards.</i>	} In four motions.
<i>Ready.</i>	
<i>Present.</i>	
<i>Order—Arms.</i>	In one motion.
<i>Fire a Volley, and Order.</i>	
<i>At—yards.</i>	} In four motions.
<i>Ready.</i>	
<i>Present.</i>	
	} In three motions : then turn to the front and order.

9. *To Load and Fire kneeling, by Numbers.*

The squad, being at “The Order,” “The Shoulder,” or “The Slope,” will be instructed as follows :

*Caution.—By Numbers, as a Front (or Rear) Rank, kneeling, fire a Volley.*

*At—yards.* { Proceed as detailed for the 1st motion of the “Ready” from “The Shoulder” or “The Order” (No. 3.)

*Ready.* {

*Two.* { Bring the rifle to a horizontal position at the right side as in the 2nd motion of the “Ready” from “The Order” (No. 1) ; at the same time sink on the right knee twelve inches to the rear and six to the right of the left heel, and square with the right foot, bringing the weight of the body at once on the right heel, and place the left forearm six inches behind, and nearly square with, the left knee, the butt to rest against the right side.

{ The right knee of the rear rank to be twelve inches to the right when on the

ground ; the left forearm on, and nearly square with, the left knee.

*Three.* }  
*Four.* } As detailed when firing standing.

The length of the leg in very tall men being greater than the breadth of the body, they have not room, in rank, to get the knee square with the foot ; in such cases, the knee will be inclined to the front, but not beyond the inside of the right foot of the man on the right.

*Present.* }  
 } As detailed when firing standing, placing the left elbow at once over the left knee as a support. The body is not to be raised off the heel in bringing the rifle to the shoulder.

*Two.* }  
*Three:* } As detailed when firing standing, bringing the left forearm on the left thigh as above directed in the 2nd motion of the "Ready" kneeling.

The instructions which follow the "Present" standing, are applicable to this position when on the knee.

When required to come to the "Ready" position kneeling, from the same position standing, the left foot will be brought back to the right before sinking on the knee.

10. *To Order Arms from the third position of the "Present" kneeling.*

*Order Arms.* { On the word *Arms*, spring to *attention*, turning on the left heel to the front, and order as before detailed.

11. *To fire a Volley kneeling, and Order, by Numbers.*

*Caution.*—By *Numbers*, as a *Front* (or *Rear*) *Rank kneeling.* *Fire a Volley and Order.*

**FIRING EXERCISE.**

2010MM004

## PLATE XVIII.



AS A FRONT RANK  
KNEELING, READY.  
(4th Motion).



AS A REAR RANK  
KNEELING, PRESENT  
(1st Motion).

<i>At—yards.</i>	}	As before detailed.
<i>Ready.</i>		
<i>Two.</i>		
<i>Three.</i>		
<i>Four.</i>	}	As before detailed : then rest a pause of slow time,—and, taking the time from the right, spring to <i>attention</i> , turning on the left heel to the front, and order.
<i>Present.</i>		
<i>Two.</i>		
<i>Three.</i>		

### 12. To Load and Fire kneeling, in Quick Time.

The recruit having been thoroughly instructed in the motions of loading and firing on the knee by Numbers, will next be taught to perform them in Quick Time by the following words of command, which are to be executed as before detailed, resting a pause of quick time between each motion.

Caution,—As a *Front* (or *Rear*) Rank kneeling, *Fire a Volley.*

<i>At—yards.</i>	}	In four motions.
<i>Ready.</i>		
<i>Present.</i>		In three motions.
<i>Order—Arms.</i>		In one motion.
<i>As a Front</i> (or <i>Rear</i> ) <i>Rank kneeling,</i>	}	In four motions.
<i>Fire a Volley and Order.</i>		
<i>At—yards.</i>		
<i>Ready.</i>		
<i>Present.</i>	{	In three motions ; then spring to <i>attention</i> to the front, and order.

### 13. *Loading and Firing in two Ranks.*

When the recruit has learned all the motions of the Firing Exercise, standing and kneeling, in single rank, he will practise them in two ranks ; also the following modes of firing :—

1. Volleys, both ranks standing } with the long rifle
2. Volleys, both ranks kneeling } only.
3. Volleys, front rank kneeling.
4. Independent firing, both ranks standing.
5. Independent firing, both ranks kneeling.
6. Independent firing, front rank kneeling.

In both Volley and Independent firing, the front rank will kneel on the word "*Ready*" unless the caution *Fire a volley*, or *Independent firing*, is preceded by the words "*Both ranks standing (or kneeling).*"

With the short rifle, Volley firing will invariably take place front rank kneeling.

When the preliminary caution *Both ranks standing (or kneeling)* is given, on the caution *Fire a volley (or Independent firing)* the rear rank will take a pace of nine inches to the front, or, if at the "*Ready*" position, will advance the left foot three inches, then bring up the right heel to the left ; resuming its distance on returning to "*The Order.*"

When firing volleys or independently, the number of rounds having been specified, the men, after giving their fire in the last round and removing the cartridge-case, &c., will order arms without word of command ; they will also order without word of command on all occasions when the "*Cease Fire*" is sounded, first, if necessary, removing the cartridge-case, &c., or, if at the "*Ready,*" unloading. In coming to "*The Order*" after volley firing, the directions



given in Nos. 4 and 11 will be observed ; after Independent firing, the men will order independently.

The mode of firing in square is detailed in S. 8.

14. *Independent firing standing or kneeling.*

Caution,—*Rounds, Independent firing.*

*At—yards.*

*Ready.*

*Commence.*

} As before detailed.

Each man of the front rank will come to the “*Present*” independently of his right or left hand man, and, when he returns to the “*Ready*” position his rear-rank man will come to the “*Present*.” When firing both ranks standing or both kneeling, the men of a file will thus continue firing and loading, the rear-rank man coming to the “*Present*” when the front-rank man is at the “*Ready*,” and *vice versa*, until the *Cease Fire* is ordered. When firing front-rank kneeling, the men of a file may fire independently after the first round. The flap of the back-sight, if raised, is not to be put down until after the last round is fired.

It is to be observed, in all cases, that the object of independent firing is that each man should take a calm and deliberate aim ; all hurry is to be avoided.

*Cease—Fire.*

As detailed in No. 13.

When firing independently as above detailed, the commands *Commence* and *Cease Fire* will be given on the drum or bugle.

The Firing Review Exercise is detailed in S. 11.

S. 8. *Preparing for Cavalry.*

Therecruits, having a thorough knowledge of the different modes of firing in the ranks, will now be practised in receiving cavalry, as in square, two and four deep.

This practice will be commenced on the march with sloped (or trailed) arms; on the command *Halt*, or *Halt, Right-about-Turn*, the men will order arms and fix bayonets (or swords). When the movement is performed from the halt the leading company will order and fix when the remainder get the command *Quick* (or *Double*) *March*. The men who halt without word of command will, in either case, order and fix as they halt.

*Prepare for—  
Cavalry.*

If the square is four deep, the second and fourth ranks will take a pace of nine inches to the front. The first and second ranks will then sink upon the right knee, as a front and rear rank, and, at the same time, place the butts of their rifles on the ground against the inside of their right knee, locks uppermost, with the muzzles slanting upwards so that the point of the bayonet or sword may be about the height of a horse's nose; the left hand to grasp the rifle firmly immediately about the lower band, the right hand to hold the small of the butt, the left arm to rest upon the thigh about six inches from the knee.

*Ready.*

The third and fourth ranks will come to the "*Ready*" position (the muzzles of their rifles slightly inclined upwards), and load, &c., as usual.

When men standing with unfixed bayonets (or swords) are ordered to prepare for Cavalry, they will at once fix, then proceed as above described.





If the square is required to fire, unless it is intended to fire from all faces of the square at once, the caution—*Face* (or *Faces*) will precede the caution to fire.

- |  |   |  |
|--|---|--|
| <p>—<i>Rounds,</i><br/><i>Independent</i><br/><i>firing—</i><br/><i>Commence.</i><br/>or<br/><i>Fire a Volley.</i><br/><i>At—yards</i><br/><i>Ready.</i><br/><i>Present.</i></p> | } | <p><b>As before detailed.</b></p>  |
| <p><i>Cease—Fire.</i><br/>or<br/><i>Order—Arms.</i></p>  | } | <p><b>As before detailed.</b></p>  |
| <p><i>Kneeling Ranks</i><br/>(or <i>Kneeling</i><br/><i>Ranks of the—</i><br/><i>Face, or Faces</i>)<br/>—<i>Fire a Volley.</i></p>  | } | <p>This caution to be given, should it be deemed necessary for the kneeling ranks to fire a volley.</p>          |
| <p><i>At—yards</i><br/><i>Ready.</i></p>   | } | <p>Come to the “<i>Ready</i>” position, bringing the weight of the body on the right heel, and load, &amp;c.</p> |
| <p><i>Present.</i></p>   | } | <p>As before detailed; then bring the rifle again to resist Cavalry.</p>   |
- Order—Arms.*

If considered expedient, the standing and kneeling ranks may fire volleys alternately, time being allowed between the rounds for the smoke to clear away.

The above detail applies equally to squares less than four deep, with the exception that the front rank only will kneel to resist Cavalry.

S. 9. *A Feu-de-Joie.*

For this mode of firing the line will be drawn up at open order, as described in Part III., S. 3 ; except that the commanding officer will take post in the rear.

<i>With Blank Cartridge, Ready. Present.</i>	}	Muzzles of rifles to slant upwards when loading, and to remain so.  Rifles to be elevated at an angle of 45°.
--	---	---

The right-hand man of the front rank commences the fire, which will run down the front and up the rear as quickly as possible. When the right-hand man of the rear rank has fired, the whole will glance their eyes to the right to bring the rifle to the "Ready" position, remove the cartridge-case, &c.

<i>Ready. Present.</i>	}	As before directed.
----------------------------	---	---------------------

The same to be repeated a third time.

*Order—Arms.*

The commanding officer will then move to the front and give the following commands :—

*Shoulder—Arms.*

*Present—Arms.*

*Shoulder—Arms.*

*Order—Arms.*

Three cheers.

When artillery are present and are ordered to fire <sup>21</sup> guns, seven will be fired before each round of the Feu-de-joie.

## REVIEW EXERCISE.

## REVIEW EXERCISE.

*S. 10. Review Exercise.*

At inspections or reviews the Manual and Firing Exercises will be performed by the men judging the Time as directed in Ss. 1. and 2., No. 2. The men standing at the "The Order," with fixed bayonets, will be ordered to shoulder and take open order, as described in Part VII., S. 1; after which the words of command will be as follows:—

*For the Long Rifle.*

Caution. MANUAL—EXERCISE.

- I. PRESENT—ARMS.
  - II. SHOULDER—ARMS.
  - III. PORT—ARMS.
  - IV. CHARGE—BAYONETS.
  - V. SHOULDER—ARMS.
  - VI. ADVANCE—ARMS.
  - VII. ORDER—ARMS.
  - VIII. ADVANCE—ARMS.
  - IX. SHOULDER—ARMS.
  - X. SUPPORT—ARMS.
  - XI. SHOULDER—ARMS.
  - XII. SLOPE—ARMS.
  - XIII. SHOULDER—ARMS.
  - XIV. ORDER—ARMS.
  - XV. UNFIX—BAYONETS.
- CLOSE—ORDER. MARCH.

Caution. FIRING—EXERCISE.

FIRE A VOLLEY AT 300 YARDS.

READY. PRESENT.

BOTH RANKS KNEELING,

FIRE A VOLLEY AND ORDER.

AT 300 YARDS.

READY. PRESENT.

STAND AT—EASE.

*For the Short Rifle.*

Caution. MANUAL—EXERCISE.

- I. PRESENT—ARMS.
  - II. SHOULDER—ARMS.
  - III. SUPPORT—ARMS.
  - IV. SHOULDER—ARMS.
  - V. ORDER—ARMS.
  - VI. FIX—SWORDS.
  - VII. SHOULDER—ARMS.
  - VIII. PORT—ARMS.
  - IX. CHARGE—SWORDS.
  - X. SHOULDER—ARMS.
  - XI. SLOPE—ARMS.
  - XII. SHOULDER—ARMS.
  - XIII. ORDER—ARMS.
  - XIV. UNFIX—SWORDS.
- CLOSE—ORDER. MARCH.

Caution. FIRING—EXERCISE.

FIRE A VOLLEY AT 300 YARDS.

READY. PRESENT.

FIRE A VOLLEY AND ORDER.

AT 300 YARDS,

READY. PRESENT.

STAND AT—EASE.

*S. 11. Manner of Inspecting Arms on Parade.*

The company having been inspected as directed in Part II., S. 27, bayonets (or swords) having been unfixed, and arms shouldered, the inspecting officer will proceed as follows :—

*For Inspection,*  
*Port—Arms.* { When at “The Port,” half-cock the rifle, and open the breech, holding the block between the forefinger and thumb of the right hand by the thumb-piece and nipple-lump.

The officer will go down the ranks to see that the breech-shoe and breech-block are free from rust, and otherwise clean, also to see that the breech-block is free in its action. Each soldier, as the officer approaches within one file of him, will turn the barrel of his rifle full to the front with his left hand, lock downwards, and draw back the breech-block with his right hand.

*Close Order—March.*

*Examine—Arms.* { Both ranks will come to the position of “The Charge,” with the muzzle of the rifle so inclined as to enable the officer to look through the barrel. The rear-rank men, in turning to the right, will raise their rifles perpendicularly, so as to clear the front-rank men when coming down to the charge.

The officer will now proceed to look through each barrel to see that it is clean and free from rust. The soldier, when the officer passes the file nearest to him, will close the breech,—ease springs,—order arms,—and stand at ease.



### S. 12. Rifle Exercises for Serjeants.

The serjeants of all infantry regiments will be taught the Manual and Firing Exercises for the short rifle.

Serjeants, when moving with their companies or with the battalion, will remain with unfixed swords, except while they are escorting the colours, and when they are in a square, in which cases they will have their swords fixed.

Serjeants will stand at ease and come to attention with the men; they will also shoulder arms, slope (or trail) arms, and order arms with them. The serjeants, during the performance of the manual and firing exercises by the rank and file, will remain steady at "The Shoulder."

#### *Recover-Arms.*

*The Recover.*—Serjeants will recover arms as follows:—Seize the rifle as directed in the first motion of "The Present Arms," then raise it perpendicularly in front of the face, right hand grasping the small of the butt, thumb as high as the mouth, barrel to the front; at the same time place the left hand under the butt, thumb in front of the heel, first two joints of the fingers round the side of the butt.

While a serjeant marking a point in a line formation is extending an arm, he will hold his rifle by the small of the butt with the other hand, resting the toe against his chest.

---

## RIFLE EXERCISES.

## BAYONET EXERCISE.

S. 13. *Bayonet, or Sword-Bayonet, Exercise.*1. *General Directions.*

*Formation of Squad.*—When recruits have been thoroughly instructed in the Manual and Firing Exercises, they will be taught the Bayonet Exercise; for this purpose they will, in the first instance, be formed in squads of not more than sixteen men in single rank.

*Method of Teaching.*—The recruits will first be taught the exercises in slow and quick time by Numbers; after which they will be taught to perform them, judging the Time, in the review exercise, and with such variation from the regular order of the drill as the instructor may require, frequently changing quickly from one movement to another.

*Position.*—In attaining a good and firm position, care must be taken not to allow the limbs to be rigid, as any stiffness will prevent the promptness of action requisite to give effect to the bayonet.

*Giving Points at Marks.*—In order to teach the recruit to deliver the thrust in a proper direction, a cross bar upon poles may be erected, from which balls can be suspended, and a squad being drawn up in front should be practised in giving point at them.

2. *Preliminary Drill.*

The squad having fallen in in single rank as above directed, will be formed into two deep, as follows:—

*Shoulder-Arms.*

<i>Prepare for Bayonet- Exercise.</i>	{	Odd numbers stand fast, even numbers turn to the right about.
<i>Quick-March.</i>		Even numbers move four paces to the rear, halt and front.
<i>Port-Arms.</i>		As usual.
<i>Charge-Bayonets.</i>	{	As usual. In the bayonet exercise, this is called the “First Position.”
<i>Preliminary Drill in Slow(or Quick)-Time.</i>		Caution.

The feet will be kept at right angles to each other throughout the following exercises.

- |                         |   |  |
|-------------------------|---|--|
| <i>Second-Position.</i> | } | Draw back the right foot twenty-four inches ; the body to be balanced upon both feet, the heels in line with each other, both knees bent, and kept well apart, directly over the feet, the left pointing to the front. |
| <i>Third-Position.</i>  | } | Advance the body by extending the right leg and bending forward the left leg without moving or raising the feet ; still keeping the body upright, and the head well up.  |
| <i>Second-Position.</i> | } | As before.   |
| <i>Advance.</i>         | } | Move forward the left foot six inches, and follow with the right the same length of step.  |
| <i>Retire.</i>          | } | Step back with the right foot six inches, and follow with the left the same length of step.  |
| <i>Double-Advance.</i>  | } | Bring up the right foot to the left, and step out again with the left to the "Second Position."  |
| <i>Double-Retire.</i>   | } | Bring the left foot back to the right, and step back again with the right to the "Second Position."  |
| <i>First-Position.</i>  | } | Bring up the right heel to the left, straightening the knees.  |
| <i>Shoulder-Arms.</i>   |   | As usual, resuming the proper front.   |
| <i>Order-Arms.</i>      |   |  |
| <i>Stand at-Ease.</i>   |   |  |

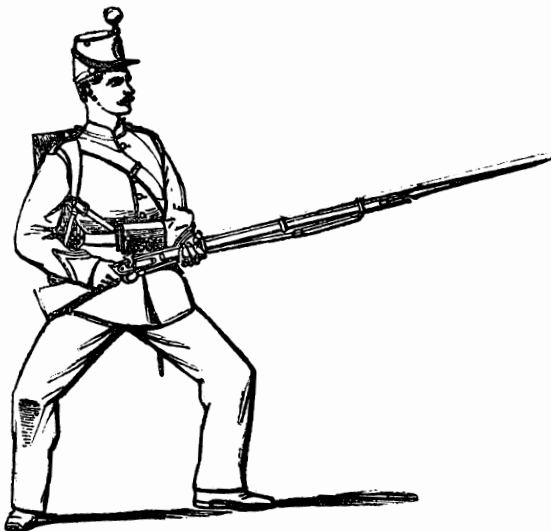
In this and the following drills, each movement will be repeated as often as may be necessary ; but the recruit must

not be kept too long in the same position. When it is necessary for an awkward man to repeat any particular portion of the drill, the rest should be allowed to stand at ease.

3. *Guards and Points, by Numbers.*

<i>Attention.</i>	}	As usual.
<i>Shoulder-Arms.</i>		
<i>Port-Arms.</i>		
<i>Charge-Bayonets</i>		
<i>Guards and Points by Numbers ; in Slow (or Quick) Time.</i>	}	Caution.
<i>Guard.</i>		
<i>Point.</i>		
<i>Two.</i>		
<i>Low-Guard.</i>		
<i>Point.</i>	}	Fall back to the "Second Position," with the knees well apart, the head and body erect, and the chest expanded ; the rifle retaining the position of "Charge Bayonets," the point of the bayonet directed towards the height of a man's breast. Plate XX,
	}	Without quitting the hold, or losing the balance of the rifle, advance it gradually to the full extent of the arms ; at the same time incline forwards to the "Third Position," the right elbow rather under and close to the stock. Plate XXI.
	}	Resume slowly the position of "Guard." Bring the rifle to the "Low Guard" by turning the sling uppermost, and raising the butt and right elbow as high as the head, the back of the hand towards the right ear, and the bayonet pointing downwards to the front. Plate XXII.
	}	As before, but downwards, and as the rifle gradually descends, turn the barrel upwards. Plate XXIII.

## PLATE XX.



GUARD.

**RIFLE EXERCISES.**

2010MM004

PLATE XXI.

POINT FROM GUARD.



POINT.

BAYONET, OR SWOOLD-BAYONET, EXERCISE.





PLATE XXII.



LOW GUARD.



PLATE XXIII.

POINT FROM LOW GUARD.



BAYONET, OR SWORD-BAYONET, EXERCISE. 103



PLATE XXIV.

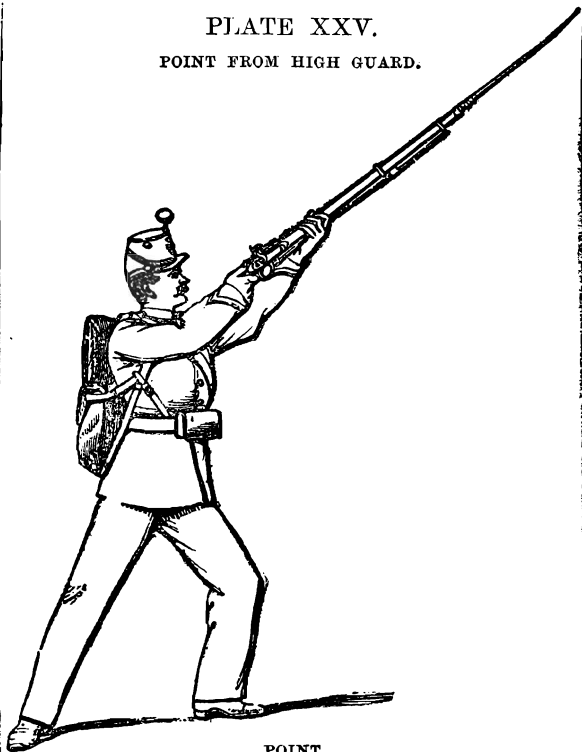


HIGH GUARD.



PLATE XXV.

POINT FROM HIGH GUARD.

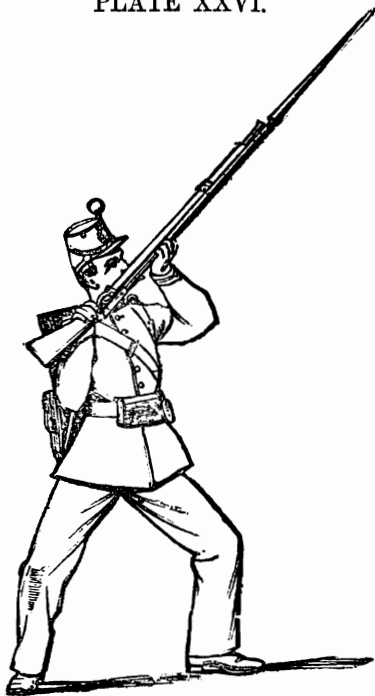


POINT.





PLATE XXVI.

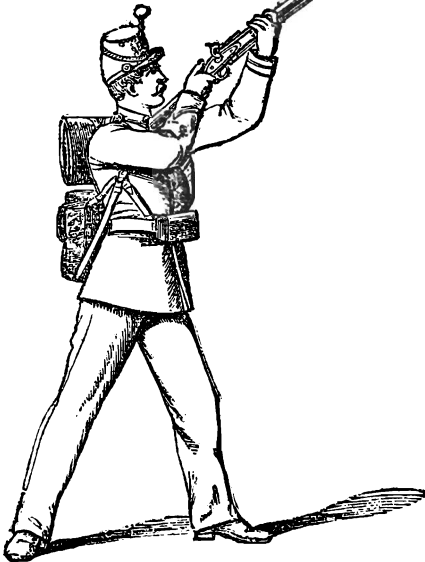


HEAD PARRY.



PLATE XXVII.

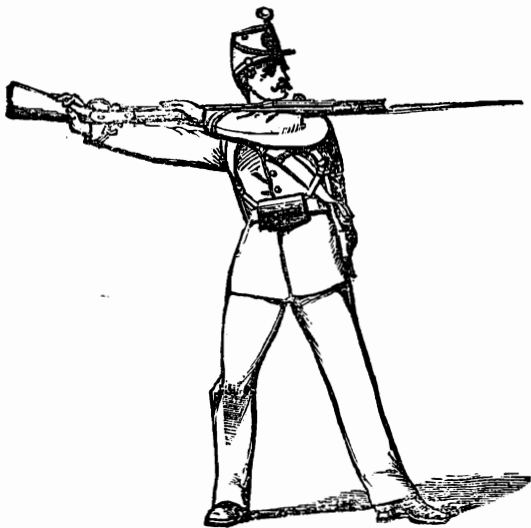
POINT FROM HEAD PARRY.



POINT.

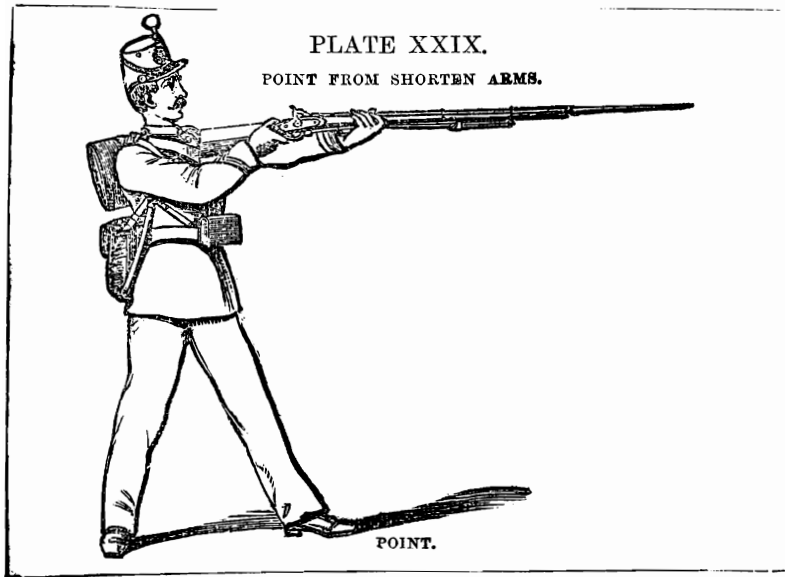


PLATE XXVIII.



SHORTEN ARMS.





BAYONET, OR SWORD-BAYONET, EXERCISE. 116





- Two.* { Resume the position of the "Low Guard."
- High-Guard.* { Bring the rifle to the "High Guard" by lowering the right wrist to the hip; the left hand to be opposite the breast. Plate XXIV.
- Point.* { As before, but upwards. Plate XXV.  
*Two.* { Resume the position of "High Guard."
- Head-Parry.* { Raise the rifle, turning the sling upwards till the left wrist is as high as, and opposite to, the forehead, the bayonet directed to the left front; the butt to slant downwards. The fingers of the left hand to be closed, and the thumb extended, to avoid a sabrecut. Plate XXVI.
- Point.* { Direct the bayonet to the front by drawing the butt towards the head; and advance the rifle to the full extent of the arms, turning the barrel upwards and opening the fingers. Plate XXVII.
- Two.* { Return to the "Head Parry."
- Shorten Arms.* { Throw back the rifle to the full extent of the right arm, lowering the point of the bayonet direct to the front, the barrel resting upon the left arm, just above the elbow; and carry back the body by extending the left leg. Plate XXVIII.
- Point.* { As before, direct to the front; keeping the left leg extended. Plate XXIX.  
*Two.* { Return to the "Shorten Arms."  
*Guard.* { As before.
- Shoulder-Arms.* { Bring up the right heel to the left, straighten the knees, come to the front, and shoulder.
- Order-Arms*

When it is necessary to repeat a thrust in the above practice, the command "*As you were*" will be given instead of "*Two*."

The first guard and point are intended to be used against a man on foot, on levelground; the low guard and point when standing on a height, such as a parapet, against a man below; the high guard and point against a man standing on a height, or against a mounted man. The thrust of a bayonet or lance can be parried by a slight movement of the rifle to the right or left when at either of the three guards. In order to protect the head from a sabre cut, the rifle will be raised to "*The Head Parry*."

#### 4. *Guards and Points in an Oblique Direction, by Numbers.*

*Attention.*

*Shoulder-Arms.*

*Port-Arms.*

*Charge-Bayonets.*

*Variations of Guard  
and Point by Numbers,  
in Slow (or Quick) Time.* } **Caution.**

*Guard* As before.

*Right.*

{ Keeping the feet steady, and retaining the position of "*Guard*," turn the body to the right front, so as to present the bayonet in that direction.

*Point.*

As before to the right front.

*Two.*

Return to "*Guard*" to the right front.

*Left:*

{ Turn the body as before, but to the left front.

*Point.*

As before, to the left front.

*Two.*

Return to "*Guard*" to the left front.

*Low Guard.*

*Point.*

} As before to the left front.

*Two.*

<i>High-Guard.</i>	}	As before, to the left front.
<i>Point.</i>		
<i>Two.</i>	}	Retaining the position of the "High Guard," turn the body to the right front.
<i>Right.</i>		
<i>Point.</i>	}	As before, to the right front.
<i>Two.</i>		
<i>Low-Guard.</i>	}	Return to the "High Guard" to the right front.
<i>Point.</i>		
<i>Two.</i>	}	As before, to the right front.
<i>Guard.</i>		
<i>Shoulder-Arms.</i>	}	As before.
<i>Order-Arms.</i>		
<i>Stand at-Ease.</i>	}	As before.

5. *Points to the Rear, by Numbers.*

In order to bring the body and limbs into equal action on both sides, the preceding practices should be performed with the right shoulder and foot foremost, the squad being turned about, as follows :—

*Attention.*  
*Shoulder-Arms.*  
*Port-Arms.*  
*Charge-*  
*Bayonets.*

THE caution will be given as before, according to the exercise which is to be performed.

*Guard.* As before.

*About.* { Straighten the knees and raise the rifle perpendicularly in front of the centre of the body ; at the same time turn to the right about upon the heels, the right foot pointing to the proper rear, the left foot to its left, and smartly changing the hold of

the rifle with the right hand at the balance, and grasping the small of the stock with the left hand, sink down again to the position of "Guard," by bending the knees.

