## HOW TO QUALIFY MADE EASY

Sergeant tolustructor M. M, PROWSE R.C.R.

## HOW TO QUALIFY MADE EASY

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INTRODUCTION.

Gentlemen,-
This book was compiled by me for the purpose of assisting Lieutenants to qualify, and help them to obtain a certificate at the School of Instruction, and at Schools that might be held at their own Headquarters.

It contains the lectures and some of the most important questions and answers relating to these subjects and this examination.

You will find it a great help to you in your course.

I have been asked to have this book published by officers, who have used it for the purpose of obtaining their certificates.
(Signed)
W. H. Prowse, Sergt.-Instr. R.C.R.

## HOW TO QUALIFY MADE EASY


CHAPTER I.
ADMINISTRATIVE SERVICE
To administer to the needs of the Fighting Troops.
i. Service of Intercommunication. Orders from the Headquarters to the units.
Telegraph, Signal Aeroplane, etc.
2. Food Transport Service.

Methods of feeding.
(a) Billeting-a few days.
(b) Requisitions.
(c) A.S. Corps transport from railheads.
(d) A combination of one or more of above.

The lines of communication are under the charge of the Inspector-General of Communications. One or more advanced bases are at extreme end of the railroad near to the troops. Then there are the Rail-heads for the Divisions. Supply Depots are all along the line to prevent congestion at base and farther on are the Regulating Stations. The Base of Supplies being at the far end of the line - at the sea coast, for instance, Calais, in the present war.

From the units to the Rail-heads are three lines of transport.

## 3. Line of Transport.

A mechanical transport running from the Rail-head to the Refilling Point or Rendezvous as the case may be. 2nd Line of Transport, or Divisional Train.

This line is behind the division and moves from the refilling point to the Cook Houses of the division. It is horse transport and the loaded waggons are left at the Cook Houses, the empties being taken away.

1st Line of Transport,
or the Regimental Transport, take these loaded waggons to the fighting troops. They carry along only the bare fighting necessities.

NOTE : If the division moves the Refilling Point becomes a Rendezvous for the 3rd Line of Transport.
3. Army Medical Corps.
(a) Administrative.
(b) Regimental.
(c) Stretcher Bearers.

Army Surgeons-Ambulance Waggons.
Field Hospital-Ambulance - Clearing Hospital - Ambulance Train.
Stationary Hospital (on the line of communication).
General Hospitals at Base.
A Division requires :
I. Clearing hospital.
2. Stationary hospital.
3. General hospitals.
4. Ambulance Train in addition to the Field Hospital, etc.

## 4. Army Vet. Corps.

(a) Regimental.
(b) Administrative.
(a) 1. Vet. Hospitals.
2. Vet. Remount Depots along line of communication at the rail-heads. Each remount station can accommodate 250 horses.
5. Ordnance.

The Ordnance Service supplies everything except food, medicine or vet. material, e.g. clothing, equipment, ammunition, etc.

The transports are the same as for food supply. The Brigade Amm. Col. supplies Brigade from Div. Amm. Col. which carries enough for one day's fighting. The Div. Amm. Column is supplied from the Amm. Parks where the emergency supply is stored. One day's emergency is kept at the batteries.

The Div. Amm. Col. is made up of 4 sections.

Three carrying the small arm amm. for each of the Brigades.

One carrying Amm. for large guns over i8 pounders.
6. Department (Works).

Engineers are part of the works service. They have machine shops at the base and advanced depots for repairs. They also have unskilled labour for odd jobs.
7. Postal Service.

Main Post Office at the base.
Branches at the Rail-heads. The mail being carried by the transports.
8. Military Police.

Each Regiment has its own military police.

## 9. Accounts Department.

All accounts are sent from the units to the Base.

Here provision is made for pay to be issued to the Pay Masters in the Field.

## io. Spiritual Service.

A Chaplain to each Regiment.

CHAPTER II.

## BOOKS AND CORRESPONDENCE

COMPANY BOOKS.
The Order Book.
Company Roll Book.
Section Roll Book.
Cash Book and Ledger.
Service Roll.
Company Conduct Sheets.
Equipment Ledger.
INDIVIDUAL BOOKS.
Infantry Training.
Field Service Regulations.
Musketry Regulations.
Rifle Exercises for Ross Rifle.
Manual of Field Engineering.
Notes on Map Reading.
CORRESPONDENCE
How to write and address an official letter.

| No............. |  |
| :---: | :---: |
| From : ........................... |  |
| To :......................... |  |
| ...............(Subject) |  |
|  |  |
| One Subject. Short, concise, to the point. |  |
| I have the honour to be, Sir, |  |
|  | Your obedient servant, (Name) |
|  | (Rank) |
|  | (Regiment) |

To address the envelope :
Names never written on the envelope unless in the case of a personal letter, when not referring to military matters.
G.S.O.-General

Staff
Officer

## CHAPTER III.

## INTERIOR ECONOMY

I. What is the form of an oath of allegiance ?
I........do sincerely promise and swear (or solemnly declare) that I will be faithful and bear true allegiance to His Majesty.
2. How and by whom are men and N.C.O.'s appointed and promoted ?

By the C.O. on recommendation of their Company Officer.
3. What are the different kinds of rank ? Substantive or regimental being the rank one holds in his own corps.
Brevet being the rank held outside one's own corps. Honorary merely titular and does not carry with it any command or authority.
4. What are the ranks in the Army ? and Lieutenant, Lieutenant, Captain, Major, Lieut.-Colonel, Colonel,

Brig. General, Major General, Lieut. General, General and Field Marshal.
5. How are the Officers appointed? By the King or his representatives.
6. What is the difference between rank and appointment?
Rank is the status of an Officer and gives seniority. Appointment is the office that he fills or discharges.
7. What is sufficient notification of orders in the Militia?
Publication in the newspaper in the Regimental Division.
8. How are orders generally made known?
By being read on parade or posted in some conspicuous place.
9. To whom does an Officer make a complaint?
To his C.O.
10. To whom does a N.C.O. make a complaint?
To his Company Commander.
II. What is Warrant Officer and how is he appointed ?
He is a Sub-Officer junior to all commissioned officers, but senior to all N.C.O.'s. He is appointed by the Secretary of State for War, in Canada by the Minister of Militia, and holds a parchment termed a warrant.
12. How does a private soldier make a complaint?
To his Company Commander accompanied by a N.C.O.
13. What is the general rule regarding Official Letters ?
They must be written on foolscap paper, with a quarter margin on the left. The subject of the letter should be stated on top of the margin. It must contain only the subject and must be short and to the point.
14. To whom must an official letter be sent?
To the C.O. who will, if approving, forward it to the D.O.C. with recommendation.
15. How many days' leave may a C.O. grant an Officer ?
Three.
16. If he asked for more than three days, what procedure must be taken?
He must send it to the O.C. Higher Command, who has now power to give up to 30 days' leave, except out of the country, when it is sent to Headquarters.
17. If you required an extension of leave how should you proceed ?
Write or telegraph to the Adjutant.
18. To whom should an Officer report on returning from leave ?
To the Adjutant.
19. If a subaltern wishes leave of absence, how should he proceed ?
Obtain verbal permission from his Company Commander and then apply in writing to his C.O.
20. How should an official document be signed ?
First, Name, then Rank, and below that the Corps.

2I. To whom should young officers apply for advice and assistance ?
To the C.O.
22. What is a Company ?

A tactical unit of Infantry. It is divided into four platoons, each of which is divided into four sections, formed under a selected leader for purposes of discipline and manoeuvres.
23. To whom and for what are Company Commanders responsible?
To the C.O. for the efficiency, pay, clothing, feeding of his men and for everything connected with his Company.
24. Who is responsible for the keeping of the Company Books?
The Company Commander ; though the Orderly Sergt. may act as his clerk.
25. What books should an Officer have in his possession?
I. Latest edition of Infantry Training.
2. King's Regulations.
:3. Regulations and Orders for the Canadian Militia.
4. Regulations of Encampment.
5. Musketry Regulations.
6. Manual of Military Law.
26. What is the duty of an Officer in charge of a Company in relation to Public Money entrusted to his care ?
He is responsible for all money entrusted to him.
27. What is a pay list ?