### 6. *Exercises in Quick Time.*

The movements detailed in the preceding numbers having been taught in Slow Time, they will next be practised in Quick Time: that is, the movements explained in No. 2 will be made more rapidly, and in Nos. 3 and 4 the thrust will be delivered quicker, especially at the latter part, and in withdrawing the rifle at the word *Two*; the motion will also be quicker, especially at the commencement.

### 7. *Bayonet Exercise in Single Rank.*

The guards and points will also be practised in single rank without intervals, the squad being reformed in single rank for that purpose.

The whole of the practices detailed in Nos. 2, 3, and 4 will then be performed, after which the squad will be brought to its proper front from the position of "Guard," as follows:—

*About.*

As before directed.

*Shoulder-Arms.*

*Order-Arms.*

*Stand at-Ease.*

### 8. *Review Exercise.*

In the review exercise the soldiers will perform the second motion, judging the Time without the word *Two*; the point being given, and the rifle drawn back to the position from which it was delivered in quick, but marked time.

For this exercise the squad, company, or battalion will be drawn up in line.

*Prepare for Bayonet-Exercise.* { The odd numbers of the front rank will stand fast ; the remainder, including the colour party, the captains, guides, markers, and supernumerary rank, will go to the right about.

*Quick-March.* { Those who have turned about will move direct to the rear ; the even numbers of the front rank, four paces ; the odd numbers of the rear rank, seven paces ; the even numbers of the rear rank, eleven paces ; the colour party, right guides, and markers eighteen paces, and the captains and supernumerary rank fifteen paces ; each man halting and fronting at his proper distance, and the ranks dressing by the right.

*Review Exercise.*      Caution.

*Guard.* { Seize the small of the butt with the right hand, and come down at once to the position of "Guard."

*Point.* { Deliver the point to the front, rest a pause of slow time, and return to "Guard;" each movement being swiftly and smartly executed.

The remaining points will be performed in like manner, by the following commands, viz.: *Low-Guard, Point. High-Guard, Point. Head-Parry, Point. Shorten-Arms, Point, Guard. Right, Point. Left, Point. Low-Guard, Point. High-Guard, Point. Right, Point. Low-Guard, Point. Guard. About.*

The above exercise will then be performed with the right shoulder and leg foremost, and when it is completed, the word *About* will be given, and line will be formed as follows:—

✱

*Shoulder Arms, Form Line, Quick March.*—The ranks in rear will move up to their proper places in two deep.

*Order-Arms.*

*Stand at-Ease.*

#### 9. *Review Exercise in Two Ranks.*

The exercise should also be practised in two ranks, without intervals, thus :—the men standing in the formation with intervals described in the preceding Section, will receive the command *Form Ranks, Quick March*; on which the even numbers of each rank will move up between the odd numbers; they will then be brought to the “Guard,” after which the words *Odd (or Even) Numbers, About* will be given, so that the movements may be performed, by alternate men, to the front and rear at the same time.

#### 10. *Review Exercise in Quick Time.*

When the men are perfect in the exercise, it may be performed without any further words of command than *Review Exercise in Quick Time—Guards*: upon which they will go regularly through the movements, executing them smartly but resting a pause of slow time between each motion.

## ADDENDUM.

In the *Shelter-trench Exercise*, on the words **SLING-ARMS**, arms will be slung on the left shoulder. The Left Sling will be taught in the Manual Exercise, as follows :—

*The Left Sling from "The Advance Arms" (or "Shoulder" with the Short Rifle).*

- |   |   |   |
|---|---|---|
| <i>Left,<br/>Sling-Arms.</i>                | { | <i>The Left Sling.</i> —Seize the rifle as in the first motion of "The Shoulder from the Advance Arms" (with the short rifle, as in the first motion of "The Present Arms").                                      |
| <i>Two.</i>                                 | { | Bring the rifle across the body, turning the barrel to the front, so that the sling may pass over the left shoulder ; then seize the sling with the right hand close over the left shoulder.                      |
| <i>Three.</i>                               | { | Bring the rifle down under the left arm, lowering the left hand to its position ; and drop the right hand to the side.  |
| <i>Advance (or<br/>Shoulder)<br/>-Arms.</i> | { | <i>The Advance Arms (or Shoulder) from the Left Sling.</i> —Raise the muzzle, and bring the rifle to the right side with the left hand, seizing it with the right hand at "The Advance Arms" (or "The Shoulder"). |
| <i>Two.</i>                                 | { | Drop the left hand to the side.   |





---

---

**MUSKETRY INSTRUCTION.**

---

---



# MUSKETRY INSTRUCTION.

---

## PART I.

---

### DUTIES, INSTRUCTORS, &c.

#### SELECTION OF DETACHMENTS FOR TRAINING AT THE SCHOOL OF MUSKETRY.

---

##### *Commanding Officers.*

**1.** THE musketry instruction of the troops, like all other exercises, is placed under the responsibility of commanding officers, who are to make themselves acquainted with this important part of a soldier's duty, by careful study of the following regulations—by giving their personal superintendence to the companies under instruction—and by availing themselves of the assistance and information to be derived from inspectors of musketry, at their periodical visits. They, and not the musketry instructor, are to conduct all correspondence on the subject, being answerable for the accuracy of the returns, &c. ;—they are to afford every information and explanation which may be called for by the Inspector-General of Musketry ;—and should they be in doubt as to any point in these regulations, or deem it necessary to make any exception thereto, they will apply to the inspector of musketry, who will give the information, or refer the question to the general officer commanding.

*Majors.*

2. The majors are also to render themselves acquainted with the theory and practice of musketry ; and are, under the orders of the commanding officer, frequently to visit the men engaged at drill and practice, to see that the instructions and orders referring thereto are observed. When there is only one major present, in addition to the commanding officer, this duty is to be taken in turn by the senior captain.

*Captains and Subalterns.*

3. Captains and subalterns are to make themselves equally conversant with the "musketry instruction," as with the company and battalion drill, of which it is a component part,—they are to be present at the musketry drill and practice of their companies,—they are to acquaint themselves with the proficiency of every man thereof in shooting, and judging distance,—and they are to be encouraged to take part in the preliminary drills and the individual firing ; but their points are not to be included in the figure of merit. All young officers are to be put through the entire course as for recruits.

*Officer-Instructors.*

4. In every regiment and battalion of infantry armed with the rifle, there is to be an *Officer-Instructor in Musketry*, charged with the entire musketry training of the young officers and recruits, and with the preliminary drills of the non-commissioned officers of the battalion annually. He is responsible to the commanding officer, that the target and judging distance practices are conducted with uniformity by the several companies, and in strict accordance with these regulations ; and will act as umpire in the case of disputed hits. He is to be considered one of the regimental staff, and to be exempt from all regimental

and garrison duties, except when he is prevented from carrying on those of his special appointment.\* The cases in which it may be necessary to employ the officer-instructor on regimental and garrison duties are to be exceptional, and to be reported to the general officer commanding on the spot, and notified in the monthly musketry diary.

*Assistant Officer-Instructor.*

5. In every battalion a subaltern is to be appointed to act as *Assistant Officer-Instructor*, who is to be exempt from all regimental and garrison duties while the annual course is proceeding. An officer who has received a certificate of qualification is, when available, to be selected for this office.

*Depôt Battalion Instructors.*

6. In depôt battalions, the officers holding the appointment of instructor and assistant instructor are not to be required to join the service companies without special orders from the Commander-in-Chief. Commanding officers are to make such arrangements beforehand, as shall ensure qualified officers being always available to fill these appointments, by the time when the holders of them are likely to be required for service abroad, as the prescribed period of depôt duty will not be allowed to be exceeded on account of their employment as instructors.

7. No officer is to be appointed musketry instructor who has not qualified at the School of Musketry, and is not in possession of a *first-class certificate*. Officers trained since September, 1863, must have obtained a *first-class extra certificate*, to render them eligible for the appointment of musketry instructor to a *depôt battalion*.

*Leave of Absence.*

8. Except in very urgent cases, leave of absence is not to be recommended for the instructor and assistant instruc-

---

\* See also para. 9, page 138.

tor at the same time,—nor when the annual course is proceeding,—nor when there is any considerable number of recruits to be trained. Whenever the instructor is absent for upwards of fourteen days, the allowance for the whole period of such absence is to be issued to the assistant-instructor. This rule is to apply to depôt battalions, where there is a paid assistant-instructor,—in which case however, (or whenever he may obtain leave for upwards of fourteen days,) the pay of an assistant, will cease to be drawn ; and whenever it may be necessary to appoint an officer to do the duty of the assistant, while the latter is acting for the gazetted instructor on leave of absence, an application to that effect must be made to the adjutant-general, showing the amount of instruction actually going on at the time, in order that the issue of the extra pay may be recommended to the War Office.

9. The words “gazetted instructor,” “provisional instructor,” or “assistant instructor in musketry,” are to be inserted against the names of the officers so employed, in the musketry diary and annual practice returns, and in the monthly regimental and depôt battalion returns.

10. The officer-instructor, like the adjutant, and the quartermaster, is appointed for the assistance of the commanding officer in a particular branch of the regimental economy ; but it is to the latter alone that the Commander-in-Chief looks for the carrying out of the system detailed in these regulations ; and it is he only, not the adjutant or musketry instructor, who is responsible for the due training of both officers and soldiers in their various duties. It is, therefore the express duty of the commanding officer to report to the Commander-in-Chief all who, by neglecting to attain a thorough knowledge of their duty, disqualify themselves for their position as instructors, or as company officers.

*Serjeant Instructor.*

11. A serjeant is to be borne on the establishment of every regiment or battalion of infantry, with the designation of *Serjeant-Instructor in Musketry*. The serjeant appointed to this position must have undergone a course of instruction at the School of Musketry, and have obtained a certificate of qualification. He is to be employed exclusively in the musketry training of the men of the battalion,—to assist the officer-instructor in all his duties,—to attend the target and judging distance drills and practices,—and to superintend the company instructors. He is to be exempt from all regimental, garrison, and barrack duties, and is not to be employed as canteen serjeant, or accountant, or steward, or caterer or treasurer to the serjeant's mess; and is not to be subject to the orders of any non-commissioned officer, except as regards discipline.

*Company Instructor.*

12. In every troop, or company, the colour-serjeant, or troop serjeant-major, or in his absence the next senior serjeant, is to be the company instructor. He is to attend with his company when under musketry instruction, to assist the officer and serjeant-instructor in their duties,—and is to be specially charged, under the orders of his captain, and of the officer and serjeant-instructors, with the duty of seeing that the men keep up the instruction they have received in the cleaning and management of their arms.

*Non-commissioned Officers.*

13. The non-commissioned officers are to assist as “drills” in the instruction of the men of their respective companies.

*Training of Officers, &c.*

14. Every encouragement is to be given to officers to qualify at the School of Musketry, and commanding officers are to be held responsible that a sufficient number of trained captains and subalterns is constantly available to fill the vacancies for instructors, that may occur either in regiments or depôt battalions. For this purpose volunteers should always be in readiness to accompany the parties from time to time ordered for instruction. These parties are to consist of one officer, two serjeants, two corporals, and three privates, including the officer's servant. No men are to be selected who are under two or over nineteen years' service, or who cannot read and write; and the preference is always to be given to those who, from their intelligence and general conduct, are likely to be of use to their regiments as drills or otherwise. The parties are to proceed fully armed and equipped, but without ammunition; they are to be unaccompanied by women; all are to be medically inspected, and reported fit for duty on the day of leaving head-quarters; and the men's regimental and company defaulter sheets, together with Form M. (page 278), showing the extent to which they have been exercised in the current annual course, are to be sent with them, in charge of the officer commanding the party. Regimental and depôt battalion serjeant-majors are required to go through a course, and when sent *after appointment* are to be in addition to the detail prescribed above. Officers are also required to go through a course to qualify for appointment as adjutant.

15. Applications to attend the School of Musketry are to be recommended by the commanding officers of regiments or depôts, and to be made, if the applicants be on leave of absence from foreign stations, in sufficient time to enable them to go through the course, and join their corps at the



expiration of their original leave. Officers in possession of second-class certificates, who have performed the duties of assistant instructor to the satisfaction of their commanding officers, may be recommended to attend the School of Musketry a second time ; but those who fail to obtain any certificate are excluded from this advantage.

---

## PART II.

---

### INSTRUCTION OF THE RECRUIT.

---

1. The Instruction in Musketry is divided into PRELIMINARY DRILL and PRACTICE.

2. Under the head of "*Preliminary Drill*" are comprised the following subjects :—

1. Cleaning arms.
2. Theoretical principles.
3. Aiming drill.
4. Position drill.
5. Blank firing.
6. Judging distance drill.

The "*Practice*" consists of—

- |                               |   |   |
|-------------------------------|---|---|
| 1. Ball practice.             | { | <ol style="list-style-type: none"> <li>a. Firing singly.</li> <li>b. Firing by volleys.</li> <li>c. Independent firing.</li> <li>d. Firing in skirmishing order.</li> </ol> |
| 2. Judging distance practice. |   |   |

3. On first joining, the recruit is to be under the adjutant and gymnastic instructor for at least two months ; and he is then to be handed over to the officer-instructor of musketry, for the purpose of being put through a course of rifle training according to the detail prescribed in pp. 132,

## DETAIL OF PRELIMINARY DRILLS FOR RECRUITS.

Days.	Cleaning Arms.*	Theoretical Principles.*	Aiming Drill.		Position Drill.	Blank Firing.	Judging Distance Drill.		REMARKS.
			No.	Distances to be aimed at each Drill.			No.	Description.	
1st	1	-	1	{ Explain rules for aiming, and aim at 100 and 150 yards - }	2	-	1	{ Known and unknown distances to 300 yards.	Each lesson in cleaning arms, and theoretical principles, and each position drill, to occupy half an hour.
2d	-	1	1	{ 200, 250, and } 300 yards - }	2	-	1	do. do.	When at aiming drill, those not actually engaged in aiming to be exercised in position drill, with the sight adjusted for the actual distance from the target.
3d	1	-	1	{ 350, 400, and } 450 yards - }	2	-	1	do. do.	
4th	-	1	1	{ 500, 550, and } 600 yards - }	2	-	1	do. do.	
5th	1	-	1	{ 650, 700, and } 750 yards - }	2	-	1	{ Known and unknown distances to 600 yards.	
6th	-	1	1	{ 800, 850, and } 900 yards - }	2	-	1	do. do.	
7th	1	-	-	- - -	2	2 20 rounds	1	do. do.	

8th	-	1	-	-	-	-	2	<u>2</u> 20 rounds	1	do.	do.	Cavalry recruits to aim to the extent to which their carbines are sighted, so regulating the distances to be aimed at daily, as to execute them in six days.
Total of Lessons & Drills	4	4	6	-	-	-	16	<u>4</u> 40 rounds	8	-	-	

\* The above table specifies only the *minimum* number of drills through which the recruit is to be exercised before he is allowed to fire ball ammunition. In addition to the time here specified, wet days are to be taken advantage of, to ascertain the proficiency of the men in each lesson. Should any recruit after being put through a lesson once, not have a competent knowledge of it, or after having been exercised through the whole number, be found unfit to proceed to practice, he is to be put back to another squad to commence again.

DETAIL OF PRACTICES FOR RECRUITS.													
	Target Practices.									Judging Distance Practices.			REMARKS.
	1st Period.		2d Period.		3d Period.		Volley firing. No. of Rounds.	Independent firing. No. of Rounds.	Skirmishing. No. of Rounds.	1st Period.	2d Period.	3d Period.	
	Distances.	No. of Rounds.	Distances.	No. of Rounds.	Distances.	No. of Rounds.							
9th	2	10	-	-	-	-	-	-	-	1	-	-	Recruits are not to fire at more than two distances or execute more than one practice of judging distance practices in one day.
10th	2	10	-	-	-	-	-	-	1	-	-		
11th	-	-	2	10	-	-	-	-	-	1	-		
12th	-	-	2	10	-	-	-	-	-	1	-		
13th	-	-	-	-	2	10	-	-	-	-	1		
14th	-	-	-	-	2	10	-	-	-	-	1		
15th	-	-	-	-	-	-	-	10	-	-	-		
16th	-	-	-	-	-	-	-	10	-	-	-		

In the case of cavalry recruits, vide paras. 7 and 8, next page.

133, which, weather permitting, should be got through in three weeks.

4. To this great object too much care and attention cannot be devoted. The rifle is placed in the soldier's hands for the destruction of his enemy ; his own safety depends upon his efficient use of it ; it cannot, therefore, be too strongly inculcated, that every man who has no defect in his sight may be made a good shot ; and that no degree of perfection he may have attained in the other parts of his drill can upon service remedy any want of proficiency in this ; in fact, all his other instruction in marching and manœuvring can do no more than place him in the best possible situation for using his weapon with effect. A soldier who cannot shoot is useless, and an encumbrance to the battalion.

5. When the number of recruits in a battalion is sixty and upwards, a squad of not less than twenty is to be undergoing musketry instruction ; if under sixty, the squad is to consist of not less than ten.

6. No recruit is to join the service companies until he has completed a course of rifle training, unless by special authority from the Adjutant-General to the Forces. In applying for this authority, the reason for making it, and the date on which the recruit joined, are to be stated.

7. The instruction for the Cavalry recruit is to be in all respects the same as that for the Infantry recruit, omitting the volley and independent practices and the third period of judging distance practice.

8. When the carbines are sighted for, or when the range extends only to 300 yards, cavalry recruits are to fire as follows :—

*2nd Class.*

250 yards	-	-	5 rounds	} at a 2nd class target.
300 yards	-	-	5 rounds	
300 yards	-	-	10 rounds	at a 3rd class target.

*1st Class.*

250 yards	-	-	10 rounds	} at a single target.
300 yards	-	-	10 rounds	

## PART III.

ANNUAL COURSE FOR THE TRAINED  
SOLDIER.

1. The soldier, when a recruit, having gone through a course of instruction which, in giving him a knowledge of the theory of musketry, and teaching him the rules for keeping his rifle in order, is calculated at the same time to make him a fair average shot, and to inculcate habits of thought and observation,—the object of the “*annual course*” for the *trained soldier* is to ensure the knowledge previously acquired being perfected and maintained by a modified system of preliminary drill (prescribed in the table at p. 137) before the yearly allowance of practice ammunition is expended. To establish uniformity of proceeding, and to ensure the instruction being carried out in the shortest time, the following regulations are to be strictly observed.

2. The course is to commence—in the infantry at home, and in other temperate climates, on the 1st April;—in

tropical climates on the 1st October, or at the beginning of the cold season ;—and in the cavalry at home on the 1st September,—unless otherwise directed by instructions from the Adjutant-General to the Forces :—and in order that the same may be got through by all corps in the prescribed period, and that the annual practice returns may be rendered at the appointed time, general officers are to take care that it is proceeded with regularly, without interruption (otherwise than hereafter directed), until completed.

3. Previously to the commencement of the annual course, the full non-commissioned officers are to be exercised through the prescribed drills, by one fourth at a time, by the officer and serjeant instructors, and to be practised in drilling one another, under the superintendence of a regimental field officer. They are to be struck off all duty while thus employed. Should it be impossible, on account of the severity of their duties, to detail one fourth, then one eighth of the number is to be handed over ; but, in this case, such arrangements are to be made for their musketry training as shall prevent the commencement of the instruction of the *companies or troops* being delayed beyond the dates specified in the preceding paragraph.

4. When all the serjeants and corporals have been exercised through the preliminary drills (which can be effected in four days per squad, and which is never under any circumstances to be dispensed with), they are to be employed to assist in the instruction of their respective companies, in the following manner, viz. :—

5. Each company in succession, with its officers and non-commissioned officers, is to be struck off all duty, and first exercised, under the superintendence of its captain (the officer and serjeant instructor being present to assist,) in the preliminary drills daily, as specified in the subjoined table :—

—	Aiming Drill.		Position Drill.		Judging Distance Drill	
	Probable Time to be occupied.	Distances to be aimed at.	Time to be occupied.	No. of Drills.	Probable Time to be occupied.	Number of Drills.
1st Day	One hour each drill.	Three daily; at the discretion of the officer commanding the parade.	Half an hour each drill.	2	One hour each drill.	Known and unknown distances at the discretion of officer commanding the parade.
2nd Day				2		
3rd Day				2		
4th Day				2		
Total number of drills in each subject.	—	4	—	8	—	4

REMARKS.—When at Aiming Drill, those men not actually engaged in aiming are to be exercised in "Position Drill," with the sight for the actual distance, so as to employ the time profitably. This rule is to be strictly enforced. Men armed with rifles sighted only to 300 yards to aim at one distance daily, and those sighted to 600 yards at two distances daily. First-class shots may be exempted from the above aiming and position drills, and first-class judges of distance from the judging distance drills, at the discretion of the commanding officer, provided they continue efficient; and short-sighted men are to aim only at distances according to their powers of vision.

6. After a company has gone through the above preliminary drills, it is to proceed immediately to execute the first, second, and third periods of individual firing, the volley, independent, and skirmishing practices, and the three periods of the judging distance practice, which will occupy at the utmost eight days, and then return to duty. Every man is to fire at two distances daily, and to perform one practice in judging distance. If from the proximity of the range, or other reasons, the commanding officer deems it advisable, the target practice may be extended to one or two additional distances (*but not to exceed twenty rounds in a day*), and a whole period of judging distance practice may be executed. The volley and independent firings are to be executed in one day, and the skirmishing practice in another. The captain or officer commanding the company

is personally to superintend the volley and independent firings and skirmishing practices, also the shooting of the 1st class ; the officer-instructor is to be present during the shooting in the 1st and 2nd periods ; and the assistant with the other period and remaining practices.

7. When the company at practice has fired to the end of the second period, another company, with its officers and non-commissioned officers, is to be struck off duty, to be exercised in the preliminary drills, as per foregoing table, so as to be prepared to take the place of the company at practice, by the time it has completed the course.

8. There are few stations at which the foregoing directions cannot be carried into effect. When the men have only three nights in bed (which, however, can seldom happen if all are included in the duty-states, who are not exempted from guard-mounting by the regulations of the service), then only one company is to be struck off duty for instruction.

9. During the months of June, July, and August the annual course may be suspended for continuous battalion, brigade, and division drills, by order of the general commanding the division or district. The course is to be resumed on the 1st September ; but only on those days on which there are no brigade or divisional drills. This rule is not to apply to recruits, nor to depôt battalions, nor to battalions abroad, in which the instruction may be suspended on Wednesday in each week. It is to be clearly understood that should the weather not prove fine on Wednesday, the rifle instruction is not to be suspended on any other day instead. The instructor is not to be put on any regimental or garrison duty on the off days, except in cases of special and urgent necessity. No shooting is to take place in the United Kingdom during the months of December, January, and February, except under special circumstances :—care should therefore always be taken.



that the annual course is completed during the summer and autumn. ;

10. Whenever the annual course is suspended, (except in accordance with para. 9,) the cause thereof is to be specially reported to the Adjutant-General, for the information and orders of the Commander-in-Chief. When the suspension is owing to the troops having only three nights in bed, correct duty-states, specifying the posts of sentries, and the numbers furnished for guard, are to accompany the report.

11. Depôt battalions are to proceed with the annual course of musketry instruction in the same manner as detailed for other battalions, except that, instead of one, two companies may be engaged at preliminary drills, and two at practice, at the discretion of the commanding officer ; but only one company from a depôt is to be under instruction at the same time.

12. When companies are detached from head-quarters to stations where there are no ranges, they are to be regularly relieved, for the purpose of instruction, by companies that have previously gone through the year's practice. If a range, however, is available, the officer-instructor is to be sent to instruct the detached companies, after those at head-quarters have completed their course of drill and practice.

13. Every company is to be as complete as possible when handed over for musketry instruction, to prevent the delay and inconvenience arising from "casuals;" and no man is to be withheld or withdrawn from this important branch of his duty. Those men who, from being in hospital, in prison, on command, or from any other valid cause of absence, are unable to attend for rifle instruction with their company, are, so soon as available, to be exercised with the company next furnished for instruction, their performances, however, being recorded in separate registers and diagrams.

R. M.

14. When every company of the battalion has been exercised, those men who may not have been before available are, if five in number, to be taken through a course of preliminary drills and practice in a squad by themselves.

15. When a squad of casuals consists of men of different companies, the men composing the squad are to execute the volley, independent, and skirmishing practices together, and not separately by companies. The results of their performances in these practices (which are to be executed apart from the company to which attached for training) are to be recorded in diagrams, and each man credited in the company's Musketry Drill and Practice Return, with the average points obtained by the squad in the volley and independent practices, and in skirmishing with the average points of the target at which he fired ; for although one diagram may do for the squad, the men of different companies are to fire at separate targets, in order that the points they obtain may be secured for the company to which they belong.

16. The practice of exempting from rifle instruction soldiers who are effective, and doing duty in the ranks, in consequence of alleged bad sight, or on pleas which, if valid, would tend to prove the men unfit for the service, is strictly forbidden, as calculated to lead to malingering, and other evils detrimental to the efficiency of the troops ; —but, in the event of any men being reported by the medical officer unable to see up to 300 yards, they are to be required to fire (according to their powers of vision) at one or more of the distances comprised in the 1st period of practice, but not more than five rounds at each distance, and to be classified according to the points obtained therein, such points being included in the totals from which are framed the averages which represent the merit of the shooting. All men who are exempted from rifle training on the plea of inability to see up to 150 yards, are to be classified as 3rd class shots, and to be specified in the

column of remarks in the first page of the annual return, and are to be included in the per-centage to determine the "figure of merit" of the company and battalion.

17. Should any men not be available for rifle instruction until after the annual practice return is rendered, and consequently appear therein as "not exercised," they are to be struck off duty, and exercised previously to the commencement of the next course ; (in tropical countries early in the morning, and late in the afternoon during the hot season ;) their performances being recorded in a musketry drill and practice return set apart for the purpose, and headed "Casuals after the termination of annual course."

18. By attending to the foregoing rules, the non-exercised men need be very few indeed. Every soldier for whom a rifle is issued is to go through a course of musketry instruction *annually*. No excuse will be admitted either as regards servants,—bat-men,—mess-waiters, hospital orderlies in excess of the authorised numbers,—assistants in the orderly-room, paymaster's office, or school,—tailors,—shoemakers,—barrack or regimental police,—or any other class of men not in the ranks, most of whom should be periodically changed in the same manner as the dismounted men in the cavalry ; and the only exception allowed will be in favor of men who, being unfit for the service, are to be brought forward for discharge.

19. Men employed as follows, when once fully trained, (which is to be notified in the monthly musketry diary), are exempt from the annual course of musketry drill and practice, viz. :—the band-masters and the regulated number of bandsmen,—pioneers,—one orderly room clerk per depot, not to be a colour serjeant,—the clerks to paymasters of Royal Engineers,—serjeant as officers' mess caterer,—serjeant superintending cooking,—duly qualified gymnastic instructors,—serjeant as canteen keeper.—provost serjeant,—serjeant in charge of gar-

risson police,—three hospital orderlies per battalion,—the master tailor, especially enlisted,—and farriers and shoeing smiths in the cavalry. Should any of the above desire to contend for prizes, they are to be put through the entire course before doing so.

20. The annual carbine instruction for the cavalry soldier is to consist of the following drills and practices :—the competitive practice is to be executed as soon as possible after the troops have been exercised through their individual firing,—and cavalry soldiers are to omit the third period of judging distance practice, their carbines being sighted to only 600 yards.

21. One complete troop, or two half troops, are to be under instruction at a time, until the whole regiment shall have gone through the course, the officers being present to superintend and see the regulations strictly complied with ; and the instruction is to be so regulated as to interfere as little as possible with the stable duties. When the rifle range is too far from quarters, application to omit practice is to be made to the Adjutant-General ; but the preliminary drills are under no circumstances to be omitted.

22. The mounted target practice in the cavalry is to be conducted as follows, viz. :—

The men are to fire both to the left and to the front.

A manège is to be marked out at the proper distance from the target, and the men are to file round to the right, keeping a horse's length distance from head to croup. Each horse is to be halted for a moment when opposite the target, the man firing, and walking on a horse's length, when he is to pause until the next man has fired—the object being to prevent the horse hurrying on after those in front.

For every third round, the order is to be given "Down the centre," on which the men will lead straight towards the target, and fire to the "*front*," turning their horses' heads to the right. according to order.

## PART III.—ANNUAL COURSE, TRAINED SOLDIER. 143

## PRELIMINARY DRILLS.

—	Aiming Drill.		Position Drill.		Judging Distance Drill.		
	Probable time to be occupied.	Distances to be aimed at.	Time to be occupied.	No. of drills.	Probable time to be occupied.	Number of drills, distance, &c.	
1st day -	Half an hour each drill.	100 and 200 yards	Half an hour each drill.	} 1	Half an hour each drill.	{ Known and unknown distances to 800 yards.	
2d day -		300 and 400 yards.					} 1
3rd day -		500 and 600 yards.					
Total number of drills and lessons in each subject -	}	3	—	3	—	3	

## PRACTICE.

—	Target Practice.			Judging Distance Practice.	
	1st Period.		Mounted practice, 200 yards.	1st Period.	2d Period.
	Distances.	Number of rounds.			
4th day -	2	10	—	1	—
5th day -	2	10	—	1	—
6th day -	—	—	10	—	2

23. The carbine instruction of the cavalry being thus reduced to a minimum, commanding officers of regiments will be held responsible for its being executed annually, except at stations where a range for target practice is not available, as provided for above ; and in order that the duty may be efficiently performed, without occupying the time of the Adjutant, an allowance of 2s. 6d. a day for three months in the year is granted, in each regiment armed with rifled carbines, to an officer for performing the duties of instructor, who, in consideration thereof, will also be required to conduct the rifle training of the recruits ; care must be taken that officers who have qualified at the School of Musketry are always available for this purpose.