It is a list containing all the names of the Officers, N.C.O.'s and men in the Company, shewing the amounts to which each one is entitled, the amount of stoppages and cash payments.
28. How are men paid ?

They are paid semi-monthly, and their accounts settled at the end of every three months.
29. What power has a Company Commander to grant passes ?
Up to six days.
30. To whom does leave of absence apply ?
To Officers.
31. What is a furlough ?

It is permission for a man to be absent from his quarters for more than 6 days.
32. By whom is a furlough recommended, and by whom granted ?
Recommended by Company Commander, and granted by C.O. up to 21 days, beyond that, Headquarters.
33. Who may be granted permanent passes ?
All N.C.O.'s below the rank of Sergeant, and well behaved men.
34. What is the difference between Leave of Absence and a Pass ?
Leave of Absence is only for Officers, and is written; Passes are for N.C.O.'s and men which are written and carried with them.
35. What is the Rule about choice of quarters among Officers ?
The Senior has first choice. If an Officer has possession, another of
the same rank cannot force him to give it up although Senior.
36. For what are Officers' Messes established?
For convenience and to keep the Officers together.
37. Who are dining members of the Mess ?
All unmarried Officers.
38. By whom and how are Officers' Messes managed ?
By a Committee with the approval of the C.O.
39. What voice has an Officer in the management of the Mess ?
He has a vote in the getting up of entertainments.
40. To whom and for what is the President of the Mess responsible?
To the C.O. for everything in connection with the Mess.
41. Who enters the Mess first ?

The Senior Combatant Officer.
42. Where does the President sit and what are his duties?
Nearest to the Seryants' Entrance.

He is responsible that the servants perform their duty, and order is maintained at the table.
43. Where does the Vice-President sit ? At the end nearest the entrance.
44. Where does the Senior Officer sit?

At the centre of the table on the right side.
45. How often should the President and Vice-President be appointed ?
Weekly.
46. What are the different kinds of dress for N.C.O.'s and men ?
Review, Marching Order, and Drill Order.

CHAPTER IV.

## CAMPS AND BIVOUACS

F.S:R., page 84 , Sec. 55 .

GENERAL PRINCIPLES.
The sites for Camps and Bivouacs should be dry and on grass if possible. Steep slopes should be avoided, but gradual slopes have the advantage of drainage purposes.

Large woods with undergrowth, low meadows, the bottoms of narrow valleys, and newly turned soil are apt to be unhealthy.

Clay is usually damp.
Rivers and watercourses are dangerous sites, as a sudden fall of rain may cause them to become large streams.

Sites of old camping grounds should, if possible, be avoided.

A good water supply is essential, but considerations of safety may necessitate a camp or bivouac being placed at
some distance from it. Other points to be considered are places where food, forage, and shelter and straw can be obtained.

## SELECTION AND PREPARATION OF SITES FOR CAMPS.

The sites are selected by Staff Officers, usually accompanied by Medical Officer, Engineers, and Mounted Police. The Staff Officers select. M.O. considers water and health. The Engineers arrange for latrines, etc.

The Mounted Police mount a sentry over the water.

In the absence of M.P. first troops to arrive do so.

When column arrives within 2 or 3 miles of its destination, a Staff•Officer, with a representative of each corps will gallop ahead and receive all instructions from the Staff Officer, who has selected the billets. The Officers of the different units are shown the location or the piece of ground which is allotted to their troops, with all instructions as to sanitary arrangements and water supplies.

On the arrival of the troops, each Officer will give the instructions that he has received to the Commanding Officer, and will lead the troops to the allotted ground. It must also be made clear to the Commanding Officer what roads they are at liberty to use.

## WATER ARRANGEMENTS. <br> "Sure to Get."

Military Police or in their absence, the first troops to arrive at the halting will mount a sentry or sentries on all water likely to be required for use. These will not be withdrawn until a permanent waterguard has been mounted. The water supplies will always be selected in conjunction with the sanitary arrangements by the Medical Officer.

Where we come to a running stream, the water for drinking will be taken the farthest up stream, and will be marked by a white flag. The watering place for animals will be next down stream, and will be marked by a blue flag. Further down stream will be for bathing and washing purposes, which will be marked
by a red flag. The arrangements for standing water may have to be used in this case where troops are camped or bivouacked farther down stream.

Where only standing water can be obtained, a rough fence will be built around it and cattle and horses will be watered by dipping the water with pails, nosebags, biscuit tins or other articles. Water for washing and bathing will be dipped in the same manner.

The daily average of one gallon per man per day is sufficient for drinking and cooking.

A horse, bullock or mule drinks about I $1 / 2$ gallons at a time.

In a standing camp 5 gallons will be allowed per man for drinking and cooking, and io gallons per horse, bullock or mule.

## SANITARY ARRANGEMENTS.

This is one of the most important things to be looked into in camps and bivouacs, therefore latrines, places to dispose of dead cattle and horses, horse
and cattle arrangements, must be attended to at once.

Horse and cattle lines and latrines will always be put, if possible, on the leeward side of the camp, and sufficient distance from the water supply to prevent any of the refuse being washed into the water in case of heavy rains.

Tents should always face the south if possible.

## LATRINE FOR ONE NIGHT.

Should be one spade deep and as long as is needed for the number of men.

If stay longer than one day, fill and dig another.

As soon as troops move from this bivouac or camp, latrines and refuse pits are always marked by stones in letter L $\begin{aligned} & \\ & \\ & \\ & \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0\end{aligned} \quad$ or limbs of trees.

Fill in earth every few hours, and put in kerosene or chloride of lime.

## INFANTRY BY DAY.

Pile or ground arms on the alarm post, articles of equipment being laid by them.

## INFANTRY BY NIGHT.

Men will be with their rifles and equipments by their sides. On some occasions it may be necessary for men to sleep fully equipped.

## CHAPTER V.

## DISCIPLINE

COMPANY COMMANDER GIVES FOR MINOR OFFENCES.
r. Confined to Barracks.
2. Extra guards.
3. " piquets.
4. " orderly man.
5. " ration carrier.

POWERS OF COMPANY COMMANDER.

1. 7 days C.B. (May be reduced to 3
in case of young officer.)
2. Admonish or reprimand (but not severely), N.C.O. below sergeant.

INVESTIGATION OF CHARGES.
r. Charge of accused in detention room must be investigated within 24 hours. Drunkenness - After 24 hours.
2. First by Company Commander Lieut. 7 days.
3. Next by C.O. 28 plus i4 days.
4. Next by Court Martial.

POWERS OF C. O.

1. 28 days C.B. for one offence ; 14 days additional for further offences 42 days altogether.

FINES FOR DRUNKENNESS
BY C. O.
I. ist offence no fine, but C.B.
2. 2nd offence $\$ 2.00$ plus minor punishment, e.g. C.B.
3 rd offence, if within 3 months- $\$ 6$. 3 rd offence, if over 3 and within $6^{\circ}$ months- $\$ 5$.
3 rd offence, if over 6 and within 9 months- $\$ 3$.
3 rd offence, if over 9 and within 12 months-discretion.
3. Detention. Not given in addition to fines unless triable by Court Martial, or unpaid fines- $\$ 10$ or more.
4. Ordinary Pay is the limit of fines,

## SUMMARY PUNISHMENT.

I. C.O. must ask: Will you take my punishment or be tried by Court Martial ?
2. If he elects C.M. remanded till next day.
3. C.O. asks the accused if he has reconsidered.
If not, then summary of evidence taken by Adjutant and forwarded to Headquarters.
4. Divisional Officer or D.O.C. orders C.M. to assemble, if necessary. If C.M. not necessary, he orders C.O. to dispose of case. If accused thinks punishment ordered by C.O. is illegal he could have it brought up before inspecting -officer or general.

## COURT MARTIALS.

Kinds-Regimental.
District.
General.
Field General.
i. Regimental C. M.

Seldom held owing to C.O.'s powers extending to 42 days, except in case of full corporal.
In active militia appointments and promotions are held at pleasure of C. O. He may revert man from any rank by word of mouth.
In permanent corps a Regimental C. M. will assemble to deal with offence committed by full corporal if case is not triable by C. O.
2. District C. M.

Assembled by D.O.C. at any place in District; with 2 years with hard labour limit.
Accused in any C.M. may have lawyer.
3. General and Field General C.M. On Active Service only, or when troops are over 100 miles from Civil Court. May then try for any criminal offence, e.g. murder, etc.

## COURTS AND BOARDS OF ENQUIRY.

1. Board.

At places where troops and stores are stationed.
To decide re articles complained against.
No oath.
2. Court of Enquiry.

To enquire re absence of a man, deaths, etc.
Oath.

## CHAPTER VI.

## MILITARY LAW

r. What is Military Discipline ?

Subordination, obedience, attention, order, regularity, system, absence of crime, and accountability to some one over us.
2. When is the Canadian Militia subject to Military Law ?
Permanent Corps always. Other members from the time called out for active service, during the period for annual training. During any drill or parade of his Corps, whether present in the ranks, or as a spectator. When going to or from parade. At any time when in the uniform of his Corps.
3. How are persons subject to Military Law?
They are subject as either officers or soldiers. Some persons are subject
to it all the time, others only under certain conditions.
4. Who are subject to it all the time in the Canadian Militia and who are not ?
The permanent force at all times. The non-permanent forces only at certain times.
5. When a person subject to Military Law commits an offence, what is done ?
He is placed in military custody ; which means in the case of officers or soldiers arrest, but if necessary they may be placed under a guard or piquet, etc.
6. What is arrest ?

Arrest is either close or open. When not specified it means close arrest. An officer in close arrest is not to leave his quarters, except to take such exercise as the medical officer may deem necessary, and then only under supervision. When in open arrest he may take such exercise within certain limits or may be directed to go from one station to another.

He is however forbidden to appear in any place of amusement and must always be in uniform, but without sash, sword belt or spur.
7. Who may place an Officer under arrest ?
He may be placed under arrest by competent military authority without any previous investigation should the nature of the offence demand it, but a Commanding Officer will not place anybody under arrest until he has enquired into the matter. When an Officer is placed under arrest a special report will be made to Headquarters. A junior officer can order a senior into arrest if the latter is engaged in any quarrel, fray or disorder.
8. How is an Officer once under arrest to be released ?
Not without the sanction of the highest authority to whom the case has been reported, unless it is by error no officer can demand Court Martial or persist in considering himself under arrest after he has been released.
9. If an Officer thinks himself aggrieved how should he seek redress ?
If on due application to his C. O. he does not receive the redress he considers himself entitled to, he may complain to the Commander in Chief, who is, according to the Army Act, bound to examine such complaint and through the Secretary of State, make his report to His Majesty in order to receive the direction of His Majesty thereon.
10. Do the rules of arrest apply to Warrant and N.C.O.'s?
Yes, a Warrant or N.O.C. charged with an offence will be placed under arrest at once, but if the offence is not serious, it will be investigated previous to arrest.
11. What is meant by arrest in the case of a private?
Arrest means placing men in charge of a guard, piquet, patrol or sentry or of a Provost Marshal, or being placed in open arrest. This does not apply to offences of a minor nature.
12. How is a soldier charged with a serious offence dealt with ?
He is to be placed under arrest at once, and the N.C. officer who ordered him to be placed under arrest is to do so without altercation, and will avoid coming into personal contact with the man. He will obtain the assistance of one or two privates to escort him to the detention room.
13. What N.C.O. can place a private in arrest?
All except Lance Corporal of less than 4 years' service, who will refer the case before arrest to the Orderly Sergeant in all cases except personal violence or on detached duties.
14. Can a commander of a guard or piquet refuse to accept anyone committed to his custody?
No. But it is the duty of the person confining the accused to deliver at the time of committal, or at least within 24 hours, an account in writing what offence the accused is charged with
15. What is done if this charge is not given within 24 hours?
The commander of the guard will take steps to procure it, and will report the matter to the officer to whom he renders his guard report.
16. What is done if "charge" is not received within 48 hours?
The officer to whom the commander of the guard renders his guard report may order the accused's release.
17. By whom can a man once confined be released ?
Only by competent authority ; that is, if confined in a regimental detention room, one can only be released by the officer commanding the regiment, or if in garrison detention room, only by the officer commanding the garrison.
18. Is an offender in arrest required to perform any duty ?
No, beyond handing over any cash stores or accounts, and he is not to bear arms except by order of his commanding officer.
19. Should he be ordered to do any duty, is he thereby absolved from liability of his offence?
No, the fact of carrying arms or employing him in duty does not count as condonation of his offence; it must be an intentional act of forgiveness.
20. How are minor offences against a soldier investigated ?
They may be held without the man being placed in arrest; but a soldier whom a charge for a minor offence is pending, will not quit barracks until his case has been disposed of. He will attend all parades, but will not be detailed for any duty,
21. How are all charges against soldiers first investigated?
By the accused company commander, who decides whether he can deal with it. If he does so deal with it, he enters the award on a minor offence report form, and sends it to the orderly room for supervision and approval of the C.O. ; if not
so disposed of, it will be dealt with by the Commanding Officer.
22. What are the powers of Company Commander ?
7 days C.B., fines for drunkenness and extra guards, piquets, etc.; may admonish or reprimand N.C. O.'s below the rank of Sergeants or appointment of Lance Sergeant; the C.B. may be limited by the Commanding Officer to 3 days C.B.
23. When must all charges be investigated by the Commanding Officer ?
Within 48 hours of their being reported to him, exclusive of Sunday, Good Friday, and Christmas Day ; if this cannot be done, a report must be made to superior authority.
24. When and how are offences investigated by the Commanding Officer ?
An hour before the Commanding Officer's parade when practicable. The accused is marched in under escort without his cap ; the charge is read against him, given their evidence, the Commanding Officer
asks the accused if he has anything to say in his defence and hears any witnesses he may wish to call.
25. Is the evidence given before the Commanding Officer on oath ?
No, unless the accused demands it, which he has a right to do.
26. How will the Commanding Officer dispose of the case?
After looking at the man's company conduct sheet, which is produced by the company commander, he may dismiss the case if he thinks the evidence does not disclose an offence, or if he thinks it should be proceeded with, he will :
I. Dispose of it summarily.
2. Refer it to superior authority.
3. Adjourn the case to have the evidence reduced to writing.
27. In the last case if the summary of evidence is taken, what is done ?
It will be considered by the Commanding Officer, who will then
I. Remand the accused for Court Martial.
2. Refer the case to proper superior authority.
3. If the accused has not claimed a Court Martial, rehear the case and dispose of it summarily.
28. If the accused is remanded for further enquiry, what should be done?
His case must be brought under review daily, till disposed of, and if at the time sufficient evidence is not forthcoming to show whether the accused is guilty or not, and there is no opportunity of completing the investigation at the time, the accused may be released without prejudice to his arrest ; when further evidence is forthcoming, if it is not a serious offence, the case should be dismissed.
29. When an award has been given, can it be increased ?
No ; though a Commanding Officer can diminish his own or a Company Commander award, the award is considered final when the accused is marched from the Commanding

Officer's presence. In any case he cannot alter the award in the conduct book after the punishment has been completed, but the General Officer can, if he thinks the punishment illegal or excessive, order the record to be expunged.
30. What is meant by the term "Commanding Officer"?
It means in the sections of the Army Act relating to Court Martial, executive of sentence on and power of Commanding Officers ; and also other Rules of Procedure. The Officer whose duty it is to deal with a charge against a person subject to Military Law, of having committed an offence.
3r. What power has an officer commanding in dealing with a case of a private?
He may award either summary or minor punishment, but before awarding summary punishment, he must first ask the man if he wishes to be tried by a District Court Martial. If he omits to ask the
man the question, he may still exercise his right any time before the commitment of prisoners on that day; but if the man claims a Court Martial, he may be given an opportunity on the following day to reconsider his decision.
32. What summary punishment can a Commanding Officer give affecting pay?
Detention with or without hard labor up to i4 days, or in the case of absence without leave exceeding 7 days, detention for each day of absence, not exceeding 21 days, fines, deductions from ordinary pay.
33. Who may give more than 7 days' detention for any offence ?
Field Officers only, but all can give the award as above for absence without leave.
34. How will detention be awarded?

Up to and including 7 days, in hours, over 7 days, in days ; if in hours, it begins to count from the day the man goes to cells, unless the
man does not go to the cells untii the following day, in which case it begins to count on that day at the usual hour for the commitment of prisoners. The day of award does not count as a day of detention. Detention exceeding 7 days will be in days, and begins to count from the day of award.
35. Can a man undergoing detention be awarded a further sentence for a fresh offence ?
Yes, provided that he is not imprisoned for more than i4 days consecutively, except for absence.
36. What are Fines ?