24. The annual course of rifle practice of companies of Royal Engineers detached from head-quarters is to be conducted by the non-commissioned officers under the superintendence of their officers. Not less than one fourth, and not more than one half, of the entire strength is to be under instruction at a time.

25. In order further to ensure the drilled soldier keeping up the instruction imparted to him as a recruit, arrangements are to be made for the men of each troop and company, while the annual course is proceeding, to be catechised in cleaning arms, and theoretical principles, by the musketry instructor, or some officer in possession of a certificate from Hythe ; and any who may be found deficient therein are to be put through a course of instruction in the first two of the preliminary drills as prescribed for the recruit in paragraph 2, page 131, until proficient therein, before going through the next year's target practice. First-class shots, and old soldiers after the second year of their re-engagement, may, at the discretion of the commanding officer, be excused from this examination, and from the extra position drills and judging distance

practice prescribed in pages 180 and 224, provided they continue efficient.

26. When battalions proceed on foreign service, commanding officers are to transmit to the Inspector-General the annual Musketry Practice Return completed to the date on which the instruction ceased; which, however, should not be until within a few days of embarkation. The instruction of the battalion is to be resumed immediately on arrival at its new quarters.

27. General officers are to give their special attention to the musketry instruction of troops in their commands, and bring to notice every instance of neglect therein. They are to satisfy themselves that the examinations prescribed above, and in para. 28, page 175, are properly attended to,—and they are to require the inspectors of musketry to accompany them, when practicable, on their tours of inspection, for the purpose of furnishing any information they may require, to enable them to reply to the several questions, in their confidential reports, in regard to the instruction of officers and men, and the exercise of arms; and on these occasions the officers of companies whose figure of merit is below 80 are to be required to furnish such explanation as they may be able to give of the causes of such bad shooting. If these explanations appear unsatisfactory, or afford ground for supposing that the officers are not acquainted with the theory and practice of musketry, or familiar with the prescribed system of instruction, the inspecting general will, if he think it advisable, require the officers to be further examined by the district inspector, or some other competent officer. When the general is not accompanied by the inspector, the cause of absence is to be explained in the confidential report.

28. Whenever the shooting of a corps or company is reported by the inspector as “bad,” the attention of the

commanding officer is to be called to the subject by the general commanding the division or district; and the non-commissioned officers of such corps or company are to be assembled once a week, for half an hour after morning parade, for the purpose of being trained under the regimental instructor or his assistant, in the "method of communicating instruction," as taught at Hythe,—and in the firing exercise and position drill,—the number of non-commissioned officers attending each drill being entered in the monthly musketry diary.

29. The Inspector-General of Musketry, being held responsible that the rifle training is conducted efficiently and according to regulation, is to report every deviation therefrom which may come under his notice, for the information of the Commander-in-Chief.

---

## PART IV.

---

### PRELIMINARY DRILL.

---

#### I. CLEANING ARMS.

In this branch of instruction the recruit is to be taught the names of the limbs and pins of the lock, and the rules for cleaning and keeping the rifle in proper order. Too much pains cannot be taken to impress upon the minds of the men the necessity for preserving their rifles at all times in the highest condition, and the impossibility of producing accurate shooting with them when dirty.

#### FIRST LESSON.

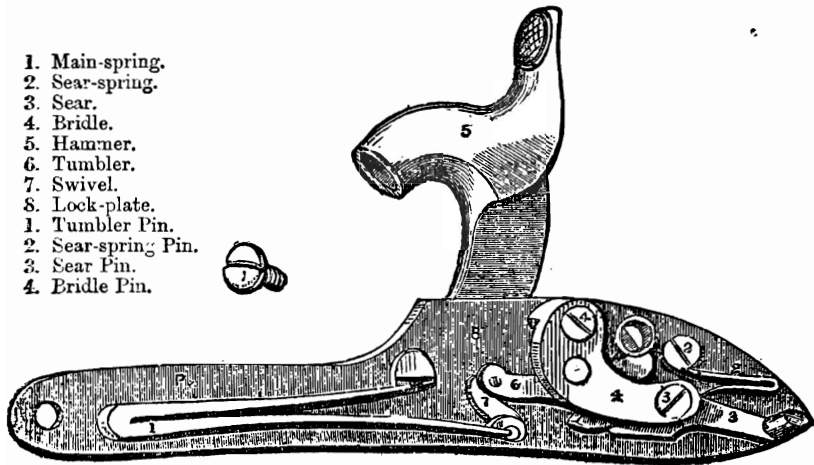
Name the limbs and pins of the lock, and explain how to dismount it.



## THE LOCK.

The limbs and pins are to be named in the order in which they are removed, viz. :—

1. Main-spring.
2. Sear-spring.
3. Sear.
4. Bridle.
5. Hammer.
6. Tumbler.
7. Swivel.
8. Lock-plate.
1. Tumbler Pin.
2. Sear-spring Pin.
3. Sear Pin.
4. Bridle Pin.



## Dismount the Lock.

- 1st. Unscrew, and remove the tumbler pin.
- 2d. Put the lock at full cock, then place the cramp on the main-spring, and, after letting the hammer down, remove it.
- 3rd. Partly unscrew the sear-spring pin, then place the edge of the turn screw between the bend of the sear-spring and lock-plate, to raise the stud of the former from the latter, after which unscrew the sear-spring pin, and remove the sear-spring.
- 4th. Unscrew the sear-pin, and remove the sear.
- 5th. Unscrew the bridle-pin, and remove the bridle.
- 6th. Remove the hammer (which is to rest in the hollow of the hand) by a few smart taps with a piece of wood, as near the lock-plate as possible.
- 7th. Remove the tumbler.
- 8th. Remove the swivel from the tumbler.

## SECOND LESSON.

Instructions to clean the lock and rifle, and to keep them in proper order.

## LOCK.

1. When the lock is dismounted, wipe the several limbs, first with an oiled rag, and afterwards with a rag quite dry.
2. If any specks of rust are seen, either on the lock, (more particularly the tumbler axle hole) or any of the limbs, they are to be removed with an oiled rag. No brick-dust, or powder of any kind, is to be used for this purpose, as it would have the effect of removing the case-hardening from those parts that are not steel, and thus render them much more liable to rust.
3. In remounting the lock, the threads of the several pins,—the pivot and axle of the tumbler,—and the pivots of the swivel,—should be oiled before putting them in their respective places, in order that they may work easily.

4. The other frictional parts of the lock to which it is essential to apply oil are the nose of the sear, and between the sear and sear-spring. Only a very small quantity of oil should be used, and should be applied either with a feather or the point of a pricker, as too much is likely to clog the parts.

The following INSTRUCTIONS are to be taught for CLEANING the SNIDER RIFLE.

1. Half-cock the rifle, and open the breach.
  2. Put a piece of rag into the jag of the cleaning rod, twisting it round so as to cover it, and rub the barrel carefully up and down with it to remove the fouling. No water is to be used.
  3. Replace the afore-mentioned rag by an oiled rag, woollen, if possible, and pass the latter up and down the barrel.
  4. After *blank* firing the following mode of proceeding is to be adhered to:—The rifle to be held muzzle downwards, at a convenient angle, with the breach-block open, and water poured through the barrel. This will moisten the fouling and enable it to be removed by a rag at the end of the cleaning-rod. This method of pouring the water is not liable to wet the breech-block or other parts of the breech arrangement of the rifle. The rag, which may be wetted, should then be placed over the muzzle and pressed into the bore with the head of the rod, *care being taken that the head of the rod is equally covered all round*; the barrel is then to be wiped out with rag or tow until is perfectly dry, and afterwards with an oiled rag.
  5. Wipe the breach-shoe and breach-block all over with an oiled rag, to remove dirt and to prevent rust. Close the breach, and ease springs.
-

6. "Nosing sticks" to clean the inside of the muzzle of the rifle are strictly forbidden.

7. Every morning, and on all occasions before using the rifle, wipe the barrel out perfectly clean and dry.

8. No attempt should be made by a soldier to drag his rod out of the barrel by extreme force when it sticks fast, as the bore is almost sure to be injured by such a process. Where such cases occur, the armourer should be called upon to take proper means for removing the rod.

9. By the foregoing mode of cleaning, the liability of the barrel to become rusty will be very much reduced, and the frequent necessity for removing it from the stock, which is always objectionable, be obviated.

10. In order to prevent water soaking into the stock, and at the same time to give it a smooth and polished appearance, rub it well with oil, and apply a little bees-wax between it and the barrel, and between the lock-plate and stock, to prevent water getting under the barrel, or into the lock.

### THIRD LESSON.

#### Remount the Lock.

1. Attach the swivel to the tumbler.
2. Place the tumbler in the axle-hole of the lock-plate with its bearer against the hind stud.
3. Fix the bridle on the pivot of the tumbler, and its stud in the lock-plate; then screw home the bridle-pin, which has a longer thread than the sear-pin.
4. Place the sear between the bridle and the lock-plate, with its nose against the tumbler, and screw home the sear-pin. This pin differs from the others by the thread next its head terminating abruptly, in order to prevent its being screwed too far into the lock-plate.

b. Partly screw the sear-spring to the lock-plate, then with the thumb of the left hand press the spring against the body of the sear until the stud enters the stud-hole, and screw home the sear-spring pin.

6. Fix the hammer on the squares of the tumbler in a position as if on the nipple, and screw home the tumbler-pin.

Attach the swivel by its pivots to the claws of the main-spring, then put on the main-spring by placing its stud in the lock-plate, and its catch against the fore stud ; after which, full-cock the lock to remove the cramp ; this being done, try the action of the lock, and afterwards ease it to half-cock.

#### FOURTH LESSON.

Explain how the rifle and ammunition may get out of order, and how this may be prevented.

1. In order to ensure a true and easy action of the lock the several pins, pivots, &c., should be perpendicular to the lock-plate, which should be a perfect plane.

2. *Pull off.*—It is erroneous to suppose that by loosening the sear or any other pin, an easier or lighter pull off is obtained ; such a measure is only calculated to impair the lock, by causing an increased wear and tear of the parts, which are thereby thrown out of truth. When the pull off is too great, either the full bent and sear-nose are not well adapted to each other, or the sear-spring is too strong ; these defects are easily rectified by the armourer when necessary, but must never be attempted by the soldier.

3. *Wood-bound.*—The lock is said to be wood-bound when the parts are so embedded in the wood work of the stock as to prevent them from exercising their proper functions. This defect, while it may arise from the swelling of the wood by exposure to wet, is often occa-

sioned by screwing the lock too tightly to the stock. The side nails and pins of the lock (the ends of which are rounded off and present no edges) when screwed home, should not protrude beyond the outer side of the lock-plate.

4. *Miss-fires*, or the non-ignition of the charge, arise from various defects, which may be classified under two heads :—

1st. Those attributable to the neglect of the soldier, viz. :—to the dirty or rusty state of the tumbler axle hole, and axle of tumbler, which impedes the fall of the hammer, and consequently reduces the force of the blow required to ignite the cartridge,—to dirt or rust on the piston, which prevents the free transmission of the blow to the cartridge. Hence the necessity of great care in cleaning the rifle.

2nd. Those over which the soldier has no control, and which should be remedied by the armourer, viz. :—a weak main-spring, and the want of free action in the piston.

5. *The barrel*.—The soldier cannot be too careful to prevent the barrel of his rifle being bent or dented, as either of these defects would be detrimental to accurate shooting, and seldom occurs, except from carelessness or ill-usage. He is, therefore, on no account to use his rifle for carrying weights, or for any other purpose than that for which it is intended. If he suspect that his barrel is either bent or dented he should report the circumstance immediately.

6. Placing arms forcibly in a rack, or piling them carelessly, so that they are liable to fall down, will often cause irreparable injury to the barrel, more particularly at the muzzle, where it is the thinnest.

7. Care should be taken to protect the fore-sight from being bent, blunted, or injured in any way.

8. Rust is caused by the joint effects of moisture and air ; the surest way, therefore, of preventing rust in the barrel is to keep the bore perfectly dry. If the interior

of the barrel be allowed to become rusty, the increased resistance to the passage of the bullet will prevent its full expansion,—impair its rotation,—probably cause it to “strip” (*i.e.*, pass out of the grooving),—or may even cause the plug to be driven through the bullet, when the arm for the time will be rendered useless.

9. The soldier should be enjoined to be careful, when skirmishing, not to run the muzzle of the barrel into the ground: should he accidentally do so, he is to ask permission to fall out to remove the dirt, &c., for, if the rifle be fired with any obstruction in the muzzle, the barrel may be damaged beyond repair.

10. *Ammunition.*—To preserve the ammunition in an efficient condition, the pouch should always be well packed, and no vacant space allowed in any of the compartments in which there are cartridges.

11. As powder when damp will not send a bullet as far as when perfectly dry, and as it is also slower of ignition, the cartridges are always to be kept as dry as possible.



12. No non-commissioned officer or private is to be allowed to remove his lock from the stock, and take it to pieces, until the officer-instructor has officially certified that he is thoroughly acquainted with the foregoing instructions in detail, and is capable of doing so accurately and efficiently. As the barrel seldom needs removing from the stock, this service, which requires great care in its execution to prevent the head of the rifle from being broken, is invariably to be performed by the regimental armourer or his assistant, more particularly as the ordinary turnscrew is not adapted either to remove the breach nail or to screw it home again.

13. The strength of the springs of a lock may be ascertained as follows :—

Weight of main-spring, or main-spring draws. { When the lock is at half-cock, attach such a weight to the comb of the hammer as will just move it or overbalance the main spring.

Weight of sear-spring, or sear-spring draws. { When the lock is at its bearing; attach such a weight to the arm of the sear as will lift or overbalance the sear-spring.

Pull off of the lock, or pull off without trigger. { When the lock is at full cock, attach such a weight to the arm of the sear as will raise the sear-nose out of the full bent of the tumbler to allow the hammer to fall.

Trigger draws, or pull off with trigger. { When the lock is at full cock, attach such a weight to the trigger as will raise the sear-nose out of the full bent of the tumbler, to allow the hammer to fall.

---

## 2. THEORETICAL PRINCIPLES.

1. This branch of the instruction is confided to the officer-instructor, who is to explain the principles in the following order, in a clear and concise manner, and in language suited to the capacity of the men, it being most important they should well understand the reasons for all those rules which have to be attended to in practice.

2. A black-board and a piece of chalk are to be used to describe the figures.



## FIRST LESSON.

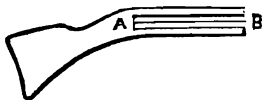
*Construction of the Barrel.*

1. The instructor will explain that, as the barrel is made of uniform diameter in the bore, but thicker at the breech than at the muzzle (in order that it may have strength to withstand the explosion of the charge,) a straight line drawn along the centre of the barrel would not be "parallel" to, or, in other words, be everywhere at an equal distance from, a similar line drawn along the upper surface of the barrel, and that, if these lines were prolonged, they would cross each other and form an "angle" a short distance in front of the muzzle; consequently, that if the upper surface were laid horizontally, the line along the centre produced would, after crossing, rise above the other, —thus showing that the direction of the barrel would be elevated above the horizontal line, or that the barrel has "elevation" in itself.

*Axis of the Barrel.*

2. That the straight line above described as drawn along the centre of the bore is called the "axis of the barrel," and is the line which the centre of the bullet (if it fits the barrel) must take in its passage through it.

Fig. 1.



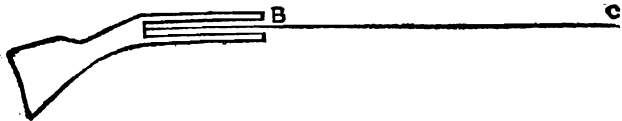
*upper surface laid horizontally.*

*The instructor will here draw a straight line along the centre of the section of the barrel represented on the board, or of the card board or tin model, showing the*

*Line of Fire.—Forces influencing the Flight of the Bullet.*

3. That the straight line in continuation of the "axis" is called the "line of fire," and shows the direction in which the bullet is proceeding from the force of the explosion at the instant it leaves the muzzle, and which direction it would naturally continue to follow with uniform velocity, if it were not impeded by the resistance of the air, and drawn down from it by the force of gravity. Describe the line of fire, *BC*, fig. 2, in continuation of the axis.

Fig. 2.



*Resistance of the Air.*

4. The instructor will then explain that the atmosphere, or common air, being an elastic fluid, (that is to say, consisting of innumerable minute particles which press against each other and everything touching them,) the bullet in its progress having to force its way through and so push them aside, is opposed by this pressure from a continual succession of them, and therefore, losing a portion of its motion, is retarded and gradually moves with less and less speed,—that this resistance of the air is greater the greater the velocity of the bullet,—is greatest at the moment the bullet leaves the muzzle,—and consequently continually becomes less and less.

*Force of Gravity.*

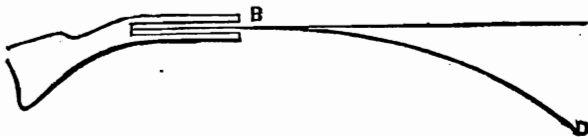
5. That the "force of gravity" is a natural law, by which all unsupported bodies, near the earth, are drawn

downwards to it, and which, being constant, the longer any body is exposed to its influence the faster it falls.

*Trajectory.*

6. That the result of the three forces which act on the bullet, viz., that of the explosion driving it forward, that of gravity drawing it downwards from the moment it leaves the muzzle, and that of the resistance of the air which causes it to travel forward a shorter distance in each successive instant of time,—is, that it describes in its flight a curved line called the “trajectory;” that at first, in consequence of the bullet moving forward with great speed, and of gravity having very little time to act on it, the curve does not deviate much from the straight “line of fire,” but that it increases and falls below the latter more quickly the longer the bullet is moving forward. *Here draw the “trajectory.”* *BD, fig. 3.*

*Fig. 3.*



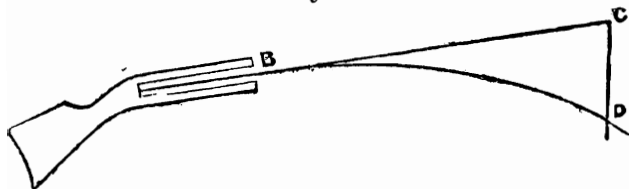
**SECOND LESSON.**

*Initial direction to be given to a Bullet to cause it to hit a Mark.*

7. The instructor will now proceed to show how the knowledge of the principles explained in the preceding lesson can be applied in practice. He will cause the men

to observe that, if the axis of the barrel of the rifle be directed straight at any object, the bullet cannot hit it at any distance, but must, in consequence of the force of gravity, fall below it; that to counteract this fall the direction of the axis and line of fire must be raised to an equivalent degree; that it has been proved by experiment that the bullet fired from the Snider Enfield rifle with the regulated charge falls ten inches in passing over the first 100 yards from the muzzle, and therefore that in order to hit the object at that distance, the "axis" must be elevated so that "the line of fire" will pass through a spot just ten inches above that which the "trajectory," or actual course of the bullet if raised correspondingly will pass through. *Change the direction of the axis and draw the new line of fire B C, and the new trajectory passing through D, fig. 4.*

*Fig. 4.*

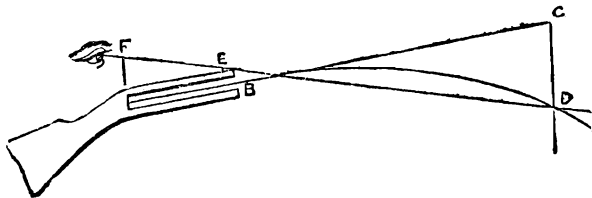


*"Line of Sight," and arrangement of Sight for  
100 Yards.*

8. The instructor must next explain how the firer can direct the axis in the required line. He will show that as it is only by means of the eye that this can be done, and that, in order to do it with accuracy, it is necessary to have two points along the upper surface of the barrel (since the firer cannot look through it) brought into a line between

his eye and the spot desired; but that if the barrel were not thicker at the breech than at the muzzle, and if he took the line close along the upper surface, he would in aiming at this point bring the muzzle up between his eye and the object he wishes to hit,—and thus losing sight of it could not judge whether his barrel was directed at a spot ten inches above it or much more, nor whether it was to the right or left of the proper direction. It is evident therefore that he must still keep the object to be hit in view, and in order to do so, that he must raise his eye so as to see it over the muzzle; further that in order to guide his eye as to the exact elevation above the breech, as well as to keep it vertically above the axis, a piece of metal (the back-sight) is affixed to the barrel of such height that when he brings the tip of the foresight and the object in a line with his eye, through the centre of the notch, the barrel is elevated and the line of fire directed at the point exactly ten inches above the object at which he is now aiming. *Draw the line of sight, DEF, fig. 5, from the mark D to the top of the fore-sight, and continue it through the bottom of the notch of the back-sight, the height of which is to be arranged accordingly.*

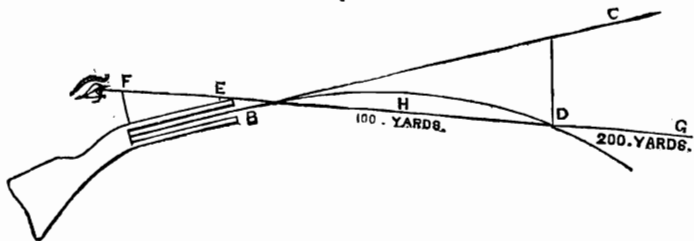
Fig. 5.



*Arrangement of Sight for different Distances.*

9. The instructor,—by taking a point on the prolongation of the “line of sight” to represent 200 yards, and pointing out that the “trajectory” (or the actual course of the bullet) crosses the “line of sight” *twice*, once a little in front of the muzzle, and again at the object,—will now show that the elevation thus obtained for 100 yards would not be sufficient for longer distances:—that thenceforward it falls below the “line of sight,” or that of aim, more and more for each distance;—that consequently additional elevation must be taken for each successive greater distance to allow for the increasing curve of the “trajectory,” the “line of fire” for such distance being raised as much above the object as the bullet would at that distance fall below it, if the “line of fire” were horizontal;—and that to guide the firer as to the height to which he must raise his eye to correspond, as has been shown him for the 100 yards, the back-sight is furnished with a hinged flap and sliding bar, on which the proper elevation for all distances from 100 yards to the utmost extent to which his rifle is constructed to carry with accuracy is marked by lines, so that if he knows the actual distance, he has only to adjust the sight thereby. If it should happen that he has occasion to fire at objects more distant than his rifle is sighted for, he must judge for himself to what additional height he should raise his eye, taking care that it be kept *vertically* over the notch of the back-sight, and that the fore-sight be still aligned with the object. If he should wish to fire at an object nearer than 100 yards he must observe that the actual course of the bullet for the first 100 yards rises in a curve above the line of aim or sight for that distance, and he should consequently for any lesser distances aim a little low—for fifty yards about three inches.

Fig. 6.



*Show relative Position of "Line of Fire" and "Line of Sight" by removing the Breech-pin.*

10. In order to impress more clearly on the soldiers' mind the preceding lesson, and the relative position of the lines of fire and sight, which the instructor has hitherto represented by lines drawn with chalk on an exaggerated scale on the board, he will, after having removed the breech-pin, place the rifle barrel on a traversing rest at a few yards distance from the black board, taking care that the back-sight, which should be raised for 800 or 900 yards distance, be kept perfectly upright, and then will cause the men to take aim at a spot marked on the board, making them observe that they are now looking along the *actual* "line of sight." He will afterwards direct them without moving the barrel to look through the bore along the *actual* "line of fire," and will mark on the board the spot seen by the soldier through the bore, and point out that the "line of fire," which at the muzzle was below, has crossed the "line of sight" and passes through a point much above it on the board; and that from the place where these lines cut each other, and form an angle, they become further apart the further they are prolonged; consequently, that the interval between them, which at the board may be only one or two feet, would at 800 or 900 yards be as much greater as these distances are than that of the muzzle from the black board.

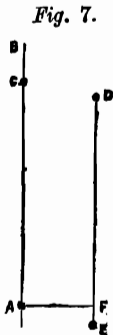
*Necessity of holding the Sights upright.—Error of Direction.*

11. While the barrel is upon the traversing rest, the instructor will point out to the men the importance of holding the back-sight upright, by explaining that if it is not so, the bullet, instead of hitting the mark aimed at, will



invariably strike low, and on that side to which the sight is inclined, and that the greater the distance, the greater will be the error due to any inattention in this particular.

To make this subject clear, draw a vertical line, A B, fig. 7, on the black-board, with A a spot to aim at. Cause the men to aim at this spot with the 900 yards sight which must be perfectly upright, and afterwards to look through the barrel, directing their attention to the fact that the "line of fire" cuts the vertical line at C above the spot aimed at. Then cause them to aim at the same spot with the same sight, *but inclined to one side*, and to look through the barrel again, when they will see that the "line of fire," instead of being directed upon the same point on the vertical line A B as before, is directed low on that side to which the sight is inclined, as at D; consequently, as the "trajectory" always conforms to



the movement of the "line of fire," the bullet, instead of hitting the mark, would strike as much below D as A is below C. Draw a new vertical line below and from D, measure off on it a distance equal to C A: this will give the spot E. From A draw a horizontal line A F to the new vertical line D E, then A F will show the error of direction, and F E the loss of elevation due to the degree of inclination to the right given to the back-sight. A sufficiently accurate idea may be given of the actual error in direction, and elevation as follows:—Supposing the black-board to be five yards from the muzzle of the rifle, and A F to be  $\frac{1}{2}$  a foot, and F E  $\frac{1}{8}$ th of a foot—

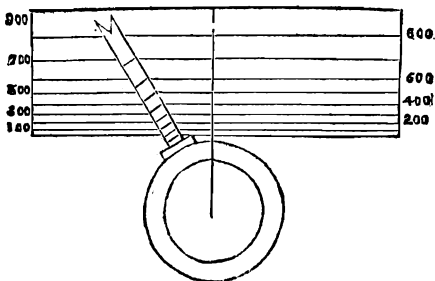
Then the error of direction will be as  $5 : 900 :: \frac{1}{2} : 90$

And the error of elevation as  $- 5 : 900 :: \frac{1}{8} : 30$

## THIRD LESSON.

*Error of Elevation.*

12. In order further to show that elevation is lessened by the inclination of the back-sight, let a card, with lines drawn upon it (*fig. 8*), to represent the proper height of the back-sight for each distance, be placed vertically at the back of the sight, when the men will observe the amount of elevation lost by any degree of inclination.

*Fig. 8.*

*How the Error of Direction and Elevation caused by the Inclination of Back Sight may be shown.*

13. Both the error of direction, and elevation, caused by the inclination of back-sight, may also be shown by a small model gun (*fig. 9*) with wires affixed to it to represent the "line of fire," the "trajectory," and "line of sight." The "trajectory" is made to hinge upon the "line of fire" to show the course the bullet will pursue at any degree of inclination of the back-sight; and that the "trajectory" always preserves the same relative position below the "line of fire."

PART IV.—PRELIMINARY DRILL.

FIG. 9.

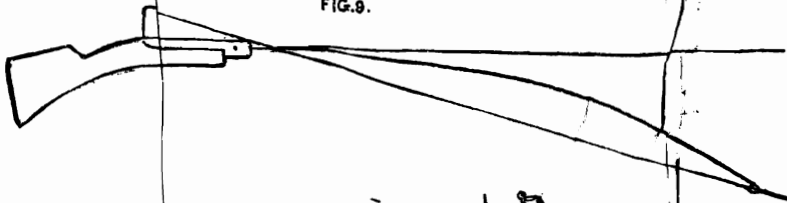


FIG. 10.



220

300

355

FIG. 11.



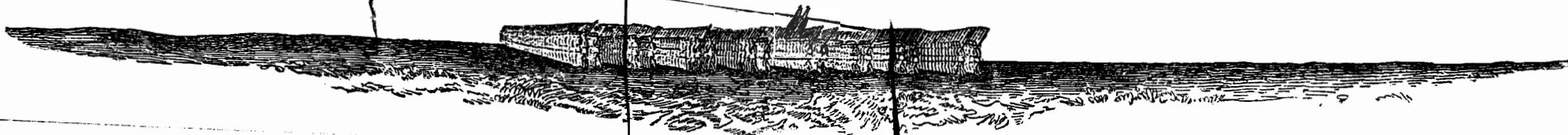
570

585

600

615

FIG. 12.





*Height of Trajectory at the several Ranges.*

14. The instructor will next explain the height of the trajectory at the several ranges, and the distances at which cavalry and infantry are under the power of the rifle when fired with the several elevations marked on the back-sight, in order to impress upon the men the great importance of training themselves to judge distance. It has already been shown that the back-sight of the rifle should be adjusted to the correct distance; but the soldier cannot do this if he is not thoroughly trained to judge distance by the eye. His being a good shot at a fixed mark is of no use if he cannot hit an enemy in the field; this is the object of all his training. As a general rule it will be sufficient to confine the lesson to one distance for each class.

## THE TRAJECTORY OF THE SNIDER-ENFIELD RIFLE.

Distances.	Culminating Point, or the greatest Height of the Trajectory, about—	First Catch.		Margin for		First Graze.	Remarks.
		Cavalry.	Infantry.	Cavalry.	Infantry.		
100 yds.	feet. 4 $\frac{1}{2}$		Throughout			180	The calculated height for cavalry is 8 $\frac{1}{2}$ feet, that for infantry 6 feet. The rifle 4 $\frac{1}{2}$ feet above the ground, at distances to 300 yards; — beyond that distance 3 feet above the ground. The object hit 3 feet above the ground at each distance. The culminating point is between $\frac{1}{2}$ and $\frac{3}{4}$ of the distance.
200 "	5		Throughout			280	
300 "	7	Thro'	220	Thro'	135	355	
400 "	11	300	350	140	90	440	
500 "	15	420	465	100	55	520	
600 "	23	570	585	45	30	615	
700 "	32	670	685	40	25	710	
800 "	44	780	790	30	20	810	

N.B.—The first catch and first graze are given in divisions of 5 yards to assist the memory, hence are only approximations.