Fines are for drunkenness excess, and are awarded according to the following scale :
(i) For the first offence of drunkenness excess during a Militiaman's service there shall be no fine.
(2) $a$. For the second offence the fine shall be $\$ 2.00$.
$b$. For the third and every subsequent offence, the fine shall be $\$ 3.00$; but if the third or any
subsequent occur within six months of the last preceding offence, the fine shall be $\$ 5.00$, and if within three months, $\$ 6.00$ Fine during which a soldier is absent from duty by reason of detention or absence without leave is not to be reckoned in the above periods.
(3) A soldier should not be fined for drunkenness excess when the unpaid fines amount to $\$_{10.00}$.
37. What is meant by deductions from ordinary pay ?
Any reductions from a man's ordinary pay ; this may be the amount required to make good, loss, damage or destruction caused by his offence.
He must be left a penny a day for his own use.
38. What minor punishments can a Commanding Officer give ?
Confinement to Barracks, not exceeding 28 days, extra guards, piquets, and admonition; in the case of N.C.O.'s, reprimand or severe reprimand:
39. What are the rules as regards confinement to Barracks?
It commences from the day of the award, unless it is combined with a sentence of detention, and the first day ends at midnight that day during the time the man is a defaulter and can not quit barracks. On duty he will do his ordinary parades and duties and in addition, fatigues, relieving the well conducted men. He is not to do more than so days' punishment drill, which consists of marching order for not more than two hours. It is not to be carried out after retreat.
Men doing C.B. are only allowed to enter the Canteen during one hour in the evening. They are not required to make up any of their punishment which they have missed by being in the Hospital or in prison, or on duty.
40. Can a man already a defaulter begin a further award of confinement to barracks ?

Yes, which will commence at the end of his previous sentence, providing the total award does not exceed 28 days.
41. When are extra guards and piquets given?
Only for irregularities when on parading for these duties.
42. Can any of the foregoing punishments be combined ?
Yes, except in the following cases :
(I) When detention exceeds 7 days no minor punishment can be added.
(2) A single award of punishment must not exceed 14 days in all, except for absence without leave.
(3) Confinement to barracks will take effect on the termination of the detention.
43. Can a private be admonished ?

Yes, but not reprimanded ; admonition is only entered in a man's conduct book in cases of drunkenness excess.
44. In cases of absence, how is forfeiture of pay made ?
The Royal Warrant for pay says : That less than 6 hours cannot rank as a day, unless two conditions are filled: ist-That it prevented the absentee from fulfilling some military duty ; 2nd-That the duty is thrown on some other person. The 6 hours should be reckoned consecutively, but not necessarily on same day. Where the absence extends over 12 hours, he forfeits one day's pay reckoned from midnight, during any portion of which he was absent.
Pay is forfeited for every day of absence ; he will be informed as to the number of days' pay so forfeited. This is done by Royal Warrant, not by the Commanding Officer. The man has a right to claim a Court Martial, should he deny his absence. This rule also applies to Warrant and N.C.O.'s.
45. What are the powers of a Commanding Officer in dealing with an N.C. Officer ?

He cannot award summary or minor punishment to an N.C. Officer or an acting N.C. Officer, but he can
(r) Admonish.
(2) Reprimand.
(3) Severely reprimand.
(4) Order to revert to his permanent grade.
(5) Remove from appointment in now permanent unit ranks are held at pleasure of C. O.
46. What are the powers of officers commanding detachment?
He has the same powers as the Officer Commanding a corps, but if he is under the rank of Field Officer (Major), he may be restricted in these powers by the Officer Commanding or by superior authority. If, however, necessity arises, he may act to the full powers of a Commanding Officer, sending in a report to the Officer who has restricted his power.

## CHAPTER VII.

## MARCHES

r. What should be kept in mind by all regimental Officers on or after march ?
(i) That boots fit properly and are kept well greased.
(2) That socks are kept clean and mended, soaping socks prevent blistering.
(3) That the men's feet are constantly inspected.
(4) That they wash their feet at the end of a march if possible.
(5) Water bottles are kept filled with unsweetened tea, cold if possible, and arrangements made for food during march.
(6) That impure water is not used.
(7) That when possible an Officer marches in rear and sees that there is no straggling or that none quit the ranks without permission.
(8) That columns move with as broad a front as possible.
(9) A system of communication throughout a column should be maintained.
(io) That troops march off at attention and before arrival at destination and passing through towns.
2. What is the average rate of marching for Infantry ?
Including halts, 3 miles an hour, if the roads are good and when columns are small, otherwise $21 / 2$ miles.
3. What is the average length of march for Infantry ?
About 12 or 15 miles a day, but provided the pace is not unduly hurried, the more quickly completed a march is, the better for the men.
4. What halts should be made during a march ?
A short halt half-an-hour after starting and afterwards a halt of 5 or 10 minutes each hour during the day, at the direction of the $\mathrm{O}, \mathrm{C}$,
5. What should all note about billeting their men ?
If billeted in a town an alarm post should be fixed before the men are dismissed to their billets. No Officer should leave the parade until the men are told off to their billets. Company Officers must visit the quarters where the men are billeted.
6. Give some of the rules for night marching.
(i) Night marches are undertaken to avoid the heat of the day ; to forestall an enemy or to give time to deliver an attack.
(2) If possible local guides should be secured.
(3) All roads and the route should be carefully reconnoitred to avoid checks which are likely to occur.
(4) The general compass bearing should be noted beforehand, and mentioned in the march orders; the magnetic compass bearing of the locality should be given.:
(5) When the column is of all arms, the cavalry and artillery will march in rear.
(6) All wheeled transports and machine guns will be grouped in rear.
(7) Units should be informed what they are to do in case of attack.
(8) Commanders should have a fixed place in the column where they can be found.
7. How are connections kept up between different parts of a force ?
On very dark nights, by detachments of specially selected men used as connecting files from front to rear, and when troops in column, by means of knotted ropes, intervals by the extension of men.
8. Should the regulation distance be kept between units on a night march ?
No, it should be reduced or omitted and columns must be constantly closed up.
9. In what condition should troops be to undertake a night march ?
Fresh troops, for if fatigued, it is
impossible to keep them from getting mixed up.
io. How will troops march ?
In the normal formation, unless tactical exigencies require a change, until the position of assembly is reached, and on arrival there the march is said to be at an end, the operations coming under the head of night operations.
ir. How should the advance guards prevent troops going astray ?
They should block all branch roads, if necessary post men on them, these men falling in, in rear of the column.
12. Are rifles to be loaded?

No, unless specially ordered.
I3. Give some of the points to be observed in night marches.
(i) Silence is to be maintained.
(2) No lights or smoking allowed, unless by permission of Commander.
(3) Halts to be made at stated hours, and for a definite period, units not
to halt until they have gained any ground they might have lost.
(4) Pace to be as uniform as possible. The darker the night the slower the pace.
(5) Spare horses accompanying the force in rear to replace worn out horses.
(6) Should men or horses fall out they should leave the road so as not to block it.

## CHAPTER VIII.

## CLASSIFICATION OF DUTIES

I. Guards of Honour.
2. Duties under Arms.
3. Court Martials.
4. Boards and Courts of Inquiry.
5. Working Parties.
6. Fatigues.

An Officer takes command when there are 20 men or over in the party.

Officers called upon to perform :
Escort duty in case of escorting colors or command of escort for Royalty.
Piquet as a rule consists of a whole Company and should have an Officer in command.
Working Party-If there are 20 men or over, or if duty is important.
Orderly Duties-Orderly Officer of the day always performed by an Officer,

Fatigue Party-When it is a garrison or general fatigue. (Probably half batt.)
Working parties receive pay ; fatigues perform the work as a duty and get no working pay.

ORDERLY OFFICER OF THE DAY
OR CAPTAIN OF THE DAY.

## Hours.

His work commences at reveille and continues until reveille the next day. 5.30 Summer ; 6.30 Winter.

## Tents and Rooms.

One-half hour after reveille he visits tents or barrack rooms to see that all men are up, beds made, rooms ventilated.