15. It will be seen from the above table that if the Snider-Enfield rifle be fired from the shoulder, standing, at the centre of a bull's-eye 3 feet from the ground, with the elevation for 100 yards, its axis must be directed at a point 3 feet 10 inches from the bottom of the target, and the height of the firer's shoulder being taken at  $4\frac{1}{2}$  feet, the bullet in its course does not anywhere rise above the latter height. It will also be observed that the bullet which, in this distance falls only 10 inches, would, after passing through the centre of the bull's-eye (if the target were made of cotton or paper) strike the ground at 80 yards beyond it,—showing that in that distance it falls the height of 3 feet,—and consequently, in passing over the second hundred yards, it would from the continually increasing curve fall more than 4 feet, thus proving what was shown in the second lesson, that the elevation for 100 yards would not be sufficient for 200 yards, or any greater distance.

16. It will also be observed that if the rifle be fired at a target with the elevation for 300 yards, the bullet will fall from the height of 6 feet to the ground in the last 135 yards of its course, within which space a man of ordinary height on foot is liable to be hit by it (*fig. 10*); but that if fired with the elevation for 600 yards the bullet falls that height in the last 30 yards, reducing by so much the margin or space within which a man on foot is in danger from it, and that a mistake in judging the distance at this range, of about 15 yards either way, would probably cause the bullet merely to graze the top of the man's head or to strike the ground at his feet (*fig. 11*). At the longer ranges, such as 700 or 800 yards, it is seen that the fall of the bullet from 6 feet high to the ground takes place in the last 25 or 20 yards of its flight, reducing thereby the margin or dangerous space to a very small interval, consequently rendering it more important to estimate the

distance accurately at the longest ranges, where it is most difficult to do so. For this reason it is useless, and a waste of ammunition, for any soldiers, who are not first-class shots and well trained to judge distance accurately, to fire at such long distances at an enemy, unless it be at columns, the depth of which, from front to rear, allows for a considerable error as to distance, in which case the bullet, if it pass over the heads of the front ranks, might fall among some of those in rear (*fig. 12*). As it is difficult for the soldier however well trained to make certain of his distance in the field, it is judicious at long and unknown distances to fire the first shot with an elevation rather under than above that which is due to what he estimates it, since by watching where his bullet strikes the ground, which he can often distinguish by the dust or earth thrown up, he gains a better idea of the proper elevation, and may also hit an enemy by the “ricochet” or rebound of the bullet.

#### FOURTH LESSON.

17. The instructor will proceed to explain the means of counteracting certain things which may casually interfere with the correct flight of the bullet, or with the aim, &c.

##### *Wind.*

18. Wind, which is air in motion, will by its pressure affect the progress of the bullet, driving it to the left if it blows from the right, and if from the left to the right of the line of fire. If blowing from the front it will add to the resistance and consequently decrease its range, if from the rear by diminishing the resistance will enable the bullet to fly further. As no fixed rule can be laid down to guide the soldier he must acquire experience as to the amount of allowance he should make for wind, in carrying his rifle to the side from which it is blowing, or in giving his rifle a little more or less elevation, but always taking into con-

sideration two things, the strength of the wind and the distance of the object at which he is firing, since on the latter will depend the length of time the wind will have to act. He should also watch the effect of his shot, and make more or less allowance as he finds necessary; and he should bear in mind that the effect of a wind from the front or rear is much less than that of a side wind, which acts on a larger surface of the bullet.

*Firing at a Moving Object.*

19. If an object fired at be moving, whether it be a man walking or a horse at a gallop, it is obvious that it will pass over a certain distance between the moment of discharge and the time when the bullet reaches it; if the object be moving across from left to right, or from right to left, the soldier must therefore carry his aim a little to the front of it, but how much, must depend, first, on the speed it is going at, and secondly, on the distance it is from the firer, and the consequent time the bullet will have to travel. The firer must exercise his own judgment in this matter, as no fixed rule can be laid down for his guidance.

20. When firing at an object moving, or during wind, in order to get the correct elevation, which would not be ensured if aim were not first taken on the object, the soldier must first align the sights on it in the usual way, and then without pausing, or dwelling on the aim, move the rifle sideways in the direction and to the extent required, by turning the body on the hips, keeping the lower limbs firm, and the arms and eye perfectly steady. Should the object be advancing towards or retiring from the firer, he should regulate his sliding bar for the distance he calculates it will have reached at the moment his bullet will arrive at it.

*Objects obscured by Darkness, Smoke, &c.*

21. It may occur that the soldier may be required to keep up a fire on an enemy whom he is prevented from



seeing, either by the darkness of the night, or by clouds of dust, or smoke of gunpowder, temporarily rising between his eye and the object. For the former, which may often be the case in the attack or defence of works or positions, if he can get an opportunity during daylight, he should plant firmly in the ground two forked sticks in such a direction, and of such height, respectively, that his rifle when laid on them may command the point desired, and have the proper elevation. Should he on the other hand by day, in action, find that clouds of dust or smoke occasionally drift across and conceal the enemy from sight, he may, during a clear interval, plant a single stick or his rod a few feet in front of him so that the top of it may be in a line between his eye and the object at which he is firing, and he can, when it becomes obscured, keep up an efficient fire by aiming at the top of the stick.

*Sun.*

22. When the sun is shining from the left it lightens up the left side of the fore-sight and the right side of the notch of the back-sight; the firer, in taking aim, is apt to be guided by those brilliant spots instead of the real centres of the sight, and the result is that in taking aim along the line in which they are, the axis is directed to the right; when, on the other hand, the sun is on the right, he will be liable in aiming to direct the axis to the left.

*Defects of Sighting.*

23. It may sometimes occur that the rifle is not accurately sighted as to elevation, and consequently may carry a little high or low. As the marks on the flap, denoting the height to which the sliding bar should be raised for different distances, are not always exactly in the right place (the sights being all made to one pattern), the soldier should be cautioned to pay attention to each shot; if it go low, he must

raise his sliding bar a little ; if high, the reverse. The sights are not always in the proper line. If the back-sight be to the right the rifle will carry to the right ; if the foresight be to the right, it will carry to the left, and vice versâ ; this defect should be remedied by aiming in the contrary direction.

*The Rifled Barrel.*

24. A barrel that has any number of grooves cut down the inside of it is said to be rifled. These grooves are cut in a spiral direction, in order to make the bullet turn or spin on its longer axis. Here cause the men to look through the barrel, to see the grooves and the degree of turn or twist given to them ; and direct their attention to the fact that, when the grooves make half a turn in the length of the barrel, the groove which is at one side at the breech, appears on the opposite side at the muzzle, passing over from left to right.

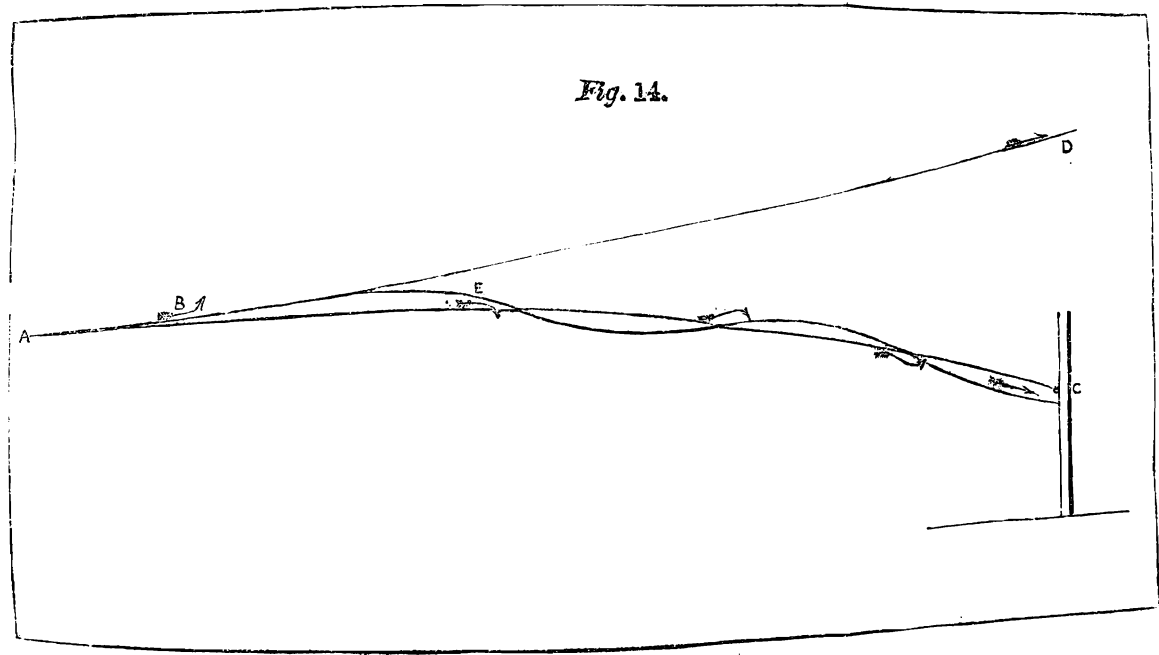
*Error due to Defective Figure rectified by the Rifled Barrel.*

25. When the bullet is expanded by the explosion of the powder, &c., it is not only made to fit the barrel tightly, but is moulded into the grooves in such a way that, during its passage through the barrel, it is obliged to turn with them, and thus it receive a spinning movement around its longer axis, which continues during the remainder of its flight ; this not only prevents a rotation in any other direction, but is in itself calculated to ensure accuracy of flight, by constantly presenting any imperfection of surface to the air in opposite directions. The object therefore of spiral grooves is to correct the flight of the bullet, and to cause it to spin or rotate round an axis coincident with its flight, thus keeping its point foremost.

*Describing the Motions of a Rifle Bullet through the Air.*

26. The motion of a rifle projectile in its passage through the air may be described by means of a bent arrow, fig. 14.

PART IV.—PRELIMINARY DRILL.





Suppose the arrow, with its bent point placed upwards, were shot from the point A, with a view to hit the mark C, and no spinning motion were given to it, then the greater pressure of the air being on its under or convex side would tend to carry it upwards in the direction D ; but if it had previously received a spinning motion, by the time it reached E the point would have turned, and the arrow proceeding downwards, would descend as far beneath the true "trajectory" as it had at first risen above it ; thus it would continue throughout its course to move in a spiral direction round the true "trajectory," constantly correcting the error due to its imperfect figure, and ultimately it would strike much nearer the mark than if it had received no spinning motion.

*Necessity of keeping the Rifle and Ammunition in order.*

27. In the foregoing instruction, the soldier will have formed some idea of the laws which regulate the flight of the bullet in the air, and he will also have been rendered thoroughly conversant with the arrangement of the sights, and with the rules for his guidance at the moment of firing. The instructor must now impress upon his mind that accuracy of shooting is not dependent on these causes alone, but also on the attention that he pays to the instructions given for the preservation of his rifle and ammunition, since it is only by the skilful construction of the former, and the perfect adaptation to it of the latter, as well as to its being dry and uninjured, that we can expect to attain the effect sought.

---

28. In order to induce all ranks to take greater interest in rifle practice the commanding officer should occasionally assemble the officers of the battalion, and the non-commissioned officers and men by squads or companies, when the officer-instructor may take the opportunity of explain-

ing more fully the theoretical principles detailed in the foregoing lessons, and of examining those officers and men who may be deficient in knowledge of the subject.

29. In the event of there being no room set apart as a Musketry lecture room, school rooms, if not used for Divine service, may be appropriated for two hours a day for the purpose of theoretical instruction in rifle practice; provided the regular school time, viz., from four to six hours daily, is not encroached upon;—a clear quarter of an hour being allowed to intervene between the periods of the occupation of the room for school and rifle instruction. The precise time of the day at which the school room is to be allotted, respectively, for scholastic and musketry purposes, is to be so fixed that the requirements of the troops under each head of service may be in all cases duly provided for.

---

### 3. AIMING DRILL.

1. In this exercise the soldier is to be instructed how to aim, and to adjust the back-sight of his rifle; and his progress is to be tested by making him aim at the different distances from a rest. If traversing rests are not available, a tripod formed of three stakes tied or looped near the top, or piled arms with bayonets fixed (sheathed), supporting a bag of sand about  $4\frac{1}{2}$  feet from the ground, will answer the purpose.

2. The squads, which are never to exceed ten men each, are to be formed in single rank at each rest, every man having his own rifle; and the instructor is first to explain the principles of aligning the sights on an object, confining the attention of the recruit to the following simple rules:—

- 1st. That the sights should not incline to the right or left.
- 2nd. That the line of sight should be taken along the centre of the notch of the back-sight and the top of

the fore-sight, which should cover the middle of the mark aimed at.

- 3d. That the eye should be fixed steadfastly on the mark to be aimed at, and not on the barrel or fore-sight, which latter will be easily brought into the alignment if the eye be fixed as directed. Particular attention is to be paid to this rule, for beginners are apt to fix the eye on the fore-sight instead of the mark, in which case the latter can never be distinctly seen, and the difficulty of aiming is greatly increased.
- 4th. That in aiming the left eye should be closed. If a recruit be not able to do this at the outset, he will soon succeed by tying a handkerchief over the left eye.

3. The instructor will also explain the difference between fine, full, and half-sight in aiming, as follows, viz. :—

- 1st. *Fine-sight* is when the line of sight is taken along the bottom of the notch of the back-sight, the fine point of the fore-sight being brought up into the alignment; as *A*, *fig. 1*.

Fig. 1



Fig. 2



- 2d. *Full-sight* is when the line of sight is taken even with the shoulders of the back-sight, the point of the fore-sight being brought up into the alignment, as *B*, *fig. 2*.

Fig. 3



- 3d. *Half-sight* is when the line of sight is taken half way up the notch of the back-sight, the point of the fore-sight being brought up into the alignment, as *C*, *fig. 3*.

4. The ordinary rules for aiming are intended to apply to the *half-sight*. As full-sight and fine-sight cause a slight

difference in the angle of elevation, the former is to be used when the rifle is found to carry low, the latter when it carries high. These several methods of aiming are to be practised by the recruit and drilled soldier in each aiming drill in the order they are explained above.

5. After the foregoing rules have been clearly explained, the instructor is to cause each man to align his rifle with the sight for 100 yards, on a mark that distance from him; having done so, he will leave his rifle on the rest and step aside, in order that the instructor may take his place to see if the aim be correct; should he discover any error, he is to call another recruit, who is to look along the sights, and state the defects; when the instructor will explain what the consequence would be if actually firing at an object, and cause the recruit to aim again. This method will have the effect of fixing the attention of the recruit, and of inducing him to avoid, when aiming himself, the errors he may have witnessed in his comrade's aim.

6. The foregoing process is to be carried out, at every distance\* of 50 yards, from 100 to 900 yards, or to the extent to which the rifle is sighted, at bulls-eyes six inches square for all distances to 300 yards inclusive, and eighteen inches square for all distances beyond 300 yards, in order that the recruit may acquire a knowledge of his sights, and become perfect in aiming; for it must be borne in mind that the difficulty of aligning the fore-sight, accurately, increases with the distance. The instructor is thus enabled to ascertain the progress of the recruit, and if he has any defect in his eyesight.

7. This exercise is well calculated to strengthen the vision; and it cannot be too strongly impressed on the mind of the soldier that, to shoot well at long ranges, he must train and strengthen his eye, by looking at small

---

\* This applies to the *recruit* only. The annual course of aiming drill for the trained soldier is prescribed in the table at page 137.



objects at distances beyond those at which he will have to fire in practice.

---

#### 4. POSITION DRILL.

1. In this exercise the recruit, as well as the drilled soldier, is to be put through all the motions of firing standing and kneeling, with the same accuracy as if actually firing ball, close attention being paid to each motion,—the object being to habituate him to the correct position, to give him a perfect command of his rifle, and to establish the connection that should exist between the hand and the eye. The eye regulates every action of the hand; but constant practice is required to enable the latter readily to raise the rifle to an object on which the eye may be fixed, and the forefinger to act upon the trigger at the proper moment.

2. In the *Firing Exercise* the soldier is instructed by the adjutant and serjeant-major in the positions of loading and firing in the ranks:—in the “*position drill*” the musketry instructor is to confine his attention exclusively to the essentials of good individual firing.

3. Position drill is always to be executed in marching order, except in tropical climates, and with fixed bayonets when standing,\* and unfixed bayonets when kneeling, and with snapcaps on the nipples of the rifles. The squads, which are not to consist of more than ten men to each instructor, are to be formed in single rank, the men to be one pace apart, and placed at a convenient distance from the marks to be aimed at.

4. Before commencing this drill, the instructor is to point out to each man a mark to aim at; for this purpose small “bulls-eyes” are to be painted on the barrack walls by the

---

\* In corps armed with short rifles, it is only the recruits who are to execute the position drill with fixed swords.

troops who will be furnished, on requisition to the local officer of the Control Department, with the necessary tools, and with prepared black and white paint. The bulls-eyes are to be black, the size of a shilling, on a white centre the size of a crown piece. They are to be placed *three feet* from the ground, and *three feet* from each other.

5. Commanding officers are to make arrangements for the position drill,—of which there cannot be too much if well executed,—particularly the first and third practices—being *frequently carried on* by every company, (when not engaged in its annual course), broken up into squads of ten men, each under the close personal supervision of the officers, assisted by the regimental and company instructors; and the number of times it is performed is to be notified in the monthly musketry diary.

### FIRST PRACTICE.

This practice is intended to accustom the soldier to handle his rifle expertly,—to strengthen his left arm so as to give him a perfect command of the rifle with the left hand,—and to habituate him to raise it to the shoulder, in the direction of the object the eyes are fixed upon, without moving his body. It is therefore to be continued until these points are accomplished. No defect, however trivial, is to be overlooked, and the instructor is to explain the errors, and their bad effects, when the squad is standing at ease.

Words of Command.

Explanations.

Position Drill, by  
Numbers. First  
Practice, as a front  
or rear rank stand-  
ing or kneeling, as  
may be ordered.  
At \_\_\_\_\_ yards,  
Ready.

A caution.

As from "The Shoulder."

The instructor is to be most particular in this, and the following practices, to see that every man holds his rifle firmly with the left hand, at the place where it is to be held when at the "present," viz., behind the lower band, and not nearer the nipple than the projection in front of the lock-plate; that the fingers of the right hand are behind the trigger-guard,—that the body is erect, the left side being perpendicular, with the left breast over the left foot,—that the shoulders are at the half turn, and the feet at right angles,—and that the eyes are fixed on the mark, or object in front, with the head in the same direction, and erect. When kneeling, the right foot and knee are to be in the proper position, and the body is to rest firmly on the right heel.

*Present.*

Without in the slightest degree moving the body, head, or eye, raise the rifle smartly to the front of the right shoulder to the full extent of the left arm,—the arms to move close to the body,—the back sight to be upright,—the top part of the heel plate to be in a line with the top part of the shoulder,—the muzzle to point a few inches below the mark the eyes are fixed upon,—the forefinger placed inside the trigger-guard,—and both elbows inclined downwards.

N. B.—The squad is frequently to be brought back to the "ready" by the command "as you were," in order to establish the men in the position above detailed,—to point out errors,—and to explain the subsequent motions of the practice: *e. g.*, "Present." "As you were." "Present."

“As you were,”—and so on, until the first motion is performed satisfactorily, when the second and third motions are to be similarly explained, and afterwards the following commands to be given :—“Present.”—“two ”—“ three.”

*Two.*

Bring the rifle smartly into the hollow of right shoulder, (*which must not be allowed to give way*) pressing it thereto with the left hand, and at the same instant bring the left elbow under the rifle, and the right elbow nearly square with, and well to the front of the right shoulder, to form a bed for the butt, without moving the body, head, or eye, placing the forefinger round the trigger like a hook, but without pressing it. When kneeling, place the left elbow over the left knee.

*Three.*

Bring the rifle smartly to the ready position, without moving the body, head, or eye, placing the forefinger at the same time behind the trigger-guard.

*Ease-Springs.*

*Order-Arms.*

*Stand at-Ease.*

When the men of the squad are established in the positions enjoined by the foregoing instructions, they are to be exercised in the first practice, judging the time, after coming to the “ready,” the commands being,—

*First practice,*

*judging the*

*Time.*

*Present.*

} A caution.

Proceed with the motions consecutively, observing a pause of the slow time between each.

*Steady.*

At this command, the squad will return to the ready position, and cease the practice.

*Ease-Springs.*  
*Order-Arms.*  
*Stand at-Ease.*

—  
SECOND PRACTICE.

This practice is to habituate the men to combine the motions of the “present” in the required order.

*Position Drill, by Numbers, Second Practice, as a front or rear rank standing or kneeling, as may be ordered.*

A caution.

*At yards, Ready.*

As from “The Shoulder.”

The instructor is to direct his attention to the points alluded to under this head in the first practice.

*Present.*

Combine the 1st and 2nd motions of the first practice (as in Firing Exercise), and look at the object through the notch of the back-sight.

*Two.*

Raise the muzzle steadily until the top of the fore-sight is brought in a line with the object through the notch of the back-sight, pressing the trigger at the same time, without the least motion of the hand, eye, or arm, until the hammer falls, *still keeping the eye fixed on the object.* The breathing to be restrained in performing this motion.

*Three.*

Bring the rifle to the ready position and “full cock.

Repeat this practice several times.

N.B.—The squad is to be brought back to the “ready” by the command “As you were” after each motion, to explain that which follows next in order, care being taken that the men do not lose the erect position of the body. or

move the eye from the object pointed out to them severally to aim at.

*Ease-Springs.*

*Order-Arms.*

*Stand at-Ease.*

### THIRD PRACTICE.

The object of this practice is to establish union between the hand and the eye, which is indispensable to produce good shooting. Too much pains, therefore, cannot be taken, to see that it is carefully and minutely executed by the men, who are to be encouraged to engage in it at other times than when under instruction, but cautioned against ever bringing the rifle to the "present," unless they have first selected some spot or object to aim at.

*Position Drill,*  
*Third Practice,*  
*as a front or rear*  
*rank standing.* } A caution.

*Independent firing*  
*at yards. Ready.* } Proceed with the motions of loading, &c., in quick time. The instructor is to see that the position of each man is correct.

*Commence.*

Each man will come to the "present" independently of his right or left hand man, and perform the motions (without hurry) in his own time; and after snapping, will return to the ready position and continue the practice.

*Cease-Fire.*

Each man after the motion of removing the cartridge-case, &c., or, if at the ready, unloading, will order arms.

As the constant repetition of the loading motions in the positions and other drills very much increases the wear and tear of the breech actions of the Snider rifles, those motions should in all such drills, with trained soldiers, be discontinued after the first round.

The squad having been well grounded in the foregoing practices standing, will afterwards be similarly exercised on the knee.

**N.B.**—The most minute attention is to be given to each man's position when at "the present," more especially to see that the sights are upright,—that the rifle is pressed firmly to the shoulder with the left hand,—that the trigger is pressed steadily without the slightest motion of the hand or arm while the muzzle of the rifle is being raised, and until the hammer falls,—and that the eye is fixed upon the mark during, and after snapping. The instructor is to scrutinize each man of his squad in succession, all the time it is practising, pointing out and correcting the errors he may discover in any man's position ; and he is also occasionally to place himself in front of each man, and cause him to aim at his eye, with a view to ascertain that he obtains the alignment quickly and readily and that his aim is not lost by pressing the trigger. Whenever the instructor discovers a fault in a recruit's position when the rifle is at the shoulder he is to give the command "As you were," and cause him to come to the "present" three or four times in succession, without loading, to correct the defect noticed.

---

## 5. BLANK FIRING.

1. Before the recruit is permitted to fire with ball, he is to be practised to fire blank cartridge, with a view to give steadiness, and to accustom him to the recoil which takes place on the explosion of the powder.

10 rounds to be fired singly	} Standing.
10 " independent firing	
10 " singly, and	} Kneeling.
10 " in volleys	

2. The position of the body, arms, and hands, and the manner of pressing the trigger, also the position of the head when taking aim, are to be duly watched in this exercise, in order to discover, and correct those errors which are fatal to good shooting, and which cannot be so successfully corrected when firing ball.

3. The instructor is to explain that the explosion of the powder, at the same time that it sends the bullet out of the barrel, communicates a force backwards, which is called *recoil*, and that by pressing the butt firmly into the hollow of the shoulder, he may control the kick of the rifle, which will otherwise take place. This is of great importance, as the more confidently a man stands up to his rifle, the less likelihood there is of random shooting, and the better will be the results of the firing.

4. With a view to make the recruit understand the reason for his being taught to press the centre of the heel plate to the hollow of the shoulder, and not the toe of the butt, the instructor is to remind him, that the bullet quits the barrel in the direction of the line of fire (as already explained), and that the recoil takes place in the opposite direction. He will likewise explain that the stock is bent downwards, in order to enable the firer to look along the barrel, and consequently, that the point of resistance, viz., the shoulder, is beneath the line of recoil; the result of which is, that the explosion of the charge has a tendency to throw the muzzle up, and thereby send the bullet high. The soldier has only to imagine the line of fire or axis of the barrel prolonged backwards, when he will observe that it will pass far above the heel of the butt;

---



## 6. JUDGING DISTANCE DRILL.

1. In this drill the recruits and drilled soldiers are to be instructed to note the size and appearance of men and objects at different distances.

2. In firing for instruction, the target is generally placed at known or measured distances, but before an enemy the distance is unknown ; it is therefore necessary, in order to apply the rules laid down for shooting, that the soldier should know how to judge quickly, and with tolerable accuracy, the distance which separates him from the object he is firing at, so as to regulate the elevation of the rifle.

3. In order to teach the soldier to estimate distances by the eye, he is to be exercised in the following manner, before he is allowed to engage in the judging distance practices.

4. Men are to be placed as points for observation at the distances of 50, 100, 150, 200, 250, and 300 yards, facing the squad or party, standing at ease, looking to their front, and remaining in an erect position, unless ordered to the contrary.

5. These fixed points are to be thrown out in the following manner. The instructor is first to select a tree, house, or any other conspicuous object in the distance, and align two men thereon, twenty yards apart and facing each other ; and place eleven paces to the right or left (as he may think proper) of the nearest man, and at right angles to him, another man as a point for covering ; after which he is to march a squad of six men, formed two deep, on the alignment chosen, and halt it at 50 yards distance, when No. 3 of the rear rank will turn about and cover the two men already aligned ; the man 20 yards off will now be removed. The squad is then to march in an oblique direction for a distance of 50<sup>5</sup>/<sub>8</sub> yards or 61 paces.

U

when it is again to halt, and No. 3 of the front rank turn about and cover diagonally, moving to the right or left by the side step, as may be required, but preserving his shoulders square to his present front. The squad is to continue so to march in an oblique direction, leaving a man at every distance of 61 paces or  $50\frac{5}{8}$  yards, who is to act as before detailed. When the points for observation are aligned diagonally, the covering point is no longer required. *See Plate.*

6. It will be observed that each man in the above formation is placed at a greater distance from the line first marched upon, in proportion as he is distant from the point where the squad commences its instruction, in order that each soldier may serve, in turn, as a distance point for the men of the squad to make observations on.

7. An officer or non-commissioned officer, as assistant or squad instructor, (if there be a sufficient number,) is to be placed opposite each of the several points for observation, and the squad or party formed to the left of the squad instructor placed opposite the point 50 yards off.

8. The instructor should direct the men to notice the position of the sun, the state of the atmosphere, and the background, at the time they are making their observations, in order that they may be accustomed to the changes made in the appearance of the several objects under altered conditions.

9. The instructor opposite the 50 yards point is then to proceed to indicate to the men of his squad, the different parts of the figure, arms, accoutrements, and dress, which can still be distinctly perceived on the soldier before him, also those parts that can no longer be perceived clearly at 50 yards; after which he will question each man on the observations made on what he can see, and enjoin him to try and impress upon his mind the appearance of





a man at this distance, and pass the squad on to the next station.

10. The instructor opposite the 100 yards point is to proceed in the same manner, and cause each man to make observations of the same kind as he did on the man at 50 yards, and desire him to make comparisons between the two men placed at this and the former distance, and, after questioning all the men of the squad, pass it on to the next squad instructor, and so continue until every man has made his observations on all the points.

11. The instructor opposite the 300 yards point will direct the attention of the men to those parts of the figure, dress, and equipments which are distinctly perceptible, and those that are seen less clearly, mentioning those that are not visible.

12. The instructors must not expect that the answers and observations will be the same from every man, since the eyesight is not the same in all.

13. The men who are placed as "points" are to be relieved by others who have made their observations at the several distances, for which purpose the squad is to consist of at least double the number of men employed as "points."

14. Should the party be very large, points may be thrown out right and left; and in order to afford a view of the men at the several distances in two aspects, points may be thrown out in the opposite directions. See Plate.

15. When all the men of the squad, or party, have made their observations on the different points, they will proceed to estimate the distances of men within the limits of 300 yards in the following manner. After having marched the squad on to a different ground from that on which the drill on "fixed points" has taken place, the instructor is

to place a man, standing at ease, at any unknown distance opposite to, but, if possible, unobserved by the squad. He is then to order the men to notice the soldier facing them, and to estimate the distance, cautioning them at the same time to recollect the appearance of the men just seen at known distances.

16. The squad instructors having formed three paces to the front of the right of their squads, are to call each man separately to the front and question him, noting down in a register his answer, which must be given in a division of five yards, and in a low tone of voice, in order that those following him may not be influenced by his opinion. No talking is to be allowed while the answers are being given.