## Supplies.

He visits the cook houses at meal hours, also the mess rooms and asks if there are any complaints. If any, he will at once have an investigation by himself. If not satisfied with rations, he at once reports case to C.O. If the
C.O. is not satisfied, and he thinks it is the contractors' fault, he will at once order sufficient rations and charge it to the contractor.

## Guards.

He also visits the Guard, once by day and once by night.

## Parades.

He attends all parades not interfering with his duty.

Guard Mounting.
He attends Guard Mounting.

## Detention Room and Detention

## Barracks.

He visits men in detention room and detention barracks, and asks if there are any complaints.

## Staff Parade.

He attends Staff Parade at ro, and receives all absentee reports collected by the Orderly Sergeants and by the Sergeant Major.

## Ten-Fifteen.

He also parades at 10.15 to see that all unauthorized lights are out.

At night he also visits the guard at an unstated hour.

Subaltern of Day.
I. Assistant to Captain of the Day, who is the Orderly Officer.

## Battalion Orderly Sergeant.

I. A daily duty, reveille to reveille.
2. Collects sick and absentee reports from Company Orderly Sergeant, and sees sick are paraded to hospital at proper hour.
3. Attends Guard Mounting. Orderly Room.
All parades not interfering with his duties.
All ration parades.
4. Sees all accused in guard detention room are at orderly room at proper time.
Sees all witnesses are notified to attend orderly room.
5. Accompanies Orderly Officer on all tours of inspection.
6. Attends Tattoo Parade at io p.m., and lights out at 10.15.

Battalion Orderly Corporal

1. Assistant to Battalion Orderly Sergeant and performs any duties B.O.S. may desire.
2. Marches sick to hospital, if no Officer detailed for that purpose.
3. Reports to hospital at retreat to bring back sick and discharged. and hands them to Company Orderly Sergeants.
4. Parades ration carriers.

Company Orderly Sergeant
I. A weekly duty, reveille one Monday to reveille Monday.
2. Duties :
r. Calls roll at reveille.
2. Takes names of sick and those wanting passes.
3. Accompanies Orderly Officer when inspecting rooms.
4. Makes out parade state showing :
(a) Number present on parade.
(b) Number employed.
(c) Number in detention room, hospital or detention barracks or civil prison.
5. Attends parades of his-Company.
6. Accompanies Orderly Officer visiting Company mess rooms and kitchen.
7. Sees all defaulters of Company parade at proper hours.
8. Sees men in guard detention room of his Company and men on guard get meals at proper time.

## DUTIES

I. What are the various rosters kept in a Battalion ?
Officers, N.C.O.'s and Men.
2. Who keeps the Officers' roster ?

The Adjutant.
3. Who keeps the N.C.O.'s?

The S.M. for Battalion purposes. The Company S.M. for Company purposes.
4. Who keeps the men's roster ?

The C.O.'s under the supervision of the Company S.M.
5. By whom are Officers detailed for duty?
The Adjutant.
6. By whom are N.C.O.'s detailed for duty?
The S.M.
7. By whom are men detailed for duty?
By the C.O.'s.
8. How do Officers and N.C.O.'s names appear on the roster ?
By seniority.
9. How do men's names appear on the roster ?
Alphabetically in platoons.
10. By what means are Officers warned for duty ?
By orders published daily.
11. By what means are N.C.O.'s warned for duty?
By the C.O.'s who receive the names from the S.M.
12. What are the classification of duties ?

1. Guards of Honour.
2. Duties under Arms.
3. Courts Martial.
4. Boards and Courts of Inquiry.
5. Working Parties.
6. Fatigues.

I3. What is an Orderly Officer of the day?
He is an officer on regimental duty. As a temporary assistant to the O.C. In regimental duties in guards piquets, and all N.C.O.'s on Battalion duties are in his charge.
14. Under what headings do the duties of an Orderly Officer come ?
Duties under arms.
15. What Orderly Officers are usually appointed in an Infantry Battalion?
Captain or Subaltern of the day.
16. When two duties come to an Officer on the same day, which one does he perform?
The senior and gets credit for both.
17. What parades are attended by the Orderly Officer ?
All parades not interfering with his duty.
18. By whose authority may Officers change duties?
Only by the same authority that detailed them.
19. To whom will Officers apply when wishing to exchange duties ?
To the Adjutant, and it must be in writing and signed by both Officers.
20. What is a Guard ?

Any number of men under a Commander for protective purposes.
2 I. What Guard should be commanded by an Officer ?
Those whose duties are important, irrespective of number, and always when over 20 men.
22. What Guard is commanded by an N.C.O. ?

Guards of under 20 men.
23. How do Guards pay compliments ?

By turning out and presenting arms if necessary.
24. To whom do Guards present Arms ? To the Sovereign and members of the Royal Family, Governors and General Officers in uniform. To Field Officer of the Day when visited by him ; and a regimental guard to its O.C. once a day when in uniform. To all armed corps. Guards will not pay compliments to persons moving in rear of his post.
25. To what bodies do they remain at the slope?
To all armed parties not up to the strength of an armed corps.
26. What is a sentry ?

He is a man on guard or watch, usually detached from a guard.
27. What are the duties of a sentry ?

To pay all proper compliments, turn out the Guard when necessary. carry out all orders (which should be in writing) report any irregularity, near or on his post. Should not allow any person to approach his post. Should not converse with persons except on matter of duty.

If asked a question he should answer it, and immediately resume his beat.
28. What is an escort ?

A moving guard usually having an accused or stores in charge.
29. What are the duties of escorts ?

To convey or escort accused or men undergoing sentence or stores and protect them.
30. What is a piquet ?

A number of men detailed for patrolling, and for quelling disturbances. They act in the joint capacity of a Guard and Military Police.
31. What is an armed party ?

Any number of men from one upwards, with a commander; side arms are sufficient to make an armed party.
32. What is an armed corps?
r. Regiment of Cavalry ;
2. Battery of Artillery with guns.
3. A Brigade of Horses or Field Artillery without guns.
4. Two Companies of Garrison Artillery.
5. Four Companies of Engineers.
6. A Battalion of Infantry, with or without colours.
33. How do sentries pay compliments ?

By sloping arms, and presenting arms to all Officers above the rank of Captain, and by carrying the right hand across to the small of the butt of the rifle, as in the dismiss to Captain, and below that rank when passing.
34. In what formation should a Guard stand when turned out?
Facing the front in two ranks with sloped arms.
35. To whom should a Commander of a Regimental Guard report on being relieved ?
To the Orderly Officer.
36. What is the rule as to inspecting and visiting reliefs and sentries ?
All reliefs should be inspected, both on going out and returning from their posts by the Commander of the Guard,

Sentries should be visited at least twice by day and twice by night, by the Commander of the Guard, and in addition a N.C.O. and Patrol should be sent around at uncertain intervals.
37. What generally are the duties of a Commander of the Guard ?
r. He should make himself acquainted with all the orders of his Guard.
2. Inspects all reliefs going out and coming in.
3. Maintain proper order and be responsible for everything in connection with his Guard.
4. Should receive all passes from men returning to Camp or Barracks and should initial the same.
5. Should report all coming in after Tattoo, if not on pass and if drunk should confine them.
6. Should take charge of all accused, inspect and search them and prevent them from getting liquor.
7. Should direct the bugler when to sound,
8. Should have a list of defaulters and men on pass, which he will get from the C.O.'s.
9. He should make out a complete report known as the Guard Report.
38. What is the rule as to Officers and men on Guard removing their clothing and accoutrements ?
They must never have them off except for cleaning and only onethird of the Guard to be unaccoutred at one time.
39. On what occasions do Guards turn out?
Reveille, Retreat, First Post, Visiting Rounds, and to pay compliments, and any unusual occurrence.
40. How often should sentries be relieved?
Every two hours.
41. What is the rule of inspection of guards on being relieved ?
They must be inspected by an Officer.
42. Under whose immediate authority is a Regiment's piquet ?
The Officer of the Day.
43. On what occasion is a piquet to be t. fully armed?

When detailed to assist the Civil Authority in quelling a disturbance.
44. With what arms does a piquet usually parade ?
With side arms.
45. To whom should a regimental piquet report on returning from duty?
To the Officer of the Day.
46. To whom should an Escort report?

To the Adjutant.
47. What is meant by Reveille ?