17. When all the men have given their answers,—which are to be read over to them by the squad instructor, in order to ascertain that they are correctly recorded,—the instructor will ascertain the correct distance by means of the stadiometer, which will be placed ten paces to the left of the squad (*vide* instructions from using this instrument at page 224), or, in the absence of this instrument, the squad will pace the distance, by marching towards the man judged from, the instructor placing himself in the centre to count the number of paces, 120 of which are equal to 100 yards. The distance, when ascertained, is to be made known.

18. The recruits, after they have been drilled four days to 300 yards, in the manner before detailed, are to be exercised for four days more up to 600 yards, first at known distances, in every respect as laid down for exercising to 300 yards, the “points for observation” being two or more men, placed at every 50 yards from 350 to 600 yards inclusive, after first measuring 300 yards on the alignment chosen.

19. When estimating unknown distances beyond 300 yards, and there is no stadiometer, the party, with a view to save time and walking, is to be separated into two equal portions, moved in different directions, and when halted, turned towards each other, throwing out a file on the flanks a few paces off. After every man has judged the distance which separates the parties, and the answers have been recorded, they are to advance towards each other, counting the paces as before. The distances each party measures, being added together, will give the correct distance.

20. The instructor, in repeating these exercises, is to take care that they are conducted, as much as possible, in different directions, and under different states of the atmosphere, in order that the soldier may become habituated to the diversity of circumstances in which he may have to act.

21. Every judging distance drill is to consist of observations made on men placed at known distances, and of three answers given on men placed at unknown distances, in different situations, immediately afterwards.

22. Should a young officer, recruit, or drilled soldier become a casual when proceeding with the preliminary drills, and not make up, before the annual returns are completed, those which he may have missed, he is to be considered as not having been exercised therein, and to be reported accordingly.

---

## PART V.

## PRACTICE.

## 1. BALL FIRING.

1. No firing is ever to take place, unless an officer is present on the range.

2. Target practice affords proof of the attention bestowed on the preliminary drills; the more carefully the latter have been performed, the better will be the results of the former.

*Targets.*

3. The targets are to be six feet in height and two in breadth, constructed of iron of sufficient thickness to be rifle-bullet proof, having squares of six inches cut on the face to facilitate the marking off of the hits on the diagrams provided for the purpose, and to serve as guides in painting the bull's-eye and centre. *Vide fig. 1.*

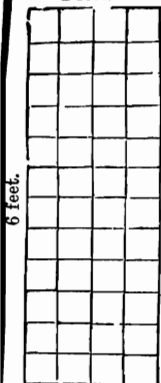
4. They are to be coloured *white* with a mixture of whitening, water, and size; and the bull's-eye, and the lines describing in the centre, *black* with lamp-black, water, and size. Pots of these mixtures are to be kept in the rear of the targets.

5. They are to be rested on the platform provided for the purpose, and when in use are to be as perpendicular as possible.



Fig. 1.

2 feet.



6. The greatest care is to be taken when lowering or raising the targets, to prevent their being damaged; they are on no account to be allowed to fall by removing the props, but are in every instance, to be carefully laid on the ground.

7. When the targets are laid down they should be placed at an incline, face upwards, to prevent the rain lodging on them; and, with a view to preserve them from the effects of exposure, they should be painted periodically.

8. When a target requires repair to an extent which cannot be made at the regiment, or becomes unserviceable, it will be exchanged in the manner prescribed for all other stores.

#### *Fatigue Party.*

9. A fatigue party of at least six men (one of whom is to be a pioneer) in charge of a non-commissioned officer, is to be detailed daily, and placed under the orders of the instructor of musketry, for the purpose of fixing and cleaning the targets,—assisting to signal shots,—as look-out men to warn persons from crossing the range while firing is going on,—and for any other duties that may be required during the practice. Watch cloaks or coats are provided for the use of the fatigue men employed *during the winter.*

#### *Signals for and Value of Hits.*

10. Hits on the target are to be indicated by flags of different colours raised above the butt, or by discs placed in

front of the hits, at stations where Bland's marker's butts (fig. 7, page 256) are constructed. These flags and discs, together with the number of points fixed as the value of the hits, are as follows :—

Shots.	Flags.	Discs.	Value in Points.
Outer-	White or yellow	Black*	2
Centre	Dark blue	Black	3
Bull's-eye	Red and white	White	4
Ricochet	Red waved in front of the target		R
Miss			0

\* In the case of an *outer* the black disc is first to be shown at the side of the target and afterwards placed in front of the shot.

11. Ricochets, or shots which strike the ground before hitting the target, are to be signalled by waving the red flag twice, to and fro, in front of the target, and are to be counted as misses in individual firing, but noted in the register by the letter R.

12. The signal for danger, or cease firing, is in all cases to be a *red flag*. This will be hoisted whenever it is necessary to cease firing to re-colour the targets, or for any other purpose. No man is on any account to leave the marker's butt until the "Cease Fire" has been sounded, or the danger flag raised, at the firing point, in answer to the *danger* signal. The red flag is always to be kept up as long as the markers are out of the butt, or any person is in the line of range. Whenever the "Cease Fire" is sounded from the firing point, it is to be immediately answered from the marker's butt by raising the danger flag; and in like manner the "Fire" is to be answered by lowering it. *On no account is a shot to be fired when the danger signal is up at the marker's butt.*

13. Whenever a shot strikes to the right, the flag indicating its value is to be inclined to the right, and vice versa. When the shot strikes high, the flag is to be raised as high as possible, and when low, it is only to be raised high enough to be easily visible above the butt.

14. The bullet will be found to make a very distinct mark, so that the correct position of each shot is easily seen at a short distance. Whenever a bullet strikes the target, so that the circumference of the mark cuts the outer edge of the bull's-eye or centre, such shot is to be counted, in all practices, as hitting the bull's-eye or centre, as the case may be, (*vide fig. 2*). No shot is to be counted in any practice where the mark of the bullet, part or whole, is not seen on the face of the target.

15. The marker in the butt, and one of the men in the ricochet butt, are invariably to be full non-commissioned officers (if possible serjeants) of a different company from that engaged in firing; the former is to be responsible that the correct signals are given to the several shots which strike the target, and is to keep a memorandum, under the head of bull's-eyes, centres, outers, ricochets, and misses, to facilitate the marking, and ensure each man's shot receiving the correct signal. The men in the ricochet butt are to keep a sharp look out, and to call out to the non-commissioned officer in the marker's butt "*ricochet*," when such is the case.

16. The firing parties are to be marched to the practice ground by squads of not more than twenty men each, and only one squad at a time for each range available. Such detailed arrangements are to be made as will ensure the relieving squads arriving on the practice ground by the time the parties firing have finished their practice, and thus prevent delay. When exercising by classes, if there be a choice of time for practice the senior class is always to have the advantage.

17. The men's names are to be entered in a register of the form marked C, or diagram of the form marked E, (page 278) before the party goes to the practice ground in the order in which they appear in the Musketry Drill and Practice Return, and according to which they are to stand in the ranks for individual firing. One register will answer for each section or squad, to record the performances at four distances.

18. The register of practice is to be kept by an officer if possible, (if not, by a non-commissioned officer,) who is to note therein opposite each man's name (which he is to call out before he fires) the number of points obtained by each shot, notifying also the result of the shot to the man.

19. All entries are to be made *in ink* on the practice ground; should any alteration become necessary, a fine line is to be drawn through the figure or letter, and the correction made, the initials of the company officer keeping the register being immediately attached to it (*thus*:  $\aleph$ : A.L.) to verify the circumstance. Inattention to this regulation, or an erasure (which is prohibited), will invalidate the entry.

20. When everything is ready, the bugler, who is to be placed on the right of the firing point, is to sound the "Fire," and as soon as the danger flag is lowered the officer is to order the practice to go on, when each man in succession, commencing from the right of the front rank, and afterwards from the right of the rear rank, will take a pace to the front, make ready, and fire, after which he will order arms, and, so soon as he sees his shot, if a hit, signalled, move by the right flank and form three paces in rear of the front he formerly occupied. Each man will step forward and get into position immediately the man on his right has fired; but will not come to the "present" until the former shot, if a hit, has been

signalled. By observing this rule the whole section, after firing one round, will have re-formed three paces in rear of its original position, to which it is to be again moved, by the officer in charge, when the loading and firing are to proceed as before.

21. The officer (or instructor) is to be cautious not to check a man for any error at the time he is firing, as it would have the effect of distracting his attention from the object he is aiming at ; but he is to watch attentively the position of each soldier, and to correct him, if necessary, after he has fired.

22. Whenever the hits on the target become too numerous to distinguish quite easily the new ones as they strike, the target is to be re-coloured ; before this takes place, however, the captain, or officer of the section, and the marker, are carefully to compare the register with the target to see that they agree, and the officer is to satisfy himself that the target is properly cleaned, and all the old shots obliterated, before the practice is resumed.

23. At the conclusion of the practice at a distance,\* the points obtained by each man are to be totalled and read out, after which the bugler is to sound the "Cease Fire" and "Advance," when the captain, or officer of the section, is to proceed to the target, and with the marker, compare the register therewith, adding or deducting from the total points any difference that may be discovered. Should any hits be found on the target which have not been noted in the register, they are on no account to be credited to any one of the squad. *Every correction in the score which a soldier may claim must be made before another shot is fired.*

---

\* If there have not been many hits when the 1st class shots are firing, the officer in command of the section may compare the register with the target after the conclusion of the practice at every two distances.

24. The register is, at the conclusion of the day's practice, to be signed by the marker, and countersigned by the captain, or officer of the section ; after which the columns "duplicate total points," corresponding with the practices executed, are to be initialed by the officer-instructor or his assistant, [to verify their agreement with the columns "total points," and then torn off and handed to the officer or serjeant instructor on the practice ground. The officer-instructor is responsible that this order (referring to the initialing and removing the "duplicate total points") is attended to in all cases.

25. In the practice of recruits, the registers are to be signed by the serjeant, or squad instructor who has kept them, and by the marker, and countersigned by the officer-instructor, or his assistant, one or other of whom is invariably to superintend the firing, The "duplicate total points," in this case are not to be torn off.

26. If there be any men, whose names are in the register, that have not practised, the cause of absence is to be briefly stated in the columns "total points" and "duplicate total points."

27. The company instructor, immediately on his return to barracks, after every period, is to enter the total points obtained by each man, per register, opposite his name in the proper column of the company Musketry Drill and Practice Return. The total points obtained by recruits are to be entered in like manner by the serjeant instructor.

28. If a man fire at one or more distances in a period, and is unable to continue it with his party or company, he may be allowed to complete such period before the termination of the annual course, and if he does not complete it, he is to be classified according to the number of points he has obtained, which are to be included in the total points of the company, the man being also counted

among the number by which the total points are divided, to determine the merit of the shooting in the period in question ; but should a man, after having fired one or more rounds at a distance, be unable to finish the practice on account of sudden illness, he is to be considered as not having fired at the said distance, unless the points he has obtained pass him into a higher class, &c.

29. Should a section or squad, when at individual firing at any distance, be prevented by heavy rain from finishing the practice, the shots already fired are to be compared, the points obtained by each round totalled, and initialed by the officer superintending the practice, and the practice completed on a future occasion.

30. The officer-instructor is to examine the Musketry Drill and Practice Return, and compare the entries therein with the duplicate total points at the conclusion of every period, and to satisfy himself that the classification is correct.

31. All persons watching the practice are to stand to the right of the firing point. They are to be kept clear of the section that is firing ; and on no account is any noise, or talking with the men, to be allowed.

32. Every recruit is to expend in his training, and every drilled soldier in his annual course of practice, (with the exceptions specified in paragraph 64, page 213), 90 rounds of ball ammunition, in the following manner ; viz. :—

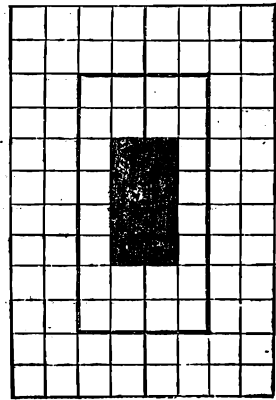
- 60 in individual firing,
- 10 in volleys,
- 10 in independent firing, and
- 10 in skirmishing order.

33. The number of rounds to be expended at each distance,—the distances,—the size of targets to be fired at by the several classes in individual firing,—and the dimensions of the bull's-eye and centre for each class, are as follows :—

TWO TARGETS.

Bull's Eye, 2 ft. x 1 ft. Centre, 4 ft. x 2 ft.

Third class.	Drilled soldiers.	{	150	}	5 rounds at each distance.
			200		
Recruits.	{	50	}		
		100			
		150			
		200			





## 2d Class.

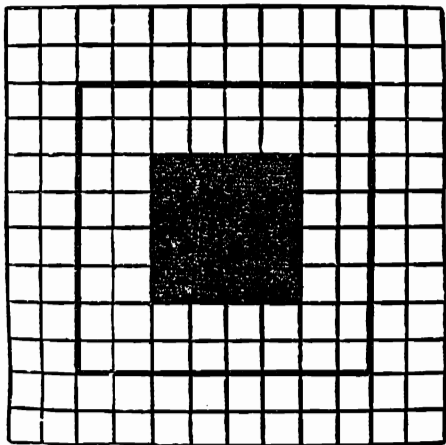
Trained  
Soldiers.

Recruits.

400
500
550
600

250
300
350
400

5 rounds at each distance. Vide page 213 for exceptions.

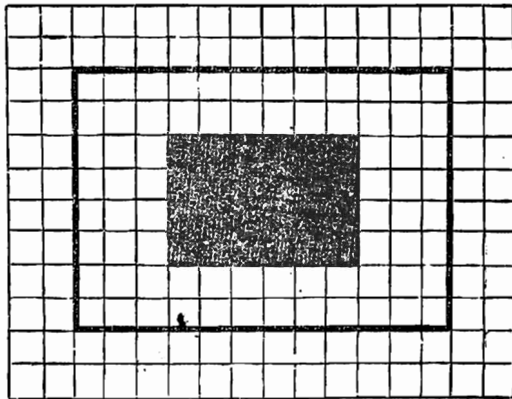


THREE TARGETS.  
Bull's Eye, 2 ft. X 2 ft. Centre, 4 ft. X 4 ft.

## FOUR TARGETS.

Bull's Eye, 2 ft.  $\times$  3 ft. Centre, 4 ft.  $\times$  6 ft.

1st Class. {  
 Trained Soldiers. {  
     650  
     700  
     750  
     800  
 Recruits. {  
     450  
     500  
     550  
     600  
 }  
 5 rounds at each distance.



N.B.—The line defining the centres for the several Classes is not to extend beyond the indented lines on the face of the target, and is not to exceed half an inch in width.

34. Individual firing at all distances to 300 yards, both by the recruit and drilled soldier, is to be performed standing; beyond this distance, kneeling,—or (in the 1st class only) lying, if preferred, in the manner sanctioned in page 93 of the Field Exercise and Evolutions of Infantry. An exception to this rule is allowed in favour of old officers,—if they cannot, through stiffness, get into the kneeling position,—and of soldiers of cavalry,—who may, with the sanction of the commanding officer, fire standing at distances beyond 300 yards. In the volley and independent firings the pack is invariably to be worn, except in tropical climates. Soldiers are not to be allowed to fire from the left shoulder unless certified by the medical officer to be suffering from defective vision of the right eye. This exception is not to extend to the platoon practices.

35. Serjeants of infantry may fire either with the long or short rifle; but whichever they commence with they are to continue to use throughout the course.

36. The number of points to be obtained as a qualification to pass into a higher class in shooting is as follows, both for recruits and trained soldiers :—

	Number of Points to be obtained with the Rifle, '577 bore, and Cavalry Rifle Carbines of all Patterns.
In the 1st period, or 3d Class to pass into the 2d Class - - - -	36
In the 2d Class to pass into the 1st Class - - - -	30
In the 1st Class to be eligible for the marksman's reward- - - -	22

37. Young officers and recruits are not to fire ball until they have been exercised through the prescribed number of preliminary drills; this rule will also apply to the drilled soldiers, (except first-class shots and first-class judges of distance, if excused by the commanding officer) before firing the annual allowance of practice ammunition.

---

a. FIRING SINGLY.

*First Period.*

38. In this branch of individual firing the recruits are to practise at every fifty yards from 50 to 200 yards inclusive, and the drilled soldier at every fifty yards from 150 to 300 yards.

39. When the party or company has performed this period, the points obtained individually at the several distances are to be added together, and the sum entered in the column total points of the period in the Musketry Drill and Practice Return, to show the value of the performances of each man, from which column a classification is to be made, when those who have obtained the required number of points are to be formed into a second class, and those who have not obtained that number are to fire again in the third class.

40. The names of men who have passed into the higher classes, and the number of points they have each obtained, are to be read over to the company before commencing the second and third periods.

*Second Period.*

41. In the second period of individual firing the party or company is to practise in two classes, viz., second and third.

42. At the conclusion of the practices in this period, the points obtained by each man at the several distances are to be added together, and the sum entered in the columns total points, from which a second classification is to be made, when men of the second class who have obtained the required number of points are to be formed into a first class ; and those of the third class to pass into the second class ; the others to remain in the second and third classes respectively.

43. In the case of troops armed with rifles or carbines sighted only to three hundred yards, the second class, in this period, is to repeat the practice of the third class, firing, however, at every distance at a single target, six feet by two feet (with bull's-eye and centre of the dimensions for the third class), and those men who obtain thirty-six points and upwards will pass into the first class.

#### *Third Period.*

44. In the third period of individual firing the company is to practise in three classes, viz., first, second, and third.

45. At the conclusion of the practices in this period the points obtained by each man are to be added together, and the sum entered in the column "total points," from which a final classification is to be made.

46. Men shooting in the first class, who obtain 22 points and upwards, are to be styled marksmen, provided they are in the first class in judging distances.

---

#### *b. VOLLEY FIRING.*

47. In this practice ten rounds of ball ammunition are to be expended by the recruit, and by the drilled soldiers of every company annually, at four hundred yards, both

ranks kneeling, except in corps armed with the short rifle, in which the front rank only will kneel.

48. For this, and the independent firing practice, six targets placed close together are to be used, across the centre of which is to be coloured a black mark *two feet* deep: shots hitting this mark are to be counted four, other hits two points.

49. The strength of the squad or section, firing in this and the following exercise, is not to exceed twenty or to be less than five men.

50. In the volley firing, if a man's rifle misses fire, he is not to fire at the target singly. Every miss-fire in a volley is to be counted as a round expended. No man is to be withdrawn from the practice after having commenced it; and whatever may be the result of the fire in each volley, the average to determine the merit of the practice is to be ascertained by dividing the number of points (obtained by the hits on the target) by the number of men in the squad.

51. In the volley, and skirmishing practices, care is to be taken that the men of the third class, who have not fired beyond three hundred yards, adjust their sights to the proper elevation.

52. This, and the following exercise are to be omitted in the training of the cavalry soldier.

---

### c. INDEPENDENT FIRING.

53. In this practice ten rounds of ball ammunition are to be fired, by the recruit, and by the drilled soldier of every company annually, at three hundred yards, in the order of firing detailed in the Rifle Exercises.

---

*d. SKIRMISHING.*

54. Ten rounds of ball ammunition are to be fired by the recruit, and by the drilled soldiers of every company annually, in skirmishing order, as laid down in the Field Exercise, advancing from four hundred to two hundred yards, and retiring from two hundred to four hundred yards, until the ammunition is expended, each man judging his own distance, and arranging his sight accordingly.

55. Six or eight single targets are to be placed with intervals of six paces between them for this practice. Each target is to have a black mark two feet deep across the centre : shots hitting this mark are to be counted four, and other hits two points. Every man is to have his own target.

56. In advancing, the men may fire kneeling. In retiring, the firing is to be invariably delivered from the knee.

57. A sentry (one of the fatigue party) is to be placed on each flank of the extended targets, about forty or fifty yards off, to prevent any person approaching within that distance.

58. At the conclusion of the firing of each squad, in this practice, and in the volley and independent firings, the company instructor, accompanied by a non-commissioned officer of another company, is to go to the targets and mark off the hits on a diagram in the manner shown in Form E, page 278, in the presence of the captain or officer commanding the company. When completed, the diagram is to be compared with the target, and then signed by the company instructor and the non-commissioned officer of another company who witnessed the hits being taken off, and countersigned by the captain or officer commanding the company who superintended the practice. The points obtained by each section are to be inserted in the columns set apart for the purpose in the *Musketry Drill and Practice Return*.

59. The diagrams of the volley, independent, and skirmishing practices are, like the registers, to be retained by the captain of the company, the officer-instructor taking the memorandum of hits on the several targets, &c., (after initialing it to verify its agreement with the diagram) in order to check the entries made in the Company's Musketry Drill and Practice Return. This memorandum is not to be removed, in the case of the practice of squads of casuals composed of men of different companies, or of recruits, as the diagrams in these cases are to be retained by the officer-instructor.

60. The volley and independent, and skirmishing, practices are not to be executed until after the completion of the individual firing, except in the case of a drilled soldier, who, having become a casual after the termination of the first period, may be available to perform these practices with his company or squad of casuals before he completes the other periods; and in no case is a man to practise in the third period until he has fired in the first and second periods respectively.

*Further Instruction of Third-class Shots.*

61. Men who remain in the third class at the final classification are to be subsequently exercised, at the discretion of the commanding officer, through a course of aiming and position drills, and blank firing, in every respect as recruits; and afterwards to fire through the first period, when the practice ranges are so situated as not to entail their being detached from head quarters; but it is to be distinctly understood that this additional practice is not to be looked upon as a punishment, nor to be suffered to deprive a soldier of his furlough, or of any indulgence to which he may be entitled. The performances of such men are to be entered in a recruits' practice return, set apart for the purpose, and headed "3d class shots at final classification."



*Figure of Merit.*

62. The figure of merit to measure the efficiency of the shooting of a squad, company, or battalion, is to be formed as follows:—\*

Average points obtained in the first period.

Average points obtained in the volley firing.

Per-centage of first-class shots at the final classification, minus the per-centage of third-class shots, to be recorded thus:  $\frac{70 \cdot 75}{10 \cdot 50} = 60 \cdot 25$ .

When the latter exceeds the former the word *nil* is to be entered in the adjoining column.

63. Although not included in the figure of merit, the independent firing and skirmishing practices are of the greatest practical importance in the training of the infantry soldier; general officers will therefore at their half-yearly inspections see a squad of at least ten file, taken indiscriminately from the several companies on parade, fire ten rounds each in independent firing. The result, in per-

\* The following table details the averages that may be considered as indicating very good,—good,—moderate,—and bad shooting with the Snider-Enfield rifle:—

	Very Good.	Good.	Moderate.	Bad when under
1st period .....	44	40	35	35
Volley firing .....	24	20	18	18
Excess of 1st class over 3rd class.	60	45	35	35
<b>FIGURE OF MERIT.</b>	<b>125</b>	<b>100</b>	<b>80</b>	<b>80</b>
Independent firing .....	22	18	14	14
Skirmishing .....	14	11	9	9

centage of hits and average points, is to be notified in their confidential reports, and in the Annual Musketry Practice Return. The Inspector-General of Musketry will specially notice in his Annual Report any deficiency he may observe in the practices here alluded to.

64. In the case of regiments armed with rifles not sighted to 800 yards, or quartered at stations where a range to the full extent is not available, the practices to be executed, and the quantity of ammunition to be expended under such circumstances, are detailed in the following table :—

When the Rifle is sighted, or the Ranges only extend to	Practices to be performed.						Total number of rounds to be fired.	REMARKS.
	1st Period.	2d Period.	3d Period.	Volley firing.	Independent firing.	Skirmishing.		
300 yards	1	1	-	1	1	1	70	The second class to repeat the practice of the third class: firing at a single target. Volleys to be fired at 300 yards standing, and skirmishing between 300 and 200 yards.
400 "	1	1	-	1	1	1	70	The second class to fire ten rounds at 350 and ten at 400 yards.
450 "	1	1	-	1	1	1	70	The second class to fire five rounds at 350, five at 400, and ten at 450 yards.
500 "	1	1	-	1	1	1	70	The second class to fire five rounds at 400, five at 450, and ten at 500 yards.

When the Rifle is sighted, or the Ranges only extend to	Practices to be performed.						Total number of rounds to be fired.	REMARKS.
	1st Period.	2d Period.	3d Period.	Volley firing.	Independent firing.	Skirmishing.		
550 yards	1	1	*	1	1	1	*70	The second class to fire five rounds at 400, five at 500, and ten at 550 yards. *The <i>third period</i> to be executed in this instance should a range of the full extent become available after the practices mentioned have been performed.
600, and under 800 yards.	1	1	1	1	1	1	90	When a range of 600 yards only is available the first-class men are to fire ten rounds at 550 yards and ten at 600 yards, at a third-class target.

65. When the practice range does not extend to three hundred yards no ammunition is to be demanded; the course of preliminary drills is, however, to be executed.

66. Men who conclude practice as recruits after the target practice of their company has commenced, are not to fire in the annual course until the ensuing year.

**ORDERS TO BE OBSERVED ON RIFLE RANGES.**

To prevent the possibility of accidents, the following orders are to be strictly observed on all ranges. Any alteration of these rules that may be found advisable or necessary from local circumstances, is to be submitted to the general officer commanding the division, district or station, who, should he sanction it, will communicate the same to the Adjutant-General for the information of the Commander-in-Chief.

*Orders for the Senior Officer at the Firing Point.*

1. Not to allow any practice to take place until the large red flag is hoisted on the long signal staff in a conspicuous place, and the sentries, or look-out men, are posted to warn persons against crossing the range.

2. Not to allow a man to fire until the shot of the previous man (should it strike the target) has been signalled.

3. To order the "Cease Fire" to be sounded, and the "danger" flag to be hoisted, immediately the red flag is raised from the marker's butt, or any person or animal appears in front of the firing party; and on no account to allow any firing to proceed so long as the danger flag is up at the marker's butt. When the said flag is lowered, to order the "Fire" to be sounded, and the "danger" flag at the firing point to be dropped.

4. On the ranges situated in pairs, the parties are to fire by classes, at the same distances, and not one class in front of another.

5. When the "Cease Fire" sounds, the firing at both ranges (occupied in pairs), is to be discontinued until the "danger" flag at the marker's butt is lowered and the "Fire" is again sounded.

6. To see that all persons who desire to watch the practice stand to the right and clear of the party; and on no account to allow any noise or talking among the men, whose attention is to be fixed on the practice.

7. To allow no irregularity, and to be most particular that the men keep their places in the ranks while the practice is proceeding, and to be alert to prevent accidents.

8. To see that *the red flag* is used in the marker's butt, to signal "danger."

*Orders for the Non-commissioned Officer marking in the Butt.*

1. Not to allow any practice to take place until the large red flag is hoisted on the long signal staff in a conspicuous place, and the sentries, or look-out men, are posted to warn persons against crossing the range.

2. To see that the following flags, or discs are raised to signal the position of the shots which strike the target,—  
"ricochet," "danger," and "cease-fire."

1st	-	{	White flag ;—or black disc, which is to be first shown at one side of the target before placing it in front of the shot - - -	}	Outer.
			Dark blue flag ;—or black disc - - -	}	Centre.
			Red and white flag ;—or white disc - - -	}	Bull's-eye.
2nd	-	{	Red flag waved horizontally twice to and fro in front of the target - - -	}	Ricochet.
3rd	-		Red flag - - -	}	Danger and cease firing.

3. To see that the signal flags are invariably waved when the wind blows directly up or down the range ; and, whenever a shot strikes the target to the right of the centre, that the flag denoting its value is inclined to the right, and *vice versa* ; also, when a shot strikes the target high, that the flag is raised as high as possible, and upright ; and when low, that it is only raised high enough to be easily visible above the butt ; and, when using the disc, that it is placed immediately in front of the hit on the target, putting it first to one side in the case of an outer.

4. To see that the " danger " flag is hoisted whenever it is necessary to cease firing to re-colour the target, or for any other purpose ; and to allow no man, on any account whatever to leave the marker's butt until the " cease-fire " has been sounded, or the danger flag has been raised at the firing point, *in answer* to the " danger " signal ; also to see that the red flag is kept up (and waved so as to attract attention) as long as the markers are out of the butt, or any person is in the line of range.

5. To see that the " danger " flag is lowered directly the range is clear.

6. To allow no person to enter the marker's butt, except on duty, without an order from the senior officer on the range, nor to allow any one to enter or leave the butt except by the regular path.

7. To check all talking or noise in the marker's butt.

8. To see that the " danger " flag is hoisted and shaken about immediately the look-out man, on the tower, or elsewhere, either hoists his flag, or gives notice that persons or boats are within the line of fire, and that it is kept up until the range is clear, and the flag on the tower or elsewhere is lowered.

9. When the 1st and 2nd class shots are firing, to see that all persons in the marker's butt stand as close as

possible to the interior slope, to avoid the chances of being struck by the bullets when falling.

*Orders for the Look-out Sentry at  
for No. Pair of Ranges.*

1. To look out carefully, and the instant any person appears at \_\_\_\_\_ going towards \_\_\_\_\_ or along the coast (when firing seaward) coming from \_\_\_\_\_, to hoist his red flag, and call out to the non-commissioned officers in the marker's butt, in a loud voice "danger," and to keep his flag flying until the said person has passed the \_\_\_\_\_, according to the direction in which he is proceeding. The same precaution to be observed in respect to boats passing close in shore in the line of range.

2. To give notice to all persons who may be about to pass the range that they are in danger while the firing is going on, and to signal them back.

3. To call out to the non-commissioned officers in the marker's butts "ricochet," whenever a shot strikes the ground before reaching the target.

4. To watch for the danger-flag at the firing point, and immediately it is hoisted to call out to the non-commissioned officers in the butts, "flag up."

5. In the performance of his duty (more particularly during the execution of the volley and independent, and skirmishing, practices), to keep as low as possible to avoid the risk of being hit by a ricochet shot.

## 2. JUDGING DISTANCE PRACTICE.

1. The following course of judging distance practice is to be gone through by recruits,—and by officers of companies, and drilled soldiers annually,—with a view to test the proficiency of the several companies in this essential exercise for the efficient and practical use of the rifle.

2. The correct distance in this exercise is to be ascertained by the stadiometer, the instructions for the use of which are given at page 224. In the absence of this instrument, a cord or chain of the length required for the practice, divided into parts of five yards each, with the distance of each division from the end so marked as to be distinguished only on close inspection, is to be stretched in any direction that may be found convenient. The ground to be varied as much as possible for the several practices.

3. One or more men, when judging to 300 yards only, but beyond that distance a section of not less than eight or ten file, are to be placed as objects to estimate from, and when a cord or chain is used to ascertain the correct distance, these men are to be stationed at the end, or at any other part of it that may be directed.

4. The commander is to select a division of five yards at which to halt the party or class, and caution the men to complete a division of five yards in giving their answers.

5. When using a cord or chain to ascertain the correct distance, and when the ground is sufficiently level to lay it down, two or more classes can judge distances together by the arrangement detailed in the following paragraph. By this means much time will be saved, and the practice be made more effective, by preventing the possibility of obtaining a clue to the correct distance.

6. The instructor is to send forward a party or one of the classes (say the 3rd class), with a non-commissioned officer-instructor as "points," from which the remainder of the class, as well as the other classes, are to judge their distance; the men of the party sent forward as "points" at the same time estimating their own distance from the class to which they belong. The non-commissioned officer-instructor in charge of the "points" and the commander of each class are to be furnished, by the officer-instructor on the practice ground, with a memorandum specifying the distance at which the "points" are to stand from the end



of the chain for each answer, in order that they may each determine the correct distance, which is ascertained by deducting the distance at which the "points" are stationed, from that at which the class is standing from the end of the chain. Care must be taken that the several classes are so situated as not to prevent those in the rear of them from seeing the "points."

7. When there is no stadiometer, and the ground is so irregular or hilly as to prevent a chain or cord being used, the correct distance is to be ascertained by triangulation.

8. The answers of each man are to be recorded in a register, Form D. page 278, which is to be kept by a sergeant or corporal, under the superintendence of an officer. The strictest silence is to be observed throughout the practice; the men are to be prevented from consulting together in judging their distance; and the answers are to be given in a low tone of voice, so as not to be heard by the others.

9. The commander having marched his party, or class, to the place that he intends to judge from, is to halt it about ten paces to the right of the stadiometer or cord,—face it towards the object or "points,"—and then arrange the non-commissioned officers who are to keep the registers three paces in front of the right of the several sections, to prevent the answers, when given, being heard by those in rear. These non-commissioned officers, after recording their own answers, will call each man of their respective sections to the front to give his answer in yards as to the distance that separates them from the "points," which answer is to be immediately noted in the register.

10. When the answers of every man of the section or class have been recorded, they are to be read to the men, so that any error, as regards entry, which may be discovered, may at once be corrected. When this has been done, the commander is to state aloud to the men the correct distance, which is to be noted at once at the top of

the column, and the number of points obtained by each man registered at the side of his answer and made known to him. No alteration of an answer is to be made after the correct distance has been declared.

11. In each practice the men are to be exercised at four different stations. When the party or class has exercised at one station, it is to be moved to another, in such a manner as to prevent any clue to the actual distance being gained.

12. At the conclusion of a practice, the number of points obtained by each man is to be read over to the class or party, and inserted in the column total points; the register is then to be signed by the non-commissioned officer who kept it, and countersigned by the officer who superintended the exercise, to verify its correctness. When the register is thus completed, (which is always to be done on the practice ground,) the officer-instructor is to initial the column "duplicate total points," tear it from the register, and keep it to check the entries which are to be made in the Musketry Drill and Practice Return, by the company-instructor, immediately on his return to barracks after each period.

13. The register, in the case of recruits, is to be signed by the squad instructor, and countersigned by the officer-instructor or his assistant. The column "duplicate total points" is not to be torn off.

14. No erasure is to be made in the registers; and all corrections are to be initialed by the officer superintending the practice. A neglect of this order will invalidate the entry.

15. The judging distance, like the target practice, is divided into three periods, each consisting of two practices or eight answers.

16. The 3d class is to practice as far as 300 yards, the 2d class to 600 yards, and the 1st class as far as 900 yards.

17. The value of the men's answers, by points, in the several classes, is as follows :—  

$$\sqrt{\quad}$$

3d class :	} Within 5 yards - 3 points.	
Or when judging distance between 100 and 300 yards -		} " 10 " - 2 "
		} " 15 " - 1 "
2d class :	} Within 20 yards - 2 points.	
Or when judging distance between 300 and 600 yards -		} " 30 " - 1 "
1st class :	} Within 30 yards - 2 points.	
Or when judging distance between 600 and 900 yards -		} " 40 " - 1 "

18. When the second or first class is brought to judge within the distance of an inferior class (which, in order to test the proficiency of the men, ought to be occasionally done, but not oftener than once in a practice,) the answers are to be valued as detailed in the inferior class in the preceding paragraph.

#### *First Period.*

19. In this period every man, recruit or otherwise, is to be exercised in judging distance between 100 and 300 yards.

20. At the conclusion of the period, the points obtained by each man are to be added together, and the sum entered in the column total points of the Musketry Drill and Practice Return, from which a classification is to be made, when men who have obtained fourteen points and upwards will be formed into a second class, and those who have not obtained this number will be formed into a third class.

#### *Second Period.*

21. In this period the recruits, or company, are to practice in two classes, viz., second and third.

22. At the conclusion of the period, the points obtained therein by each man being added together, and the sum entered opposite each man's name in the column "total

points" of the prescribed return, a second classification is to be made, when men of the second class who, having exercised as such, have obtained ten points and upwards, will be formed into a first class; and those of the third class who have obtained fourteen points and upwards will pass into the second class. Those who have not obtained the number of points above specified will remain in the second and third classes respectively.

*Third Period.*

23. In the third period the recruits, or company, are to be exercised in three classes, viz., first, second, and third.

24. At the conclusion of this period the points obtained by each man are to be added together, and the sum entered opposite each man's name, in the column "total points" of the respective classes, from which a final classification is to be made. The man who, in the practice of the first class, obtains the greatest number of points will be the best judge of distance of the battalion.

25. Should two or more men obtain the same number of points in the first class, a reference is to be made to their performances in the second period, and should they tie therein, then the best judge of distance will be that man who obtained the greatest number of points in the first period of practice.

*How to determine the best Judging Distance Company.*

26. The best judging distance company of a battalion will be that company which scores the highest figure, by adding together the average points obtained in the first period, and the per-centage of first-class *minus* the per-centage of men in the third class at the final classification; the performances of the officers to be included.

27. All officers of regiments and battalions are to be exercised through a course of judging distance drill, and practice annually, with their companies, and the names of

the three best judges of distance, with the number of points they obtained respectively, are to be notified in the annual musketry practice return.

28. In addition to the three periods of judging distance practice before detailed, which are to be executed concurrently with the corresponding periods of target practice when practicable, the men are to be occasionally taken into the country by companies, under their respective captains, to be exercised in judging distance, with a view to develop their powers in this branch of musketry training. They will also be exercised in this practice on marching-out days, for which purpose the halts may be prolonged if necessary. The number of times it is performed is to be notified in the monthly musketry diary. The names of the best judges of distance are to be taken down, and delivered to the adjutant on the return to barracks, and such of them as may deserve it may be permitted to be absent from afternoon parade, or receive some other indulgence.

---

## PART VI.

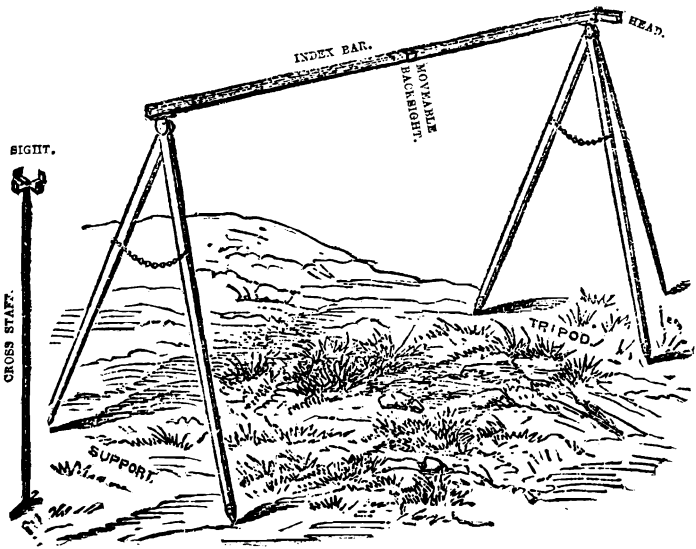
---

### INSTRUCTIONS FOR THE USE OF THE STADIOMETER.

---

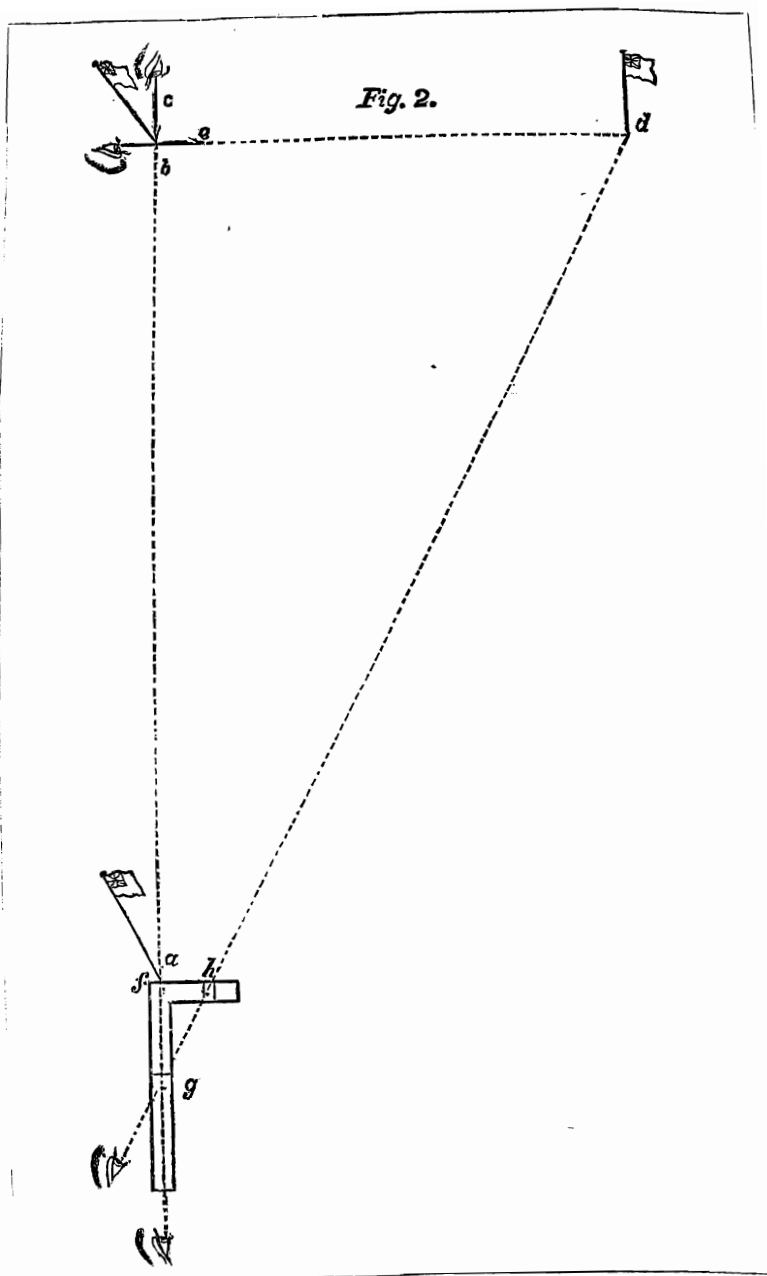
1. Set up the instrument by placing the head of the index bar on the pivot of the tripod, and the end on the support, as shown in fig 1.
2. The principle on which this instrument is constructed is the well known mathematical proposition that in similar triangles similar sides are proportional.
3. To ascertain the correct distance when *men* are employed as "points of observation," proceed as follows:—

Fig. 1

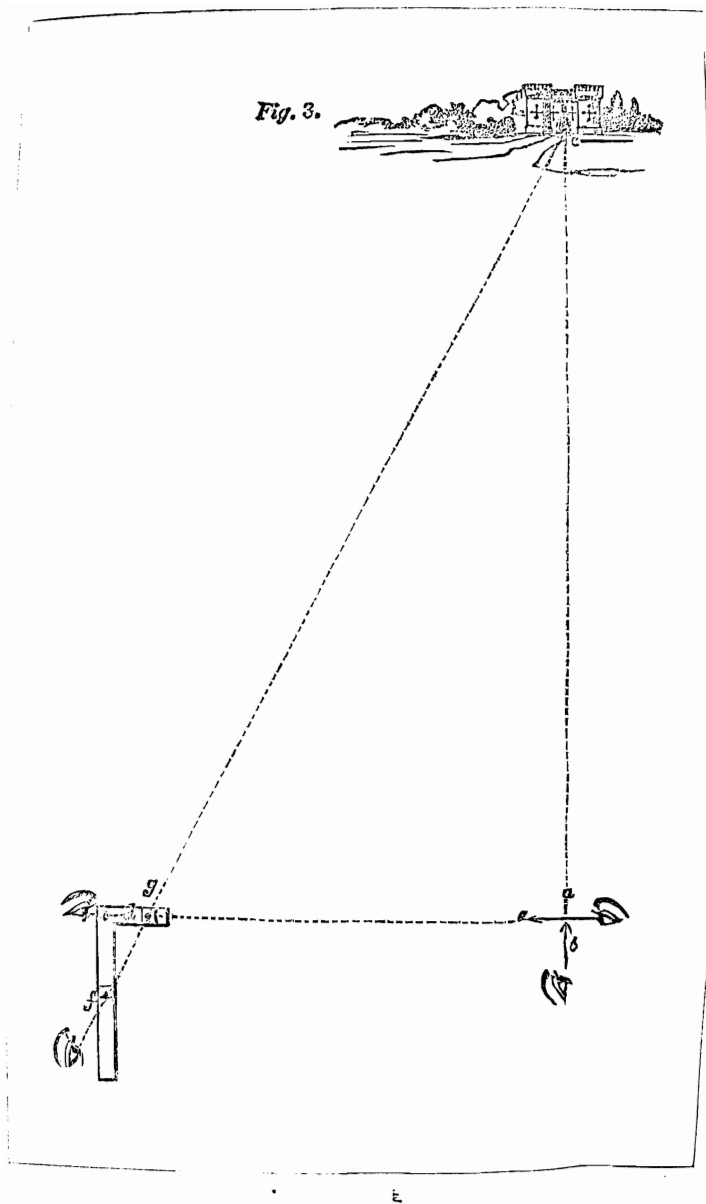


STADIOMETER (PATTERN 1863).—Scale  $\frac{1}{2}$  inch to the foot.

- 1st. The instructor will fix a flag *a* (*vide* fig. 2, p. 227) at the place at which the party or squad is to estimate the distance from the men standing as "points of observation."
- 2ndly. A non-commissioned officer (if practicable, the serjeant-instructor) will fix the cross staff *b*, fig 2 in the ground (pressing it with the foot on the arm at the lower part until it is steady and upright) in any situation and at any distance that may be determined by the instructor, and align one pair of the sights attached thereto, *c* fig. 2, on the flag *a* at the judging distance point.
- 3rdly. At 40 yards, measured by a chain, from the cross-staff, and to the left of it, align flag *d*, fig. 2, by means of the other pair of sights attached to the cross-staff *e*, and fix the said flag perpendicularly in the ground. Having thus established a right angle, give the cross-staff a few turns in the ground, and, into the hole so made, put another flag. These flags thus arranged form the base, between which the men intended for "points of observation" are to stand.
- 4thly. Place the stadiometer so that the foresight on the index bar *f*, fig. 2, will be aligned on the flags *a* and *b*, looking through the bottom of the notch of the slider or moveable back-sight *g*.
- 5thly. Push the slider *g* backward or forward without in any way moving the index bar until the foresight on the head of index bar *h*, fig 2, is aligned on the flag *d* to the right of the flag *b*.
- 6thly. Look at the index or scale on the shaft of the stadia for the distance, which will be shown by the number immediately in front of the moveable back-sight *g*, fig. 2.







## PART VI.—INSTRUCTIONS FOR USE OF STADIOMETER. 229

4. There are two fore-sights on the head of the index bar, one at two inches, the other at four inches from the fore-sight on the base: as every four inches represents 40 yards, and as the scale on the index bar is only 5 feet, it can only measure 600 yards. When the distance is greater than this, the inner fore-sight is to be used, and the distance read off in front of the moveable back-sight, doubled, to give the correct distance, as, in this case, every two inches represents 40 yards.

5. When a class is divided with a view to judge the distance from each other, the following method will be observed to signal the correct distance to the party or squad opposite to that with which the stadia is, viz. :— a flag lowered to the right, will signify *hundreds* of yards; to the left, *tens*; and to the front, *five*. Thus, for example, if the flag be lowered 4 times to the right, 5 times to the left, and once to the front, the distance signalled is 455 yards.

6. To ascertain the correct distance from an object, such as a house or tree, which is to be practised when judging distances during route marching, or at times other than during the annual course of instruction, proceed as follows :—

1st. Fix the cross-staff *a* (*vide* fig. 3, p. 228) in the ground (pressing it with the foot on the arm at the lower part until it is steady and upright), and align it by means of one pair of the sights attached thereto, *b*, on a given point *c* of the house, or other object, the distance of which from the said cross-staff is required.

2ndly. At 40 yards from the cross-staff, and to the left of it, place the stadiometer, the head of which *d* is to be aligned by means of the other pair of sights attached to the cross-staff *e*.

3rdly. Push the slider or back-sight backward or forward until the foresight *g* is aligned on the same point *c* of the house, or other object, on which the cross-staff has already been aligned.

4thly. Look at the index bar, and read off the distance.

7. The stadiometer may be used on any ground, as there is no necessity for the men judging the distance being on the same level with the object of observation.

8. The stadiometer is always to be kept in a dry place. In the event of its getting wet when in use, it is to be wiped thoroughly dry before being put away into the box provided for it. If these precautions are taken the instrument will last for many years.

## PART VII.

### PRIZES FOR GOOD SHOOTING.

1. With a view to stimulate individual exertion, and to reward the proficiency of soldiers in the use and management of the rifle musket, prizes are to be awarded according to the following extract from the Royal Warrant and Regulations, promulgated by direction of the Secretary of State for War, on the 7th May, 1869, viz. :—

<p>“ 1st Prize.—To the best shot of the  “ infantry of <i>V. &amp; M.</i> (including  “ the Royal Engineers and Colo-  “ nial Corps) who have practised  “ through the annual course of  “ musketry drill and individual  “ firing prescribed for the drilled  “ soldier - . . . . .</p>	}	<p>20<i>l.</i> and a bronze medal, — inscribed with the year in which won, and the winner's name, number, and regiment, — to be worn on the right breast.</p>
--	---	---

- “ 2d Prize.—To the *best shot of*  
 “ *every regiment, or battalion, or*  
 “ *depôt battalion of infantry, con-*  
 “ *sisting of not less than four*  
 “ *companies, all of which must*  
 “ *have practised through the*  
 “ *annual course of musketry drill*  
 “ *and individual firing as above*  
 “ *laid down* - - - } 5*l.* and a badge of  
 cross muskets and  
 crown, worked in  
 gold, to be worn  
 on the left arm.
- “ 3d Prize.—To the *best shot of*  
 “ *every company, in which 40*  
 “ *men at least have practised*  
 “ *through the annual course of*  
 “ *musketry drill and individual*  
 “ *firing as above laid down* - } 3*l.* and a badge of  
 cross muskets,  
 worked in gold,  
 to be worn on the  
 left arm.
- “ 4th Prize.—To ‘*marksmen*’ to the  
 “ *number of 10 per cent. of the*  
 “ *men practised through the*  
 “ *annual course of musketry drill*  
 “ *and individual firing as above*  
 “ *laid down, in each regiment,*  
 “ *battalion, or dépôt battalion,*  
 “ *in addition to the holders of*  
 “ *the 1st, 2d, and 3d prizes* - } 1*l.* 10*s.* and a  
 badge of cross  
 muskets, worked  
 in worsted, to be  
 worn on the left  
 arm..

“ No two of the above prizes will be held by the same  
 “ soldier. The second in order of merit will in each case  
 “ succeed to the prize vacated by the winner of a higher  
 “ prize.

“ All prize-holders must have qualified as marksmen.

“ In addition to the above prizes, an honorary distinc-  
 “ tion of a badge of cross muskets and crown, worked in  
 “ gold, will be worn on the right arm by the serjeants of  
 “ the best shooting company, (in which 40 men at least  
 “ have practised as above laid down) in every battalion of  
 “ infantry or dépôt battalion, and in the Royal Engineers,

“ consisting of not less than four companies, all of which  
 “ shall have passed through the annual course of practice,  
 “ and shall have established a good average ‘figure of  
 “ merit ;’ and those men who qualify as marksmen in the  
 “ annual course, but who may be in excess of the per-  
 “ centage to whom prizes are allowed, will be permitted  
 “ to wear the distinctive badge of ‘marksmen.’

“ The prizes will be issued as soon as the necessary  
 “ authority shall be received at the corps, and the badges  
 “ will be worn for one year, commencing from the 1st day  
 “ of the month succeeding the receipt of such authority.  
 “ When the musketry drill and practice are suspended,  
 “ the badges may continue to be worn until the next  
 “ award of prizes, after another annual course.

“ The medal given with the first prize will be the pro-  
 “ perty of the winner, and may be worn during the whole  
 “ of his service.

“ Soldiers who, by reason of imprisonment or their own  
 “ misconduct, are prevented from going through the  
 “ course with their companies, and are consequently prac-  
 “ tised as ‘casuals,’ will not be eligible to receive any  
 “ rewards for good shooting ; and any soldier who, be-  
 “ tween the date of his annual training, and that of the  
 “ receipt of the authority for the issue of the prizes, shall  
 “ desert, or be convicted of felony, or of disgraceful con-  
 “ duct, or be discharged from the service with ignominy,  
 “ will thereby forfeit any prize that may have been  
 “ awarded to him, and such prize will not be issued to  
 “ any other soldier.

“ In calculating the number of men entitled to the  
 “ fourth prize as ‘marksmen,’ additional prizes will be  
 “ given for fractions of six and upwards.

“ Prizes of the value of 1l. 5s. each (with a badge of  
 “ cross carbines worked in worsted, to be worn on the  
 “ left arm) will be granted to all regiments of cavalry, at

“ the rate (but not exceeding one per troop exercised) of  
“ one for every 10 soldiers who shall compete for them in  
“ accordance with conditions to be laid down and publish-  
“ ed by the Commander-in-Chief ;\* and if there be 100  
“ such competitors an additional sum of 1*l.* will be grant-  
“ ed to the soldier who, having obtained one of the above  
“ prizes, shall make the highest aggregate score in the  
“ first period of the annual course and the competitive  
“ practice together.’

2. The best shot of the battalion will be that soldier who, having obtained 22 points, in shooting in the first class, scores the greatest number of points in the first and second classes together,—and is also in the first class in the final classification of the judging distance practice.

3. The best shot of the company will be that soldier who, having obtained 22 points, in shooting in the first class of his company, scores the greatest number of points in the first and second classes together,—and is also in the first class at the final classification of the judging distance practice.

4. To qualify a soldier for the position of *marksman*, and the rewards attaching thereto, he must, in the yearly course of practice, have obtained at least 22 points, in shooting in the first class, and be in the first class at the final classification of the judging distance practice.

5. The order of merit to regulate the issue of the money prizes to the authorized number of “ marksmen ” will be

---

\* All men who obtain 40 points and upwards in the first period are to fire ten rounds, standing, at 400 yards at a second-class target ; the prizes being awarded to those who obtain the highest score in this practice irrespective of the troop to which they belong ; but no man is to receive a reward who is not in the first or second class in judging distance practice. **C**rosses, armed with carbines sighted to 300 yards, may compete for prizes firing ten rounds at 300 yards (instead of 400 yards) at a single target.

determined by the greatest number of points obtained in the first and second classes together. Should two or more marksmen obtain the same number of points in the first and second classes in shooting, a reference is to be made to their respective performances in the following practices, to be taken successively in the order detailed, and those men are to be selected for money prizes who are in the highest class and have obtained the greatest number of points therein ; viz. :—

1st, to the shooting in the 1st class,—if there is still a tie, then—

2nd, to the shooting in the 1st period,—or if there is still a tie—

3rd, to the judging distance in the 3rd period do.

4th, do. do. 2nd period do.

5th, do. do. 1st period.

6. Men who may undergo a course of instruction at the School of Musketry, are, if qualified, eligible for the rewards for good shooting in their respective battalions, provided they have not been exercised in the yearly course of practice before joining the said establishment, which is to be duly notified. Practice returns of men instructed at the School are to be sent to the officers commanding battalions.

7. Should a serjeant of the best shooting company be either “the best shot of the battalion,” the “best shot of his company,” or a “marksman,” he is to wear the distinguishing badge of that position in addition to the honorary distinction,—the latter he must resign when he leaves his company.

8. Although *the best shooting troop or company* can be established, and the company badge be issued accordingly, wherever a range of 600 yards can be obtained, no rewards

are to be granted to *battalions* unless they have been practised in the three periods of individual firing ; and under no circumstances is the limit of one prize for the best shot per battalion, one prize for the best shot of each company, and prizes for marksmen at the rate of ten per cent. of the number of men exercised ever to be exceeded. Should the shooting of any battalion fall below the average, the prizes will be wholly withheld.

9. In order to ensure, on the one hand, a high rate of efficiency, and, on the other, to guard against the public being called upon to pay for a low standard of merit, as well as to secure the utmost impartiality in the distribution of the rewards, the practice registers and diagrams are to be the data upon which the proficiency of the men's shooting is to be estimated. Care must be taken, therefore, that these documents are correctly kept, and always forthcoming until authority has been received to dispose of them. If any irregularity should be detected, whereby the integrity of these records may be questioned,—such as erasures,—corrections not initialed by an officer,—absence of the signature either of the marker or company officer,—or loss of documents,—the rewards will not be allowed to be charged to the public,—but the responsible company officers will be required to make good to the men any disallowances which may be occasioned through neglect, on their part, when superintending the target and judging distance practices.

10. Should irregularity be discovered in the execution of the several exercises in target and judging distance practices,—such as counting ricochets,—placing marks to aim at, to denote the allowance to be made for wind, &c.,—firing at distances shorter than those enjoined by the regulations,—or at a greater number of targets than are prescribed for the several distances,—or at larger bull's-eyes and centres than prescribed for the several classes,—



departing in any way from the rules clearly defined for conducting the platoon and skirmishing practices,—or otherwise deviating from the spirit of these regulations, by which alone a fair comparative merit can be arrived at, —all prizes will be forfeited.

11. The prizes for good shooting will be issued to marksmen in depôt battalions according to their order of merit in the battalion, irrespective of the depôt to which they belong, at the rate of ten per cent. of the number of men exercised in the annual course of practice.

12. Applications for rewards for good shooting, on the prescribed form, are to be transmitted, in triplicate, with the annual musketry practice return sent to the Inspector-General of Musketry, by whom, after due examination, they will be forwarded, with his recommendation, to the Adjutant-General to the Forces. On the receipt from the War Office of the authority for the money prizes, it is to be published with the names of the prize-holders in regimental orders.

13. The distinctions and attendant pecuniary advantages liberally granted by the Government to those who excel in shooting are considered sufficient to stimulate the soldier to attain skill in the use of his rifle; the practice, therefore, of captains or officers commanding companies giving rewards from their private funds to the best shots of their companies is prohibited. This rule does not apply to divisional, brigade, or battalion rifle contests, which may take place with the sanction of the general or officer commanding on the spot.

## PART VIII.

## RETURNS.

1. The following forms are to be made use of in the different branches of musketry instruction, and will be issued on application to the War Department. (*Vide* page 250.) They are to record the performances of all men trained with a battalion or company during the annual course, whether effective or otherwise on the dates the returns are prepared except as hereafter specified.

## FOR RECRUITS.

*Musketry Drill and Practice Return.—Form B.*

2. This return is to contain the names of young officers and recruits, including lads incapable of bearing arms, in the order they join the depôt or battalion, which is to be obtained from the orderly room at the end of each month.

3. In depôt battalions there will be a separate return for the recruits of each depôt forming the battalion.

4. This return is to be kept by the serjeant-instructor, superintended by the officer-instructor, and is to show when each recruit has concluded the preliminary drills, thus, "*concluded*,"—the points he has obtained in the several periods in shooting and judging distance,—the averages obtained by each squad or party in volley, independent, and skirmishing practices,—and the figure of merit of the recruits trained between the 1st April and

31st March. The cause which has prevented the training of every recruit, who appears not to have been exercised, is to be clearly and concisely explained in the column of remarks.

5. This return is to be closed on the 31st March in each year, excluding the performances of all effective recruits not fully trained, and of transfers to another corps or battalion partly trained in individual firing, but including all those of partly trained transfers received who have completed their training since transfer, and of men non-effective from other causes, whether fully trained or not. A return as per Form A., page 278, is to be prepared in manuscript, and transmitted immediately afterwards to the Inspector-General of Musketry. The names of the recruits not exercised, or who being effective have not completed their musketry training, are (with the performances of the latter) to be transcribed into a new return.