It is an Army Call at sunrise or some other stated hour when troops shall rise.
48. What is meant by Retreat ?

An Army Call at sunset or some other stated time after which Guards do not pay compliments.
49. What is First Post?

An Army Call usually sounded at 9.30 p.m.
50. What is Last Post ?

An Army Call usually sounded half . an hour after First Post ; after which all men not on pass are reported absent.
51. What is Tattoo ?

The time which elapses between First and Last Post.
52. What is Lights Out?

An Army Call for the extinguishing of all unauthorized lights.
53. Under what circumstances may the Militia be called out to aid the Civil Power ?
In case of a riot or pending riot, with which the Civil Authorities are unable to cope.
54. What must be done by the Civil Authorities to call out the Militia?
They must send in to the Senior Officer of the locality a requisition signed by three magistrates of whom the Mayor, Warden or other head of the Municipality must be one, or by the Chairman of the Court of Sessions who is County Court Judge in Ontario.
55. What should be done by a Company Commander on receiving an order from his C.O. to turn out in aid of the Civil Power ?
He should warn and assemble his men and report to the C.O.
56. What penalty may be imposed on a N.C.O. or man for refusing to turn out in aid of the Civil Power ?
A fine not exceeding $\$ 20$.
57. What penalty may be imposed upon an Officer for refusing to turn out in aid of the Civil Power?
A fine not exceeding $\$ 100$.
58. What is a Guard Escort or Fatigue Party entitled to count a tour of duty?
When it is marched off the Parade Ground.
59. What are the duties of Officers in command of parties passing Guards ?
If an armed party, he will slope and bring his sword to the "carry" and give the command Eyes Right or Left as the case may be. If an unarmed party he will give the
command Eyes Right or Left as the case may be, and salute with the right hland. (Rifle Requirement Trail).
60. What Officers should always be mentioned in orders ?
The Officer of the Day, and waiting, or the next for duty.
6 I. What are the duties of the N.C.O.'s on Canteen Duty ?
They should be held responsible that the canteen is only open at the proper hours and none are allowed in but those entitled to the privilege, and no one in liquor allowed.

## CHAPTER IX.

## DRESS

One of the most important things a soldier has to attend to. He must keep himself properly cleaned, clothes brushed, buttons cleaned, boots cleaned, and himself shaved.

## REVIEW ORDER.

Wear the best you have ; tunics, helmets and busbies, cloth trousers, black boots, belts, sidearms, ball pouch and rifle.

## MARCHING ORDER.

I. Heavy-everything you own.
2. Light-changes as the equipment changes.

## DRILL ORDER.

Always in service dress, unless otherwise ordered ; belt, bayonet, rifle and pouch.

WALKING OUT.
Tartan unless for amusement. Sergeants always wear side arms with straight cane. Staff Sergeants, the slung belt but no sword.

CHURCH PARADE.
Carry side arms.

## CHAPTER X.

## FIGHTING TROOPS

1. Cavalry.
2. Artillery.
3. Infantry.
4. Mounted Infantry.
5. Engineers.
6. Cyclists.
7. Flying Corps.

## CAVALRY.

Being most mobile are generally used for :

## Reconnoitring;

Despatch riders ;
Mounted orderlies ;
often in
Flying Attacks.
Owing to mobility they are able to make an attack and get away quickly.

Usually divided into three parts :

1. Protective Cavalry.
2. Independent Cavalry.
3. Divisional Cavalry.

Protective Cavalry are usually employed on protection purposes, reconnaisance, scouting, etc.

Independent Cavalry are of an independent force, i.e., independent of main body. Are under special commander. Object of Independent Ca valry is that they move any place or in any direction the Commander thinks he can put. his cavalry to the best advantage.

The Divisional Cavalry is under sole command of divisional commander.

## ARTILLERY.

$$
4 \text { parts. }
$$

1. Royal Horse.
2. Field Artillery.
3. Heavy Artillery.
4. Garrison Artillery.
5. Howitzer Batteries. Imp. for Infantry.

Royal Horse Artillery are usually allotted to cavalry brigades owing to their being the most mobile of their force; every man being mounted, they can move more rapidly from one position to another. Scale fences, ditches, etc.

Use a $13-1 \mathrm{lb}$. shell.
Has range of 6,500 yards.
Quick-firing.
Field Artillery usually accompanies infantry owing to not being as mobile as H.A., owing to gunners having to ride on guns and limbers. (Heavier horses than R.H.A.)

Use 18 - 1 b . shell.
Quick-firing.
Range- 6,500 yards.
Howitzer Battery always assist infantry in attack. Owing to steep angle of descent, they can continue firing until infantry have almost reached objective.

Use $50-\mathrm{fb}$. shell.
Use 5-in. Howitzer.

Use shot, shrapnel, or other high explosives.

Range-6,500 yards.
Shot-Not explode till it strikes.
Shrapnel bursts in air.
Lyddite being a poisonous explosive, will kill within radius of 200 yards. Percussion Cap.

Heavy Artillery-Are 1east mobile of artillery forces, but have great advantage over lighter artillery. Owing to long range fire they can use enfilade or oblique fire, where lighter artillery can only reach enemy by frontal fire.

Use : 4.7 shell ; 60 lbs .

- Range-10,000 yards.


## Garrison Artillery

For coast defence :
r. Fixed armament.
2. Movable armament.

The heavy and medium guns which are intended chiefly to encounter vessels larger than torpedo-boat destroyers.

High angle fire guns, intended by deck attack to prevent bombardment at ranges at which the side armour of ships is beyond the penetration of other heavy guns.

Light quick-firing guns for use chiefly in case of torpedo attacks.

The guns of the movable armament are generally allotted for the defence of land fronts or for use in case of attempted landings, but they may also be used as auxiliary to the fixed armament.

## INFANTRY.

Compared with cavalry and artillery, infantry is very slow and the distance which infantry can march in a day is limited. But on the other hand infantry can travel over ground which is impassable for cavalry or artillery.

They are less hampered by darkness, can gain cover more readily.

It has the power to develop rapid fire and concentrate that fire in any direction, but the expenditure of ammunition involved in rapid fire does not as a rule give the results according to the number
of rounds expended, unless it is delivered at large and conspicuous targets. Fire control is essential if the full power of the infantry is to exist.

MOUNTED INFANTRY.
Mobile, but only three-quarters in action, one-quarter holding horses.

## ENGINEERS.

I. Field Troops.
2. Field Companies.

Allotted to cavalry division; owing to being most mobile of their force, can travel much faster.

Owing to all being mounted, their tools being carried on pack animals and in light waggons.

## FIELD COMPANIES.

Usually allotted to infantry and slower moving forces.

Include :
Telegraph.
Cables.
Bridges.

## CYCLISTS.

Owing to mobility, are usually used for scouting, reconnoitring and despatch carriers, owing to the fact that they can travel much faster and much quieter than horsemen. It has been known for one single horseman travelling along a road to be heard 600 yards. Another advantage cyclists have over cavalry is they can travel over ground which cavalry can not.

If they do go into the attack the whole force can go into action, as no horse-holders needed.

## CHAPTER XI.

## FIRE ORDERS

THEORY OF RIFLE FIRE.
Needle gun-I862 first breach-loading gun.
" $T$ " in gun $3300^{\circ} \mathrm{C}$. $161 / 2$ tons per sq. in.

Ross tested at 24 tons per sq. in.
Muzzle jumps up, down or sidewise.
Tremors and vibrations in barrel.
Drift-Lateral deviation caused by rifling. Smooth base does not drift. Drift depends on direction of rotation.

Bullet drifts :
Ift. at 600 .
2 " 1000 .
7. " I 500.

This must be added to or subtracted from wind.

Sighted normally for :
T $60^{\circ} \mathrm{F}$.
Bar. $30^{\prime \prime}$.

Still air on horizontal line of sight.
Slope greater than ro\% less elevation. Colder-more elevation.
Bar. higher we ascend, less elevation. For $1000^{\prime}$ elevation-Mercury drops $I^{\prime \prime}$.

At $5000^{\prime}$ elevation-stands $25^{\prime \prime}$.
For every $I^{\prime \prime}$ deduct $I 1_{2}^{\prime \prime}=15$ rods in 1000 .