#### COMPANY OR TROOP RETURNS.

##### *Musketry Drill and Practice Return.—Form B.*

6. This return is to contain the name of every soldier borne on the strength of the company, without reference to where he is, or how employed,—the regimental staff serjeants,—drummers,—lads incapable of bearing arms,—and recruits in a musketry sense, only excepted,—on the date when the annual course commences.

7. The names are to be entered by squads or sections, with the non-commissioned officers at the head, leaving two lines between each squad. All men who are not available when the company commences its annual course, and all who join it afterwards, are to be entered after the last squad or section, leaving a space of two lines.

8. This return is to show the points obtained by each soldier in the several periods in shooting and judging distance,—the averages obtained by each squad or section in the volley, independent, and skirmishing practices,—and the figure of merit of the company, on the date the return is closed. In the column headed preliminary drills is to be entered against each man's name "*concluded,*" or "*excused,*" with the reason why, whenever such indulgence may be granted under the conditions laid down in the "Remarks" appended to the table at page 137. The cause which has prevented the training of any man who appears not to have been exercised, or only partially so, or who has become non-effective by death, desertion, discharge, &c., is to be clearly and concisely explained in the column of remarks. The points obtained in the mounted practice in cavalry regiments are to be entered in the column headed "*skirmishing.*"

9. When men who have not completed the three periods of individual firing are transferred to or received from another corps or battalion, their names and performances will, in the former case, be struck out of the return, and in the latter they will be inserted in the return of their new company, the date of transfer being specified in the remarks. When men who have been fully exercised in individual firing, but who have not completed their annual course, are transferred to or from another corps or battalion, they will execute the platoon and skirmishing practices with their new corps or battalion, the points obtained in volley firing being included in calculating the figure of merit of the battalion they then belong to, their performances in the 1st period, together with their classification, being included in calculating the figure of merit of the corps or battalion from which they have been transferred. This will also apply to the recruit's return.

10. The totals at the foot of the return, and in the recapitulation table, are not to be inserted in ink until the annual practice returns are to be prepared, when the information given under the respective headings is to apply to all men who have been trained in their company during the annual course, non-effectives included, excluding the performances of transfers to other corps or battalions who had not completed their individual firing when transferred, but including all the performances of transfers who had been partially exercised in individual firing with other corps or battalions.

11. All entries in the table recording the volley, independent, and skirmishing practices are to be vouched by a separate diagram, except in the case of men trained at Hythe, and casuals. The section with which exercised in volley and independent firing, and in skirmishing, the average points of the target under which their names are entered in the diagram, are to be shown under these headings against each man's name in the body of the musketry drill and practice return.

12. The captain of the company is to be held responsible that this return is correct in every particular, and that it is forthcoming whenever it may be called for, as it is the record showing the efficiency of every soldier of the company in the use of his rifle.

13. In closing this and the recruits' musketry drill and practice return, it is to be observed that, when a man has practised and has not obtained any points, a cypher is to be entered,—and the class in which he is not to practise in the second and third periods is invariably to be ruled through.

*Target Practice Register.—Form C.*

14. One of these forms is to be used for each squad or section for a period of four distances, and is to record the

period of practice,—the class,—number of targets used,—the dates on which the practices took place,—the distances fired at,—and the result of each shot fired.

15. This register is to bear the signatures of the marker, and the captain or company officer superintending the practice, who is to certify that the practices were conducted according to regulation,—that he examined the targets before and after the firing at each distance took place, noting where necessary the exception sanctioned by the memorandum at the foot of page 200,—and that the points recorded were obtained by the men opposite whose names they appear. When the period is concluded the register is to be endorsed and filled.

16. The names of the soldiers are to be entered in the order in which they appear in the musketry drill and practice return, with the succession number in the said return prefixed. The same rule is to be observed in the register for casuals.

17. The names of the men of a class of two or more squads or sections are to be entered in one register, in consecutive order, as per Musketry Drill and Practice Return, provided the number does not exceed 20. In no case are the names of a squad or section to be partly in one register and partly in another.

18. When the number of men either in the 1st, 2nd, or 3rd class of a company is 20 or under, their names are to be entered in one register.

19. The registers of casuals are to be prepared by the battalion serjeant-instructor as in the case of recruits, the names of the men of different companies being entered in the same register, and their performances are to be supplied to the captains of the companies with which they commenced the course, or with which they are serving, on Form M, at the end of the course, from which they are

to be transcribed into the musketry drill and practice return.

20. Captains of companies are responsible for the safe keeping of the practice registers,—except those of the casuals which are to be kept by the officer-instructor,—and they are not to be made away with without reference to the Inspector-General.

21. The columns “duplicate total points” attached to the register, are to be initialed by the officer-instructor, or his assistant, *on the practice-ground*, to verify their correctness, and afterwards to be torn off and retained in his possession, to check the entries made in the musketry drill and practice returns, until examined by an inspector of musketry. The officer-instructor is on no account to have in his possession the companies’ practice registers, (except those of the casuals) nor to send for them to check the entries in the musketry drill and practice returns.

*Register of Judging Distance Practice.—Form D.*

22. One of these forms is to be used for each squad or section for a period of practice, and is to record the period of practice,—the class in which exercised,—the object used to judge from,—the date of the practice,—the correct distances,—the answers given, and the points obtained by each man.

23. This return is to be signed by the non-commissioned officer who kept it, and by the captain or other company officer superintending the exercise, who is to certify that he was present during the practice,—that it was conducted in accordance with the regulations, and that the answers recorded were those given by the men.

24. The instructions respecting names, safe keeping, &c., &c., laid down for the target practice register will apply to this form also.

*Diagrams for Volley, Independent, and Skirmishing  
Practices.—Form E.*

25. The diagram is to record the results of the performances of squads or sections in the volley, independent, and skirmishing practices by a mark thus, O,—the distance fired at,—and the date of the practice.

26. The names of men exercising, with their succession numbers, are to be entered on the back of each form, except in the skirmishing practice, when they are to be entered at the foot of the diagram of the target, recording their respective performances.

27. The diagrams are, at the conclusion of the practice of each section, and when completed, to be signed by the company instructor, the non-commissioned officer of another company who witnessed the hits being taken off, and by the captain or company officer superintending the practice, who is to certify that he was present at the practice,—that it was conducted according to regulation,—and that he saw the hits recorded on to the diagram, which was closed in his presence before being taken from the practice ground.

28. Captains of companies, being responsible for the safe keeping of the diagrams, are to take possession of them on the practice ground when completed, and when the officer-instructor has torn off the memorandum of hits on the several targets, &c., which he is to verify by his initials before doing so. This memorandum the officer-instructor will use to check the entries made in the musketry drill and practice return.

29. The diagrams of squads of casuals composed of men of different companies are to be kept by the officer-instructor, who is to supply the captains of the companies to which the men belong with a memorandum of the average points they are entitled to: these diagrams are to be numbered consecutively 1st, 2nd, or 3rd squads of casuals,



and headed with the companies and depôts of the men composing the squad, which number is to be entered in the first column of the table, recording the result of the volley, independent, and skirmishing practices.

30. The foregoing documents are to be produced, for the examination of the inspector of musketry, at his periodical visits, the captain of the company, with the company-instructor, being present; and if they have not been examined before the company proceeds on detachment after executing the annual course, they will be transmitted to the inspector of musketry for examination when applied for. Any carelessness or irregularity observed in keeping them is to be brought to the notice of the commanding officer.

#### BATTALION RETURNS.

##### *Monthly Musketry Diary.—Form F.*

31. This return is to be prepared in duplicate by the serjeant-instructor, superintended by the officer-instructor. One copy is to be transmitted to the inspector of musketry, on or before the fourth day of every month, by the officer commanding every corps, battalion, or detachment armed with the rifle, whether the instruction is proceeding or not; the other is to be inserted in the regimental return book. Companies of Royal Engineers when not engaged in the annual course are not required to render this return. Regiments or detachments in commands where there is no inspector of musketry, are to transmit one copy of this return to the Inspector-General of Musketry. Those at the Mauritius, St. Helena, and Bermuda are to send one copy to the Inspector-General, and one copy to the inspector of musketry of the district of which these stations form a part.

32. This return is to show the company and number of men employed each day at drill and practice,—the cause of suspension of instruction when such is the case,—the dates when extra position drill and judging distance prac-

tice have been performed,—the stations of the several companies and whether trained or not,—the results of the practice of the companies, and of the squads of recruits trained during the month separately; the number of drilled soldiers and recruits, separately, fully exercised with the battalion and transferred from other corps,—the number under instruction and the number not exercised wholly or in part, with the number of each exercised with the battalion since the commencement of the annual course to the last day of the month; the figure of merit of the drilled soldiers and recruits trained with the battalion, non-effectives included,—and the number of marksmen, and the place, extent, and distance from barracks of the practice range. Recruits in a musketry sense are those men who had not concluded the prescribed musketry training for recruits on the date when their company commenced the annual course of practice, and all men who join the battalion as recruits after that date. This does not apply to men who, having served in the army for 10 years, may have taken their discharge and re-enlisted within 12 months.

33. When the musketry diary is not signed by the gazetted officer-instructor, the cause of the omission is to be explained; and when a serjeant, who is not in possession of a certificate signed by the Inspector-General, is acting as serjeant-instructor, it is to be stated whether or not he has been trained at the School of Musketry.

*Annual Musketry Practice Return.—Form G.*

34. This return is to be prepared in duplicate by the serjeant instructor, superintended by the officer-instructor, from the companies' "musketry drill and practice returns," and is to refer to all men who have been exercised in the battalion during the annual course, except as hereafter specified. On the first page are to be shown the dates on

which the course commenced, and terminated,—the rifle with which the target practice was conducted,—the stations at which quartered during the period for executing the course,—the number of men by companies (non-effectives included), exercised during the year, exclusive of transfers to other corps or battalions who had not completed their individual firing when transferred, but including transfers received from other corps or battalions under similar circumstances, with the result of their performances by companies in the several classes and periods in shooting,—the number of men in each class at the final classification, with the number of non-exercised men,—the cause of difference in the numbers exercised in the several periods, &c.,—the figure of merit of the several companies and of the battalion,—the result of the independent firing executed in the presence of the inspecting officer,—the best shooting company,—the name of the best shot among the non-commissioned officers and privates of the battalion,—and the effective strength of the battalion, exclusive of recruits. On the second and third pages are to be shown the names of all men effectives and non-effectives (first, those who qualified with the corps and battalion and then transfers received), who have obtained twenty-two points and upwards, firing in the first class, specifying the number of points obtained in each period of target and judging distance practice :—the best shots of the battalion and of each company are likewise to be stated, also the causes of ineligibility of any man for the reward of marksman. Against the names of non-effectives are to be stated the date and cause of becoming so, and, in the case of transfers, the corps or battalion to or from which transferred. The names of effectives and non-effectives who qualified with the corps or battalion are to be entered in order of merit, according to the points obtained in the forty rounds fired in the first and second classes, those of transfers

received, after an interval of a few lines, according to seniority of corps. At the foot of these pages a certificate is to be supplied, signed by the commanding officer, and inspector of musketry if available,—if not available by the officer-instructor,—to the effect that the entries against the men's names agree with those in the registers; also that the entries in the companies' Musketry Drill and Practice Returns agree with those in the registers and diagrams. On the fourth page are to be shown the per-centage of first-class men in judging distance practice at the final classification,—the number of men of each company exercised in the several periods of the judging distance practice, with the points obtained,—the number in each class at the final classification, with the number of non-exercised men,—the names of the three best judges of distances among the officers, with the points they obtained,—the name of the best judge of distance among the non-commissioned officers and privates, with the points obtained in each period,—the number of non-exercised men, under separate headings, by companies, with their classification when last practised,—and the number of men excused from preliminary drills by order of the commanding officer, and their classification when last trained.

35. One copy of the annual musketry practice return is to be given to the general officer making the half-yearly inspection, and the other is to be transmitted, through the inspector of musketry (where there is one), to the Inspector-General, as soon as the inspection is made, or in the case of battalions serving in the United Kingdom, North America, Australia, and the Cape of Good Hope, not later than the 14th November, and those serving elsewhere not later than the 15th May. The cavalry serving in the United Kingdom to transmit this return to the Inspector-General of Musketry not later than the 15th December.

36. The annual musketry practice return is to be rendered by every corps and battalion armed with the rifle carbine or musket, whether it has completed the prescribed yearly course of training or not. In all cases in which the course has only been partly executed, or has been omitted altogether, a statement fully explaining the causes that have delayed or prevented the instruction is to accompany the return.

37. The commanding officer will forward with the annual musketry practice return, sent to the Inspector-General, a certificate to the effect that the field officers have visited the drill and practice of the men frequently during the progress of the annual course,—that the company officers were present with their companies during the whole time their companies were engaged in executing the annual course,—and that all the orders on the subject have been observed. When this certificate cannot be supplied the cause is to be fully explained.

*Application for Rewards for Good Shooting.*

38. The annual musketry practice return sent to the Inspector-General is to be accompanied by the application for rewards for good shooting in triplicate, in which are to be entered the names of the effective and non-effective men shown on pages 2 and 3 of the first-mentioned return, and in the same order. No entries are to be made in the columns, &c., which are required to be filled in by the Inspector-General.

*Musketry Transfer Return.—Form M.*

39. As the musketry returns will show the performances of all men trained with a corps or battalion or company, or at the School of Musketry during the annual course,—whether effective or otherwise, on the dates the returns are prepared,—when men are transferred from one corps or

battalion to another, their performances are not to be sent with them unless they have not completed their individual firing or are marksmen. In these cases Form M. is to be made out and forwarded to the battalion to which they are transferred, in order that in the former case they may receive credit in the practice return of their new company for the points they have severally obtained, and that their instruction may be resumed ; and in the latter that their performances may be inserted in the list of marksmen in the annual return. In other cases, it will be sufficient to notify to the commanding officer the extent to which the men transferred have been exercised, and their classification in the target and judging distance practices. When men are transferred from one company to another in the same corps or battalion, they are, if possible, to continue their practice with, and their performances are in all cases to be included in the drill and practice return of the company with which they commenced.

*District Musketry Report.—Form K.*

40. To be transmitted by inspectors of musketry to the Inspector-General on or before the 10th of each month, or if abroad, by the first mail after that date. Inspectors of musketry in Madras and Bombay will also send a copy of their returns and reports to the Deputy Adjutant-General of their respective Presidencies, for the information of the General Commanding ; and those in Bengal will likewise send a copy of their returns and reports to the Chief Inspector of Musketry, who is to prepare a report quarterly for the information of the Commander-in-Chief there, and transmit a copy thereof to the Inspector-General of Musketry. Should the annual course be suspended by reason of the troops being employed on field service, or for any other cause, this return is not to be discontinued, but is to be accompanied by the necessary explanation, to enable the

Inspector-General to complete his quarterly and annual reports for the Commander-in-Chief.

41. The following number of Musketry Forms are considered ample for the rifle training of a battalion annually: commanding officers will be guided accordingly in making requisition for the said forms.

For each battalion, or depôt of a depôt battalion.	}	2 musketry drill and practice returns for recruits. ( <i>Form B.</i> )
		1 musketry drill and practice return. ( <i>Form B.</i> )
For a company of 100 men, or for every 100 recruits.	}	40 target practice registers. ( <i>Form C.</i> )
		40 judging distance practice registers. ( <i>Form D.</i> )
		30 diagrams. ( <i>Form E.</i> )
		30 diaries. ( <i>Form F.</i> )
For each battalion.	}	3 annual musketry practice returns. ( <i>Form G.</i> )
		4 applications for rewards for good shooting.
		30 musketry transfer returns. ( <i>Form M.</i> )

N.B.—All returns and other communications sent to the School of Musketry and to District Inspectors are to be prepaid.

## PART IX.

## THE SELECTION, INSPECTION, AND LAYING-DOWN OF RIFLE RANGES.

1. Too much pains cannot be bestowed by officers in the survey of ground proposed for rifle ranges, in order to protect the public from danger, to facilitate the acquisition of sites for the purpose, and to prevent unnecessary expense. While it is impossible to lay down precise rules for every feature of country, the following instructions will be found sufficient to guide under ordinary circumstances.

2. No ground is to be selected for rifle practice which does not afford space for a range of at least 300 yards.

3. In selecting sites for ranges, it is most important that the ground behind the targets should be thoroughly commanded from certain points sufficiently clear of the line of fire to ensure safety to the look-out men, in order that the firing may be easily stopped when necessary: hence it is manifest that a range down hill is generally to be preferred, as being more easily commanded, to one up hill. See figs. 1 and 2, page 253.

4. Ranges are to be established by pairs, with an interval of not less than 10 yards between each range, and with a margin, for a single pair, of at least 40 yards at the sides; the minimum breadth of ground for a pair of ranges should be 90 yards; vide fig. 3, page 254.

5. When two or more pairs of ranges are to be established on the same ground, the targets are to be placed in the same line, with a space of 90 yards between the centre of one pair and that of another, and 40 yards at



the sides of the outer ranges (vide fig. 4, page 254), in order that the men on each pair of ranges may fire independently.

6. When the number to be exercised in rifle practice is large, and the breadth of ground available for the purpose limited, three or four ranges may be established with an interval of 10 yards between each, to be worked or used as if a pair, with a margin at the sides of the outer ranges of at least 40 yards ; vide fig. 5, page 255.

7. The breadth of ground in rear of the targets at each side of the outer ranges should gradually increase from 40 to 80 yards, when the ranges are parallel ; but when they converge towards the targets, the breadth required as allowance for the divergence of shots must vary according to the degree to which the ranges are made to converge (fig. 6, p. 255). It must be borne in mind that the distances at the targets, between ranges in pairs and between pairs of ranges, must never be less than 10 yards in the former and 80 yards in the latter case, whether they are laid out parallel to each other, or converge towards the targets.

8. The space behind the targets, on level ground, should be about 1,500 yards. A less distance may, however, answer if a steep hill rises in rear of the targets. Before steps are taken to procure ground for ranges, it is essential to secure the right to fire over the land behind the targets to the extent required, should it not be desirable to purchase it.

9. The height of the butt against which the targets are to rest must differ according to the nature of the back ground. If the range be on a plain, then the butt should be from 45 to 50 feet high, provided the distance behind the target is less than 1,500 yards. Under ordinary circumstances the height of the butt need not be more than 20 feet.

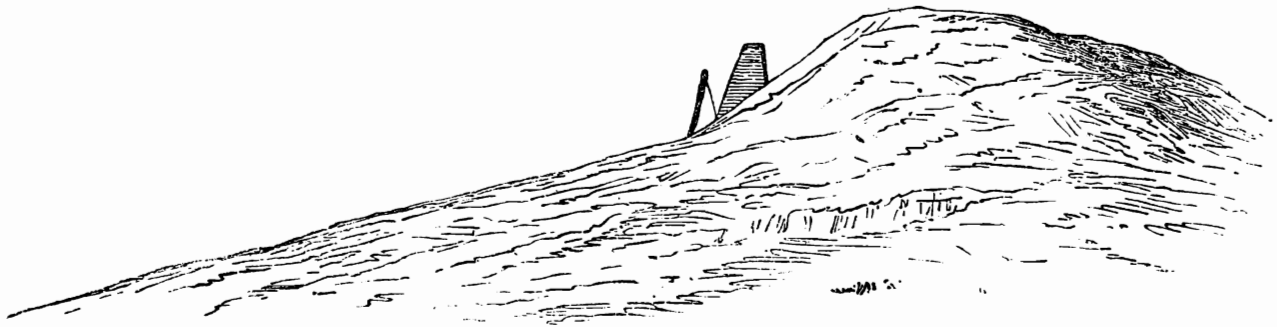


Fig. 1.—RANGE UP-HILL.

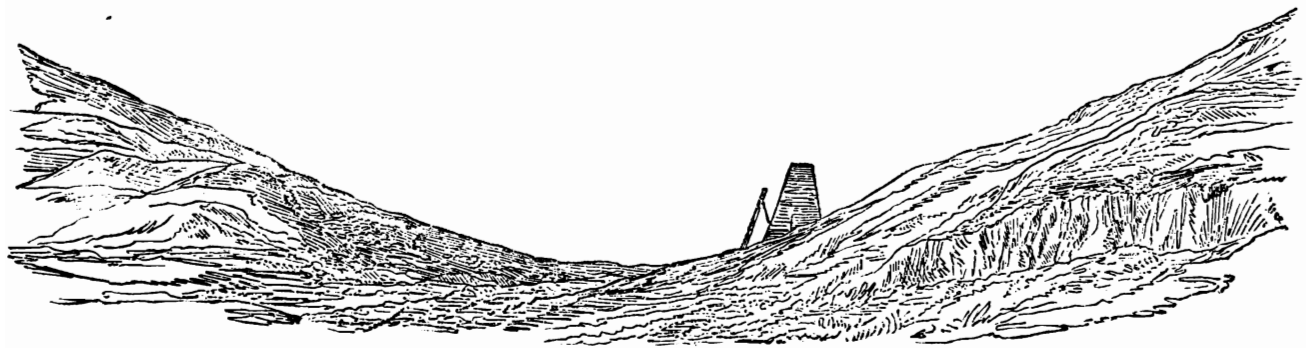


Fig. 2.—RANGE DOWN-HILL.

MUSKETRY INSTRUCTION.

Fig. 3.

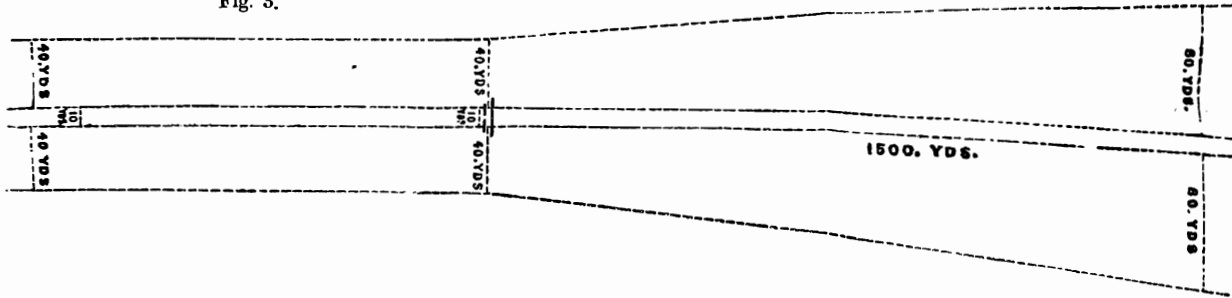
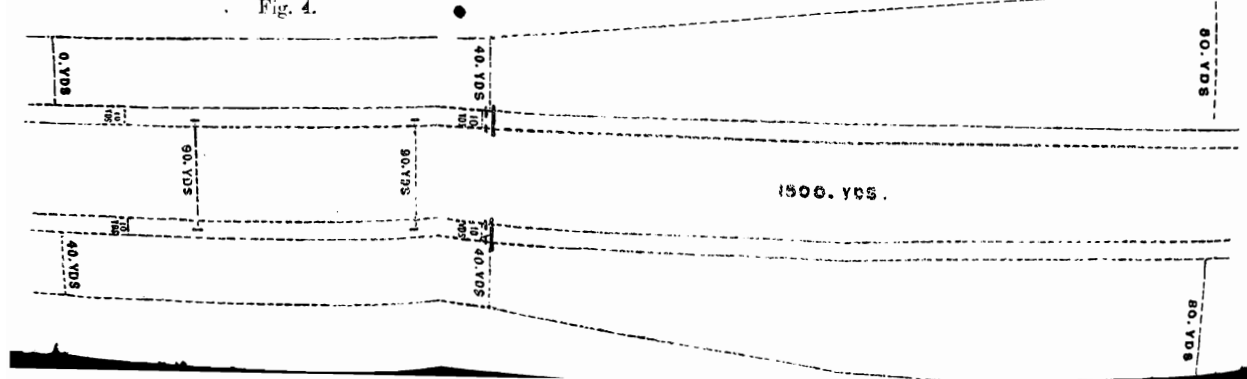


Fig. 4.



## PART IX.—SELECTION, ETC., OF RIFLE RANGES.

255

Fig. 5.

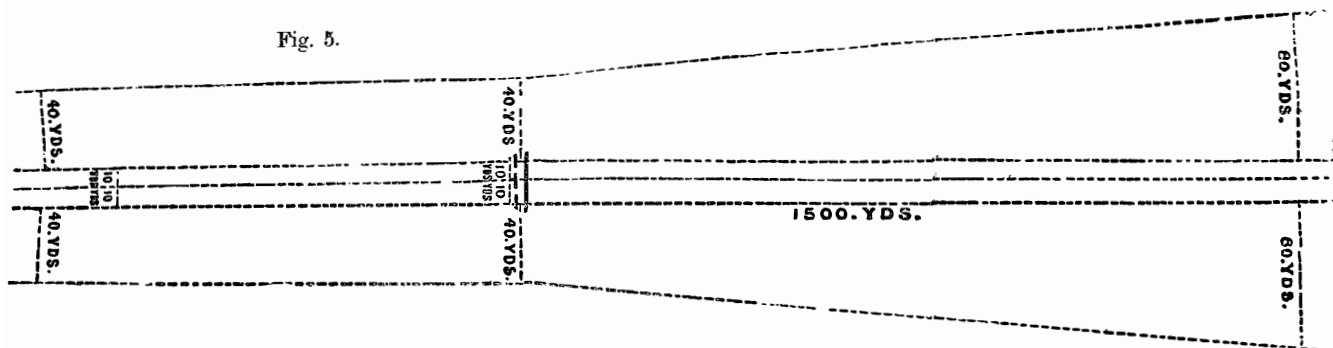
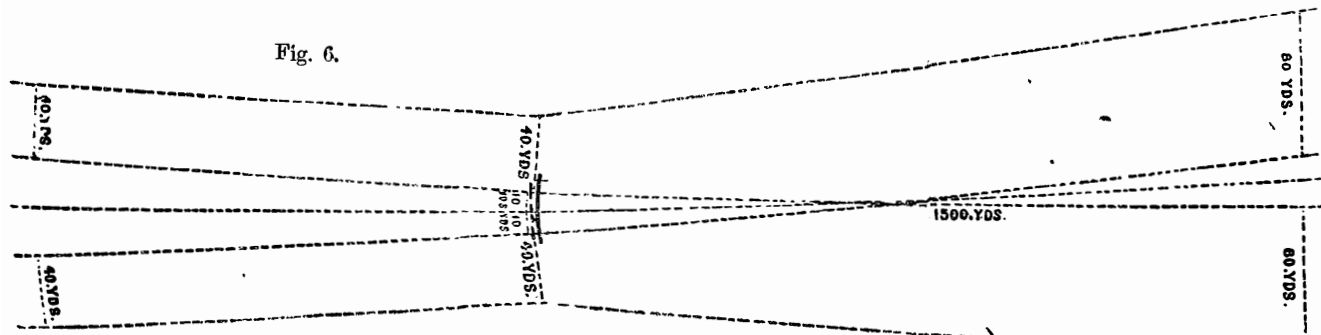
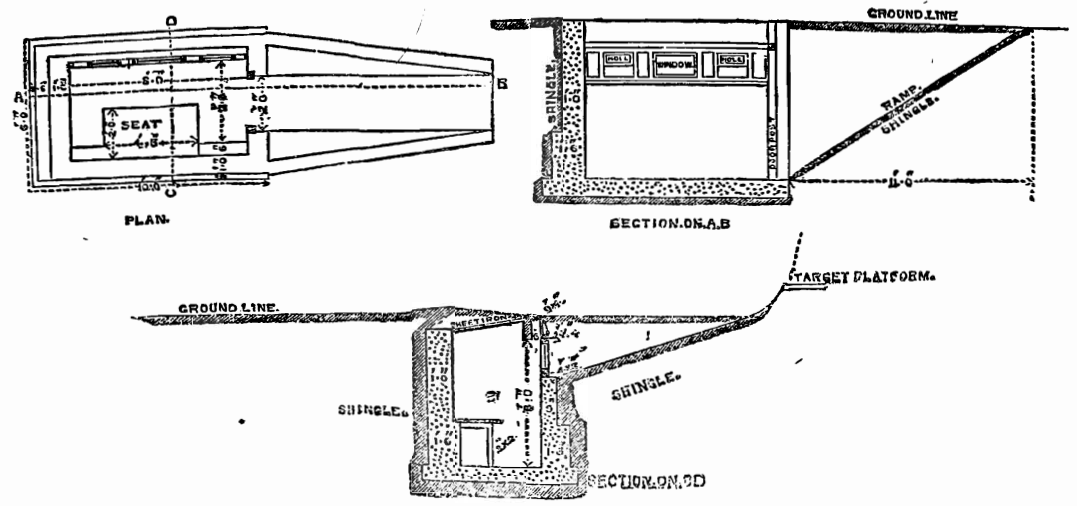


Fig. 6.



MUSKETRY INSTRUCTION.

MARKER'S BUTT.—Fig. 7.



and when firing seaward, a butt of 12 feet in height will be sufficient.

10. On some ground there are found natural butts for the targets to rest against. To be of use in stopping stray bullets, and thereby ensure the safety of the public, the hill should be at an angle of  $45^{\circ}$  at least ; if at a smaller angle than this it would, instead of acting as a stop, increase the chance of ricochet, and therefore be unsafe.

11. The length of the butt for a pair of ranges should not be less than 45 feet measured along the top.

12. Platforms of stone or iron, 16 ft.  $\times$  9 in., are always to be laid down in front of the butts to rest the targets upon, and to ensure their being at right angles to the line of range.

13. Every range is to be carefully and accurately measured by an officer of the engineer department, and the distances defined at intervals of 50 yards, commencing at 100 yards from the target, and continuing to 900 yards, or to the extent of the ground if under that distance.

14. In all cases where the nature of the ground admits of it, a trench is to be dug for the markers parallel with, and 10 feet in front of, the target-platform, of the dimensions given in fig. 7, page 256, with a seat so fixed that the marker may easily see, when sitting, the entire face of the target through the window of the trench. No ricochet butt is required on a range when a marker's butt of this pattern is constructed, as hits from ricochet shots can, as a general rule, be distinguished from fair hits by the marker being placed close to, and in front of the target. On every practice range when this pattern marker's butt is not constructed, a small earthwork butt, capable of holding two men to signal ricochets that may hit the target, is to be made about 80 yards in rear of the marker's butt.

15. With this pattern of marker's butt, discs are to be used instead of flags, to denote the position of the hits on the target, the poles of which are to be flattened on each side, so as to rest evenly against the small beam of the trench, and to be marked off by a broad black line into three parts of two feet each on both sides, commencing from the centre of the disc, which is to be let into a slit at the top of the pole, and fastened thereto by screws.

16. When the ground is such as to render it impossible, except at considerable expense, to construct a marker's butt, iron mantlets or screens will be supplied on application to the local officer of the Control Department. The marker's mantlets are to be placed 15 yards to the front, and on one side of the target-platform, and those for signalling ricochets that may hit the target are to be 80 yards in rear of that used for the markers.

17. All work in the formation of practice ranges, &c., such as the throwing up of butts for the targets to rest against, and levelling irregularities in the ground, is to be executed by fatigue labour of the troops, whenever the soil is such that it can be turned and moved with the ordinary entrenching tools furnished by the engineer department.

18. The butts, ranges, &c., are also to be maintained and kept in repair by fatigue parties ; and regiments and battalions on quitting a station are to leave the same in a complete condition. All damages arising from carelessness and neglect are chargeable against the troops.

---

## PART X.

## EXPERIMENTS WITH SMALL ARMS.

1. The quality of arms, projectiles, and gunpowder is now represented by a figure showing the degree of concentration of a certain number of rounds fired, which is called by any of the following terms "mean deviation," "mean absolute deviation," or "mean radial deviation."

2. To determine the "mean deviation," the following rules are to be observed :—

1st. Measure the distance of the centre of each hit from the left of the target ;—this is called the *horizontal measurement*.

2nd. Measure the distance of the centre of each hit from the bottom of the target ;—this is called the *vertical measurement*.

3rd. Add together the horizontal and vertical measurements separately, and divide each sum by the number of HITS ;—the results are called the *mean horizontal* and *mean vertical measurements*, which furnish the "*point of mean impact*."

4th Having marked the point of mean impact on the diagram (which is merely the intersection of the lines indicating the mean horizontal and mean vertical measurements), measure the distance of the centre of each shot from this point ;—this gives the *absolute deviation* : and for all misses allow as the "absolute deviation" half the diagonal of the target.



5th. Add together the "absolute deviations," and divide the sum by the number of ROUNDS fired;—the quotient taken to two places of decimals will be the "mean deviation."

3. The distance from the "point of mean impact" to the point aimed at denotes the error due to wind, defective sighting, &c.

4. In conducting experiments, or in testing the accuracy of fire of rifles supposed to be defective, the following course should invariably be observed:—

1st. The arms are to be previously examined and cleaned by an armourer serjeant, if available; if not, by some careful soldier.

2nd. One of the best and steadiest shots in a battalion is to be selected to fire the arms for experiment, or under examination

3rd. The charges of powder are to be carefully weighed, and the ammunition properly examined.

4th. The firing is to be from the shoulder, with the aid of a table or other such rest.

5th. The firing is to take place at 500 yards, when trying the accuracy of rifles supposed to be defective, at which distance "a mean deviation of over 3 feet is to be considered a sufficient inaccuracy to condemn a rifle." When the trial is to determine the relative value of two or more rifles, projectiles, or descriptions of powder, then the shooting should take place at least at three distances.

6th. The size of the target is to be 6 ft.  $\times$  8 ft. (1st class) if shooting at and under 600 yards.

7th. A few shots are to be fired as "trial shots," to determine the correct elevation and the position for the bull's-eye which should be so placed for aiming as to ensure all the shots, or as many as possible, being on the target.



## DIAGRAM OF THE PRACTICE.

Date, Aldershot, 1st July 1870.

Thermometer, 82½. Barometer, 30.37. Atmosphere. Clear.

Fired by Corporal T. Nun, a marksman.

Distance, 500 yards.

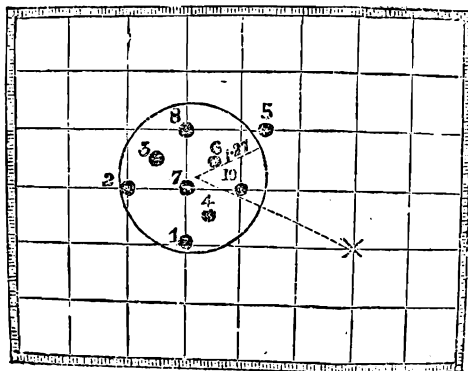
No. of shots, 10.

Object of practice. To test the rifle.

Description of arm. Snider Enfield  
rifle, .577 bore.

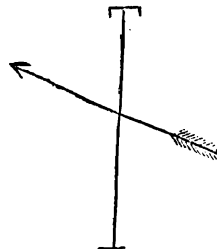
Charge, weight of, 2½ drams.

Bullet, do. 480 grains.



Each of the above squares represents a foot.

Wind. Strong.

General } Fouling mo'st.  
Remarks }

No. of Shot.	Measured from bottom and left of target.		Absolute Deviation, Measured from point of Mean Impact.	REMARKS.
	Horizontal Measurement.	Vertical Measurement.		
1	3.00	2.00	1.20	
2	2.00	3.00	1.20	
3	2.50	3.50	0.80	
4	3.50	2.50	0.72	
5	4.40	4.00	1.40	
6	3.50	3.50	0.50	
7	3.00	3.00	0.27	
8	3.00	4.00	0.86	
9	—	—	5.00	Miss.
10	4.00	3.00	0.79	
Total	29.00	28.50	12.74	
Mean	3.22	3.16	1.27	
Mark aimed at	6.00	2.00	3.01	

N.B.--X point aimed at.

MATTHEW NIXON,

Captain 98th Foot, Officer conducting Experiments.

- 8th. Each diagram is to record the result of the shooting of not less than 10, or more than 20 shots, aim being taken for each shot at the bull's-eye fixed upon by the trial shots.
  - 9th. Great care is to be taken in transferring the hits from the target to the diagram in order that they may be shown in their correct positions. All the shots fired for a diagram are to be numbered consecutively from 1, not including the trial shots; the hits on the diagram are to be denoted by their respective numbers, and the shots which miss the target shown as such opposite their number in the table of calculation.
  - 10th. In the diagram are to be recorded the name of the firer, the distance fired at, the number of rounds fired, the object of the trial, the description of arm, projectile, or powder under trial, the weight of charge, the weight of bullet, the strength and direction of the wind, the state of the thermometer and barometer—if these instruments are available—and the state of the loading as affected by fouling; with any other information which may be considered desirable to elucidate the diagram.
-

## PART XI.

---

**INSTRUCTIONS FOR INSPECTORS OF MUSKETRY, OR OTHER OFFICERS CHARGED WITH THE SUPERVISION OF THE MUSKETRY TRAINING OF THE TROOPS, AT HOME AND ABROAD.**

---

1. Inspectors, or officers charged with the supervision of the musketry instruction, are to be subject to, and in communication with, the Inspector-General of Musketry in all matters appertaining to their peculiar duties.

2. They are responsible that the authorized system is rigidly adhered to in all its details, and they are to make every arrangement for the efficient carrying out of the same in the several corps within the circuit of their supervision.

3. They are to be well acquainted with the facilities afforded at the several military posts in their districts or stations for conducting the instruction.

4. Any want of ranges, or deficiency of musketry articles, is to be immediately brought by them to the notice of the general officer commanding, in order that the necessary steps may be taken to procure them.

5. When quartered where several battalions or dépôts are assembled, either in camp or garrison, the inspectors are to visit the men of the battalions under instruction, both at drill and practice, *daily*, to see the manner in which these exercises are executed; and they are to examine, at least once a month, the musketry drill and practice returns, to ascertain that the entries therein agree with the registers

and diagrams, and that the "duplicate total points" are forthcoming.

6. The troops stationed within a reasonable distance of the place where they are quartered are to be visited once a month, on which occasions they will see the men both at drill and practice, and examine the returns to ascertain their correctness.

7 The troops quartered at long distances from the station where the inspector resides are to be visited once in every three months.

8. Inspectors are never to leave their posts without authority from the general officer commanding, to whom they are to afford every information on the subject of their special duties, and to render every assistance in giving effect to his orders. They are to signify to him their desire to make their prescribed visits to out-stations, and receive his orders to do so.

9. Inspectors of musketry are to apply to the general officer under whom they are immediately serving for leave of absence, which is not to be granted during the period the annual course of training is going on, except under peculiar or pressing circumstances. Inspectors are to notify to the Inspector-General the period for which they have obtained leave,—their address while absent,—and the officers named to act for them,—who must be in possession of a first-class extra certificate, (when such are available,) and not under the rank of a captain.

10. Should Inspectors, in their periodical visits, discover any infraction of the orders on the subject of musketry training, or anything which may impede or retard the annual course, they are to report the circumstance at once to the general officer commanding, and notify having done so in their next monthly report to the Inspector-General.

11. Inspectors of musketry are, when practicable, to accompany the general officers of divisions, stations, or commands in their half-yearly inspections, and if required are to examine the officers on the theory and practice of musketry, and on the system of conducting the musketry instruction of recruits and drilled soldiers of their respective companies in accordance with para. 26, page 145.

12. They are also to bring to the notice of officers commanding battalions any want of care in keeping the company musketry returns, or neglect on the part of the officer or serjeant instructors, notifying having done so in their next monthly report.

13. Inspectors in their visits are to ascertain by a few well-directed questions the proficiency of the recruits in the theory of musketry, and the knowledge they possess of the method of keeping their rifles in an efficient condition.

14. Inspectors abroad are to avail themselves of any public conveyance which may offer to make their visits to battalions detached from the station where they are quartered.

15. They are, by the 10th of each month, to transmit to the general officer commanding the station, district, or division, and to the Inspector-General of Musketry, a return and report according to the prescribed Form K, to show the progress of the musketry training of the troops in the circuit of their supervision. Inspectors in Bengal will also forward a return and report to the Chief Inspector of Musketry at the Army Head Quarters, East Indies, and those in Bombay and Madras, to the General commanding the troops in those presidencies, through the Deputy Adjutant-General. When the circuit to which an inspector is appointed embraces more than one district, division, or

station, the return rendered to the respective general officers is only to refer to the troops under their command. Those rendered to the Inspector-General, the General commanding the troops in the Bombay and Madras Presidencies, and to the Chief Inspector at the Army Head Quarters, East Indies, are to contain every regiment and *dépôt* in the circuit of supervision.

16. Inspectors will be supplied monthly by each battalion and corps in the circuit of their supervision, with a musketry diary, from which they are to prepare their monthly return. These diaries they are to retain in their offices until a year has elapsed from the date of the publication of the Annual Musketry Report to which they refer. When destroyed the circumstance is to be notified to the Inspector-General.

17. Inspectors are to notify to the Inspector-General the removal of regiments from their districts, mentioning the date of departure,—the station to which they have proceeded,—and the extent to which exercised.

18. Inspectors, and other officers charged with the supervision of the musketry training of the troops, will draw up their monthly or quarterly reports under separate general headings in the following manner. The paragraphs to be numbered consecutively, and the headings to be stated in the margin of the report :—

- 1st. *Corps visited during the Month.*—In a form as follows, show the corps visited during the month, with the stations at which quartered, the number of men of each corps found under instruction in preliminary drills, and at practice, the merit of the shooting witnessed, with the distance, and the merit of the judging-distance practice, with the class to which it refers.



## MUSKETRY INSTRUCTION.

Date of Visit.	Corps visited.	Corps stationed at	No. of Men at P. D.	Target Practice.			Judging Distance Practice.		
				No. of Men.	Distance of Practice.	Average.	No. of Men.	Class.	Average.

When no corps has been visited, the cause of the omission is to be stated.

2nd. *Non-commissioned Officers employed as Musketry Drills.*—Notice the proficiency or otherwise, of the company instructors, and non-commissioned officers generally as *musketry drills*, mentioning, in cases

of inefficiency, the corps concerned, and the branches of instruction in which they are deficient.

- 3rd. *Preliminary Drills.*—State if the instruction in the several subjects embraced under this head is carefully conducted; and if, from the position of the men, and the answers given in the examination on the theoretical principles, and cleaning arms instructions (the questions being invariably put by the inspector and not by the instructor), attention has been paid to the preliminary drills, and also whether the examination and instruction of the trained soldiers referred to in para. 24, page 144, and para. 28, page 175, is attended to. When such is not the case, name the corps and detail the particulars. It is to be borne in mind that the results obtained in practice afford unerring evidence of the goodness or otherwise of the position acquired by the men when at drill, &c.
- 4th. *Target and Judging Distance Practice.*—Notice irregularities that have been discovered in the execution of these exercises, mentioning in each case the corps, company, and name of company officer attending the practice. No departure from the Musketry Regulations, however trivial, is to be allowed,—one system should prevail everywhere. Inspectors are to satisfy themselves that the targets are coloured according to the orders on the subject,—that the independent and volley firings take place as directed in the “Rifle Exercises,” and as herein detailed,—that the skirmishing practice is executed in advancing from 400 to 200 yards, and retiring from 200 to 400 yards, until the ammunition allowed for the practice is expended,—and that the pack is worn invariably during the volley and independent firings. All irregularities are to be noticed.

specifying the corps, company, and company officer concerned.

5th. *Companies' and Recruits' Musketry Drill and Practice Returns.*—Notice in general terms if these returns in the several corps and battalions are neatly kept, and if the entries therein agree with the registers and diagrams ; and mention the battalion and company, with the name of the captain or officer commanding company, in exceptional instances. In cases in which the total number of points recorded against the man's name in the Practice Return is greater than in the registers, and the man has in consequence practised in a higher class than he should have done, the corps, company, regimental number, rank, and name of the soldier is to be mentioned, with the particulars of the mistake, and whether a "marksman" or not.

6th. *Practice Registers and Diagrams.*—Notice whether these records are correctly kept, and complete in every particular. When it is discovered that corrections are not initialed by the *company officer* attending the practice, in the case of duty men, mention the corps, company officer, and company concerned, and in the case of marksmen, the regimental number, rank, and name, with the distance at which firing, or the practice and period of judging distance, and the number of points obtained in the period, with and without the value of hits altered and not initialed. Copies of the remarks on the company practice returns sent to commanding officers are not to accompany the report ; they are to be retained by the inspector, so that they may be forthcoming should they be required. A synopsis of the said remarks, so far as relates to irregularities

affecting the claims to rewards for good shooting, arranged by companies, is to accompany the annual practice return, and, on the removal of battalions, is invariably to be forwarded to the inspector of their new district. Inspectors are carefully to examine the annual practice returns and when correct transmit them to the Inspector-General, notifying all errors they may have discovered therein.

- 7th. *Ranges and Musketry Articles.*—The condition of the ranges, and any alteration in their number or direction, are invariably to be noticed. Under this head, reference is also to be made to the condition and economical use of articles sanctioned for musketry training, which are not to exceed, without authority, the number sanctioned by the regulations. Inspectors of musketry are responsible, so far as lies in their power, that every arrangement is made to prevent the suspension of rifle instruction on account of the want of ranges, or the deficiency of musketry articles.
- 8th. *Arms and Ammunition.*—Notice the state of the arms, whether clean, serviceable, properly browned, and if they possess the regulation “pull off” of trigger, viz., between 6 and 7 lbs. Too much attention cannot be paid to this subject, in order that by timely interference the arms may be kept ready for service. Also notice the condition of the ammunition issued for practice. Whenever trials of arms or ammunition are made, in consequence of reports of their being defective, the “mean radial deviation” of each trial is to be notified, specifying the number of rounds from which calculated, number of hits and misses, the size of targets used, and the allowance made as the “absolute deviation” for misses,

with remarks as to fouling, and other points of importance, in a form as follows :—

Dis- tance.	Size of Target.	No. of Rounds Fired.	No. of		Mean Devia- tion.	Allow- ance made for Misses.	Re- marks.
			Hits.	Misses.			

## PART XI.—MUSKETRY INSPECTORS' INSTRUCTIONS. 273

9th. *Correspondence.*—Notice the date and purport of communications, and officers to whom addressed, with the result in a form as follows. Inspectors of musketry are not to issue any instructions to the battalions under their supervision, or to call for any returns not specified in these regulations, and are to carry on as little correspondence as possible *with corps*. Except in cases which require immediate attention, they are to represent to *general officers*, in their monthly reports, all irregularities discovered. In no case are copies of correspondence to accompany the monthly report, it being sufficient to give a *resumé* of such in the said report.

Date.	Purport.	To whom addressed.	Result.

Inspectors of musketry or officers charged with the supervision of musketry instruction, are to forward all their communications and returns to the Inspector-General, through the Deputy Assistant Adjutant-General of the School of Musketry, and to general officers commanding divisions, districts, or stations through the appointed channel.

10th. *Instructors.* — Notice the manner in which the officers perform their duties, and whether they convey the instructions in the theoretical principles in a lucid and methodical way, naming those who appear indifferent to their duties and those who deserve special notice for their zeal and efficiency; also notice the efficiency of the serjeant-instructors of musketry, who are not to be employed in the preparation of the company practice returns, but are to take an active part in the instruction of the men. Inspectors are to satisfy themselves, by personal examination and inquiry, that the serjeant-instructors of the School of Musketry attached to depôt battalions are improving themselves,—that they are efficient “drills,”—and that they uphold their position by good conduct and soldierlike bearing,—naming those whom they consider worthy of promotion for efficiency and educational acquirements; and mentioning the subjects in which they have examined them during the month.

**SCHEDULE OF ARTICLES** authorized for the Musketry Instruction of a Battalion, which are to be obtained on application to the local officer of the Control Department at the several Stations.

ARTICLES REQUIRED.		No. and Quantity of each required.	
For the Practice Ground.	Iron targets 6 ft. x 2 ft. complete	8	
	Flags when using mantlet, &c.	Red - - - - - 6 feet square	4
		Red - - - - - 3 x 4 feet	2
		Red and White - - - 2½ „ square	2
		Dark blue - - - - - 2½ „ „	2
		White - - - - - 2½ „ „	2
	Poles, lance 16 feet long	11	
	When using bust, Fig 7 page 256.	Dises with poles	2
		Red flag 6 feet square	1
		Red flag 3 x 4 feet	4
	900 yards length of Gunter's chain or cord labelled every 5 yards, and numbered from 1 to 900, divided into 18 equal parts-	1 Cord or Chain	
	Pins of stout wire, 12 inches long	18	
	Stadiometer complete, with one 20 yards length of chain,—a cross staff,—and a tripod with stand for the stadiometer to rest upon	2	
	Tripod rests with rings	12	
	Sand bags, bushel	12	
	Large brushes for colouring targets, 1 lb.	2	
Small do. „ „ - sash tools	2		
Whiting, fine, no lumps	3 cwt.		
Lamp Black	15 lbs.		
Glue to make size	42 „		



ARTICLES REQUIRED.		No. and Quantity of each required.
For the Lecture Room.	Black-board 6 ft. x 4 ft. and easels - - - - -	1
	Wooden model with suspended wires to illustrate the necessity of holding the sights upright when taking aim - - - - -	1
	Common flat ruler - - - - - 3 feet long	1
	Rifle musket barrel, pattern 1853 - - - - -	1
	Waster locks with cocks complete, swivel pattern - - - - -	6
	Wrenches or nipple-keys, T headed, with cramps - - - - -	6
	Files to retain documents (common) - - - - -	12
	Sponge, $\frac{3}{4}$ oz. pieces - - - - -	2 oz.
	Chalk - - - - -	1 lb.
	Compasses with holder to contain chalk - - - - -	1
Boxes, wooden, for models - - - - -	1	

The foregoing Articles will be in charge of the Officer-Instructor, who will deliver them over to the Quartermaster, to be returned to the Control Department when the regiment is about to leave the station,

*Extract from General Orders, 1st March 1870.*

## G. O. 20.—MUSKETRY INSTRUCTION OF DEPÔTS.

1. The musketry instruction of the recruits and trained soldiers of depôts, attached to corps serving in the United Kingdom, will be conducted by the regimental instructors and be executed under the responsibility of the officer commanding the battalion they are attached to, who will conduct all correspondence on the subject, and sign and be answerable for the accuracy of all returns, &c., &c.

2. The performances of the men of such depôts will not be incorporated with those of the corps to which they are attached (nor with those of the regiment they belong to, if the depôt has executed the annual course previous to joining the service companies on their return from foreign service), but separate returns, viz.—Form A for recruits, and War Office forms Nos. 926, 927, and 928,—will be prepared and furnished at the prescribed periods with the regimental returns.

3. The performances of transfers received from, or given to, these depôts, by another depôt, corps, battalion, depôt battalion, or the service companies, will be accounted for, and treated in all respects, in the manner prescribed by the Musketry Regulations, as if they had been transferred to or from one corps or battalion to another.

---

A rigid enforcement of the attendance of first-class shots at the aiming and position drills will no longer be required ; and old soldiers in the second period of service will be excused (provided they continue efficient) from the extra position and judging distance drills, which, instead of being required to be executed weekly as heretofore, will henceforth be left more to the discretion of Commanding Officers.

## LIST OF FORMS.

---

- Form A.—Recruits Annual Musketry Practice Return.
- Form B. (W. O. No. 922).—Musketry Drill and Practice Return.
- Form C. (W.O. No. 923).—Register of Target Practice.
- Form D. (W.O. No. 924).—Register of Judging Distance Practice.
- Form E. (W. O. No. 925).—Diagram of Volley and Independent Firings and Skirmishing Practice.
- Form F. (W.O. No. 926).—Monthly Musketry Diary.
- Form G. (W.O. No. 927).—Annual Musketry Practice Return.
- (W.O. No. 928).—Application for Prizes.
- Form K. (W.O. No. 1022).—District Musketry Reports.
- Form M. (W.O. No. 929).—Transfer Returns showing extent to which men have been instructed.

TABLE of corresponding Pages and Paragraphs, or Sections, in the *Instruction of Musketry*, dated Horse Guards, March 1870, and the *Musketry Instruction*, as issued with the *Rifle Exercises*, dated Horse Guards, September 1870.

Old Book.		New Book.		Old Book.		New Book.	
PART I.				PART IV.			
Para.	Page	Para.	Page	Section	Page	Section	Page
1-3	1	1	125	1	19-27	1	156-124
4-6	2	2-4	126	2	27-42	2	154-176
7-10	3	5-8	127	3	42-44	3	176-179
11-14	4	9, 10	128	4	45-51	4	179-185
15	5	11-13	129	5	51, 52	5	185, 186
		14, 15	130	6†	52-57	6	187-193
PART II.				PART V.			
Para.	Page	Para.	Page	Sec. 1.		Sec. 1.	
1-4	6	1-3	131	Para.	Page	Para.	Page
5-8	8	4-8	134	1-6	61	1-5	194
PART III.				7-10	62	6-10	195
Para.	Page	Para.	Page	11-15	63	11, 12	196
1-3	9	1-2	135	16	64	13-16	197
4, 5	10	3-5	136	17-20	66	17-20	199
6-9	11	6	137	21-24	66	21-23	200
10-13	12	7-9	138	25-29	67	24-23	201
14-16	13	10-18	139	30-33	68	29-33	202
17-19	14	14-16	140	34-37	70	34-36	206
20	15	17-19	141	38-42	71	37-41	207
21-24	16	20-22*	142	43-50	72	42-47	208
25-27	17	23-25	144	51-56	73	48-53	209
28	18	26-28	145	57-60	74	54-58	210
		29	146	61-63	75	59-61	211
				64	76	62, 63	212
				65, 66	77	64	213
						65, 66	214

\* New paragraph.

† S. 7 (Manufacture of Cartridges, pp. 58-60) is omitted.  
26115.—a

Old Book.		New Book.		Old Book.		New Book.	
<b>PART V.—continued.</b>				<b>PART VIII.—continued.</b>			
Sec. 2.		Sec. 2.		Para.		Page.	
Para.	Page.	Para.	Page.	Para.	Page.	Para.	Page.
1,2	80	1	218	22-28	101	15-19	241
3-6	81	2-6	219	29-31	102	20-24	242
7-12	82	7-10	220	32-34	103-105	25-29	243
13-17	83	11-17	221	35-37	105	30-32	244
18-24	84	18-22	222	38-40	106	33-34	245-247
25-28	85	23-27	223	41	107	35	247
		28	224			36-39	248
						40	249
						41	250
<b>PART VI.</b>				<b>PART IX.</b>			
Para.	Page.	Para.	Page.	Para.	Page.	Para.	Page.
1-3	86	1-3	224	1-6	108	1-5	251
4	87	4-6	229	7-13	109	6-9	252
5-8	88	7,8	230	14-18	110	10-14	257
						15-18	258
<b>PART VII.</b>				<b>PART X.</b>			
Para.	Page.	Para.	Page.	Para.	Page.	Para.	Page.
1	91	1	230	1-4	115-117	1, 2	259
2-5	93	2-5	233			3, 4	260
6-8	94	6-8	234				
9-11	95	9, 10	235				
12, 13	96	11-13	236				
<b>PART VIII.</b>				<b>PART XI.</b>			
Para.	Page.	Para.	Page.	Para.	Page.	Para.	Page.
1-5	97	1-4	237	1-6	118	1-5	264
6-9	98	5-7	238	7-12	119	6-10	265
10-14	99	8, 9	239	13-17	120	11-15	266
15-21	100	10-14	240	18	121-125	16-18	267-274

## INSTRUCTIONS FOR CLEANING THE MUZZLE- LOADING ENFIELD RIFLE.

---

1. Full cock the rifle, and draw the ramrod.
  2. Put into the jag a piece of rag (woollen if possible) or tow, and twist it round so as to cover it.
  3. Hold the rifle in the left hand, at the full extent of the arm, with the forefinger and thumb in line with, and round the muzzle, the heel of the butt resting on the ground to the rear.
  4. Pour a small quantity of water into the barrel with care, so as to prevent any of it getting between stock and barrel, or into the lock through the tumbler axle hole; immediately afterwards put the ramrod into the barrel, and rub it carefully up and down to remove the dirt or fouling, forcing the water through the nipple to clear the touch-hole. Repeat this process until the water comes out of the nipple quite clean.
  5. Wipe the barrel well out with rag or tow until it is perfectly dry, and afterwards with an oiled rag; then put in the muzzle-stopper. The fouling which settles on the stock near the nipple lump when firing should, if possible, be removed without using water or a damp rag. On no account is a knife, or sharp instrument of any description, to be used to remove the dirt near the nipple lump or trigger plate. Care should be taken to keep the snap cap dry when washing out the barrel, and to wipe the nipple, and the mouth of the hammer, before letting it down.
-



# Hunter, Rose & Co.'s Publications.

---

**MAN AND WIFE:** A Novel. By WILKIE COLLINS.  
Crown 8vo, 574 pp. Oxford style, \$1.00; paper cover, 75c.

**DOT IT DOWN:** A Story of Life in the North-West. By  
ALEX. BEGG. Crown 8vo, 380 pp. Cloth, embossed, \$1.50.  
"This volume contains a large amount of useful information, concern-  
ing a country in which we are deeply interested."—*Guelpb Mercury*.

**LIFE OF THE DUKE OF KENT:** embracing his Corres-  
pondence with the De Salaberry Family. By Dr. J. ANDERSON,  
Quebec. Demy 8vo., 242 pp. Cloth, embossed, \$1.00.

**SKETCHES OF CELEBRATED CANADIANS,** and  
Persons connected with Canada, from the earliest period in the  
history of the Country, down to 1862. By HENRY J. MORGAN.  
Demy 8vo., 794 pp. Library style, \$2.00. A few copies of  
this rare book on hand.

**ROUGH AND SMOOTH;** or, Ho! for an Australian Gold  
Field. By Mrs. A. CAMPBELL, Quebec. Demy 8vo., 138 pp.  
Cloth, 50c.

**A GARLAND GATHERED AT MORN:** A Collection of  
Short Poems. By HETTY HAZELWOOD. Crown 8vo, 79 pp.  
Cloth, 50c.


**POEMS.** By Dr. J. HAYNES. Crown 8vo, 152 pp. Cloth, 50c.

**THE TEETOTALER'S COMPANION;** A Collection of  
Reading, in prose and verse, for Divisions and Temples.  
Compiled by G. M. ROSE. Paper, 25c.; cloth, 40c.



# Hunter, Rose & Co.'s Publications.—*con.*

**A COLLECTION OF DIALOGUES**, for Divisions and Temples. Compiled by Mr. HAMMOND. Paper, 25c.

 *Any of the above Books sent post-paid, on receipt of the price.*

## BRITISH COPYRIGHT WORKS IN THE PRESS

**KING ARTHUR**; A Poem. By EDWARD BULWER, LORD LYTTON. Revised edition. Crown 8vo., 460 pp. Cloth illuminated, gilt edges, \$1.75; cloth embossed, \$1.50 Frontispiece. (*Will be ready in a few days.*)

**A TERRIBLE TEMPTATION**: A Story of To-day. By CHARLES READE, author of "Foul Play," "Griffith Gaunt," "Put yourself in his Place," &c. Crown 8vo. Illustrated.

**WILFRED CUMBERMEDE**. By GEORGE MACDONALD, author of "Alec Forbes," "Robert Falconer," &c. Crown 8vo. Illustrated.

**THE CREATION OF MANITOBA**: A History of the Red River Troubles. By ALEX. BEGG. Crown 8vo. Frontispiece and Map. (*Will be published in a few days.*)

**HUNTER, ROSE & CO.,**

*Publishers, 86 and 88, King Street West, Toronto*

MAY, 1871.