Light-Harder to see over estimate.
Easier to see under estimate.
At 500 yds. company of men put $75 \%$ shots. Effective zone 220 yards.

At 1000 yds. effective zone.
I 10 yds. in depth 14 ft .
At $1500-100$ yds. in depth and
Human error- $15 \%$ of range.

## FIRE ORDERS.

Must be as brief as possible, consistent with clearness. Should not contain an unnecessary word and firm so as to ensure obedience and loud enough to be heard.

## CHAPTER XII.

## MAP READING

## CONVENTIONAL SIGNS.

How to read a map.
How to set a map.
How to find one's way by the same.

## ROADS. <br> A ist class road $=$ two heavy lines

In a colored map, usually in brown and written underneath whether metalled or unmetalled.

A 2 nd class road=one heavy line and one thin line

Usually stated at bottom what kind of troops could pass over the road.

A 3 rd class road = two thin lines
As a rule not fit for heavy traffic, e.g. transport, cavalry, artillery.

Fenced side.
Unfenced side.

Swampy, marshy country.

Evergraen
A tree that loses its leaves in the fall and gets them in the spring.

Orchard = Always "laid out" in line where woods are irregularly spaced.

F. $\quad=$ Forge or blacksmith shop.
S.P. $\quad$ Sign Post.
T. = Telegraph or telephone station.
P. $\quad=$ Post Office.
S.M. = Saw-mill.
S. $\quad=$ School.
H. $\quad$ Hotel.
$=$ Railroad line marked "single" or "double" if not room for double track.

$$
\cdots \notin \mathrm{mm}=\text { Tunnel. }
$$

$=$ Church with tower.
$=$ Church with steeple.
= Any kind of church or chapel, mission hall, etc.
$=$ House or barn.
Brick in red.
$\square \mathrm{W}=$ Wood in black
Stone in red.
© = Windmill.
C] Cemetery

$=$ River.
$=$ Ford.

$=$ Ferry.

$=$ Floating bridge pontoon, driven across river by altering angle of bridge by cables so water drives pontoon across.
$=$ Obstacle.
Frequently wire entanglements.

When directed to go to a certain place by map :
r. Look for scale :

$$
\frac{1}{6335^{\circ}}=1^{\prime \prime} \text { to mile. }
$$

2. North Point. Not on military map, but side lines of all military maps run true North and South. Find magnetic bearing. At Guelph say $5^{\circ} \mathrm{W}$. Lay protractor on true N. and S. and mark point. Count off $5^{\circ}$ and draw line.

To set the maplay it flat on the ground. Place compass on it. Allow compass to come to rest. Rotate map under compass till needle corresponds to magnetic bearing.

## Another way to set a map :

Select three objects in landscape. Locate them on map, turn map (on ground) to correspond with three objects.

Another method:
Use "Big Bear." Turn map till N. and S , line points to N. star.

## CHAPTER XIII.

## CARE OF ARMS

## CLEANING.

Wear caused by :
Heat.
Excessive use of gauze.
Passage of bullet.
Bore has a high polish. This must be preserved.

Life of rifle barrel: 5000-6000 rounds.

## THREE KINDS OF FOULING.

Internal fouling, gases forced into pores of steel.

Superficial, deposit of solid products of combustion.

Metallic fouling, "nickelling" (armorer must remove nickelling).

## DAILY CLEANING

Cleaning before firing.
Cleaning after firing.
Daily cleaning.

Take a dry rag, wipe whole of outside, being particular about corners.

Cleaning bore not necessary daily. Always have a film of oil in bore.

## CLEANING BEFORE FIRING,

Remove oil with dry flannelette.
Remove all grease and oil from bolt action.

Use Russian Petroleum, will not thicken as much as other oils.

CLEANING AFTER FIRING.
Most Important.

1. Clean immediately after last shot.
2. Use gauze to break up fouling. Put through tightly - draw through with one arm.
One application of gauze.
3. Then take $2 \times 4$ flannelette and draw through till rag clean.
4. Put in film of nil.

Clean like this for three days after firing.

Clean bolt head after firing with piece of stick, and black lead, and put a little oil on it.

In case of black ammunition fouling accumulates. Should put pull-through and oily rag through once in 10 to 15 rounds.

No gauze after blank if oily rag has been put through.

When atmosphere is dry and hot, gauze may not be necessary ; use tight rag. Rifle cleans easy in this kind of weather.

## FOR DRILL PURPOSES

Never remove oil from bore, but oil should be removed on ceremonial parade or during "weekly inspection of small arms."

## INSPECTION

Officers should inspect arms once a week and report any accidents to rifles.

Examine bore for rust or cuis (cracks).

Examine sights not bent, tight joint pins of back-sight tight: ?

Magazine platform.

See if spring is strong enough .
That "sear" works properly, and has not been tampered with.

That extractor works O.K.
That ejector works freely.

## CHAPTER XIV

## MUSKETRY EXERCISES

TO LOAD.
Use charger.
(A clip is not a charger.)
(Clip goes in magazine.)
(Charger does not.)
Efficient if 30 chargers in 45 seconds.
TEACHING AIMING.
20-25 minutes on Company aiming lessons.
1st. Reason for sights on rifles :

## FORCES.

Explosion.
Resistance of air.
Gravity.
TRAJECTORY.
Highest point $=\mathrm{Culminating}$ point.
Reason for sights = Clear view of object. Also for alignment.

Where bullet has descended low enough to hit head of man $=$ ist catch
Where it strikes ground = 1 st graze .
The danger space $=$ Distance between them.
With Ross Rifle, the danger space $=600-$ 700 yards.
" German $=800$ yards.
" American $=800$ yards.

## RULES IN AIMING.

ist. Man keeps sights perfectly upright.
2nd. Close other eye.
$3^{\text {rd. }}$. Fore-sight, centre in notch of backsight and level with top. With peep, bring sight about to centre.
Next take man.
Teach him how to adjust the back-sight. On Ross :

Screw elevating sight.
Draw.
COMMON FAULTS IN AIMING.

1. Taking too much or too little foresight.
2. In accurate centring of fore-sight.
3. Canting rifle.

Right-Right and Low.
Left-Left and Low.
4. Not keeping eye fixed on object.

## FOCUSSING.

Practice rapid alignment to overcome this.

Make men declare point of aim.
Aiming Disc to test a man's ability to take the regulation aim.

FOR TRIANGLE OF ERROR.
$30^{\prime}$ from rest to sheet of paper.
Instructor places disc as directed by aimer who says "mark" when correct.

Instructor takes one aim.
Recruit takes three aims.
The three dots form triangle of error.
If any one side is $1 / 3$ of an inch or centre $I / 3$ of an inch from centre, man has not passed test.

No man should be permitted to fire till he has passed this test.

AFTER TRIANGLE OF ERROR.
Index Target Rod.
Index Practice "grouping practice."
Miniature Range.
Grouping.
Application Practices.
Not over 20 sec . per shot.
Normal fire $3-6$ rounds per minute.
Rapid from io-r 5 .

## Rapid Fire.

$\begin{array}{ll}\text { Say } 6 \text { rounds in } \\ \text { Then } 5 & \text { " } \\ 30 & \text { 20 }\end{array}$

## Advanced Aiming.

Aim at moving objects.
Table I ft. in front of man walking across per 100 yds.

2 ft . running.
3 ft . horse trotting.
4 ft . horse galloping.
Too rough for any object over 300 yds.

1. Aim at feet.
2. Carry rifle off.

Objects toward or away
Toward-Aim so as to see 3 ft . of ground.

Away-Half way up on body.
Diagonally-A combination.
Aiming at Indistinct Targets.
Man takes cover.
Comes up. Squad notes. Man down.
Squad told to aim at point where they thought man was.

## Firing Exercises.

Taught in three ways and four positions. Ist-Without any word of command, then by word of command, then by combining one or more motions by word of command. It is taught in four positions:

Standing.
Kneeling.
Sitting.
Lying.
The standing position is used over high continuous cover such as high mud walls, hedges or where no other position
can be takea up. The kneeling position is taken up behind low continuous cover, such as low mud walls, low hedges where the prone position cannot be taken. The prone position should always be taken up in the open, as cover is gained more readily, or where no other position is named. The sitting position is used when firing down an incline or across a valley.

## Judging Distance.

Very important in connection with rifle shooting. Officers and Non. Coms. should be able to judge distance up to 1400 yards and not have greater error than $20 \%$. Privates up to 800 yards and $u p$ to 600 yards without an error.

## Effect of Low Estimate of

 Distance.I 400 yards is limit of effective rifle range.

600 yards limit of close fire.
Over 1400 yards range-finders are used.

Officers must be able to judge quickly ${ }^{*}$ after change of position. After 600 the officers may lose control of fire and it may become a matter of each judging for himself.

Unless range has been correctly taken most perfect shot would be ineffective.

Beaten zone from 500 yards would be 200 yards.

At 1000 yards beaten zone would be 120 yards.

METHODS TO USE IN TEACHING Judging Distance.
Take bolt and look through bore.
At 300 yds. man fills bore.
" 600 " half fills bore.
" 900 " third fills bore.
By comparison of objects as size of window or door.

By using men at 100 yds. intervals standing, kneeling or lying.

At 100 yds. eyes and buttons are visible.

At 200 yds. eyes become shadowed, buttons appear as a line.

At 300 yds. man's shoulders taper into head.

At 400 yds. taper is very distinct.
At 500 yds. taper more pronounced and figure becomes distinct.

Men should then be tested out kneeling.

At 400 yds. man very small.
At 500 yds. almost invisible.
Lying at 100 yds. if lying still in short grass, almost invisible.

At 200 yds. likely require glasses to be seen.

At 300 yds. practically safe.
Another method have men judge half distance and then multiply by two. (Favorite method).

Teach to judge short distances 100 or 200 yards, and then apply this to longer distances.
Another method-By lateral jump of thumb each man must find his own factor.

Conditions affecting judging distance if object is lighter color than object under estimate. Viewed over water, snow or level ground under estimate.

Object small, same color, only partially seen, over broken ground, mist or failing light cause over estimate distance. Distances are judged by sound, beats per 3 sec .

I beat $=$ Ioo yards.
Man on outpost duty at night can make use of above.

## Sequence of Positions.

ist. The standing position. To come to the loading position, to load, to unload, to aim, trigger pressing, adjustment of sights.

This runs the same through all positions.

## Danger Space.

Extent depends on firer's position and height above ground.

With Mark VI. danger space any distance up to 500 yards. With Mark VII. danger space up to 600 yards.

Flatness of trajectory, conformation of the ground; gentle slopes are very dangerous.

Defilated zone is the unbeaten bullet area on opposite side of hill from fire position.

Dead ground is ground unswept by fire in the side of hill in from firing position.

Terms given to fire :
Firing from a high hill termed Plunging Fire. (Minimum effect.)

Fire on level surface, Grazing Fire. (Maximum effect.)

Sweeping Fire concentrated or distributed along enemy's front.

Oblique Fire-Firing at an angle, straight in front-Frontal Fire.

Searching Fire - Distributed in depth.

Enfilade Fire - Fired on from flank.

Reverse Fire - Fired on from rear.
Converging Fire - Two machine guns from different points firing at one position at the same time.

Zone of Fire-In distribution of shots over a certain area, each man has his own zone.

The nucleus of beaten zone is where $50 \%$ of shots fell in zone of fire.

Where $75 \%$ fall-Effective Zone.
Where $90 \%$ fall would be termed the Beaten Zone.

Where shortest shot falls is Danger Zone, and Danger Zone added to Beaten Zone makes up Whole Danger-space.

Collective Fire always used where possible.

Individual fire never emploved over 600 yards.

## CHAPTER XV.

## MOBILIZATION

Mobilization is the process which an armed force passes from a peace to a war footing.

Mobilization may be either general or partial. In the former event the whole of the Active Militia would be placed on a war footing (and in the absence of orders to the contrary) the war establishment being laid down would become operative.

In the event of a partial mobilization, special instruction would be issued detailing the force to be employed, its war establishment and its war outfit.

## PERSONNEL.

To complete its war establishment a unit depends upon the personnel borne on its service roll, appointments and promotion transfers and attachments from other units, corps reserves, the
reserve of Officers, civilian rifle associations and other reserves of the Militia (which has not yet been organized).

Headquarters units will be mobilized by or under the direction of their Commanders, each of whom will, as far as possible, complete the personnel of his own headquarters by detaching Officers and men as required from regiments and units under his command, with the following limitation :
I. Officers required for the completion of his staffs will be detailed from Militia Headquarters.
2. As regards Cavalry Divisional Headquarters, special instruction will be issued.
3. Each Divisional and District Commander will be responsible for the attachment of signalling and postal corps detailed to the Cavalry and Infantry Brigade Headquarters' units, which mobilize within the area of his command.
4. Mounted police, military police for Infantry Brigade Headquarters' units, will be detailed from the Divisional Cavalry Regiment.
5. Transport personnel will be provided as explained in Notes 21 and 22.
6. The Motor Corps has not yet been organized.

Officers and men detailed to serve with Headquarters' units will be surplus to the war establishment of the regiment unit from which they are detached.

Instructions will be issued regarding the Mobilization of Regimental Units which do not exist as such in time of peace. Divisional and wireless telegraph company, divisional ammunition columns, transport and supply columns and divisional transport and supply park.

The war establishment of cavalry regiments and infantry battalions include machine gun sections, which will be absorbed by squadrons and companies should machine guns not be available.

The following officers and men are shown in the Regimental Establishment of the Active Militia, but they do not take the field with their respective units.

Cavalry Regiment, Pay Sergeant.
Field Artillery Brigade Regiment, Quartermaster Sergeant, Pay Sergeant, and Battery Orderly Room Sergeant.

Heavy Artillery Batteries, Orderly Room Sergeant.

Infantry Battalions, Paymaster, Bandmaster, Paymaster Sergeant, and Bandsmen.

Chaplains will be attached to units as required.

Bicycles are provided for inter-communication. They will be ridden by men specially selected for the purpose. A cyclist section, consisting of one Lieutenant, one Sergeant, one Corporal, and 20 men, including one cyclist repairer and one batman, may be raised in each Infantry Battalion. Bicycle riders and cyclist section are included in the total war establishment of their respective units.

Unless otherwise ordered batmen are allowed at the rate of one for Dismounted Officer or Mounted Officer with one horse and two for each Mounted Officer with two horses. They carry arms and are available for duty in the ranks.

## CHAPTER XVI.

## ORDERS

Classified as follows :
I. Standing Orders.
2. Operation Orders.
3. Routine Orders.
4. Field Messages.

## OBJECT OF STANDING ORDERS.

I. (I) To adapt existing regulations to local conditions.
(2) To save frequent repetitions in operation and routine orders.
2. Unless carefully revised and kept up to date, standing orders may lead to misunderstanding. For this reason they should be confined to essentials and added to as circumstances require.
3. The authority issuing standing orders is responsible that any alterations in them are notified to the
troops, and that they are communicated to troops newly entering the command.
4. Repetition of existing regulations is to be avoided.
5. At least six copies of standing orders should be issued to each squadron, battery, or company, and one to each officer.

## MESSAGE INCOMPLETE.

Names of places and persons will be written in block capitals, e.g. LONDON or WELLINGTON. Names of places must be spelt exactly as given on the map in use. Great care is necessary to prevent possible misunderstanding resulting from the existence of two or more places of the same name. Abbreviations will only be used when there can be no doubt as to their meaning. The writer of an order, report or message is responsible that any abbreviations he may use are such as will be understood by the recipient.

OPERATION ORDERS Issued to all concerned. See page 28, F.S.R. ist Div. Order, No. 23.
Reference Map: Date
LONDON Orders by
SHT.
Information. (Body of Information)

Intention. Summary of Intention.
Instruction. Details of Instruction.
Starting Point.

Hour of Starting.

Reporting Point.

Hour.
Mode of Service.

## ROUTINE ORDERS.

Are orders which are published daily. They are of same nature in war as in peace.
ı. Drills.
2. Discipline.

## REPORTS AND FIELD MESSAGES

i. Short.
2. Concise.
3. To point.
4. Only essentials.
5. Written plainly.

If not time to write report or message sent verbally by messenger and later written at earliest possible time.

## CHAPTER XVII.

## PARTS OF RIFLE AND DESCRIPTION

Four Parts.

1. Barrel.
2. Bolt.
3. Receiver.
4. Stock.

Barrel-Screwed into receiver. Breach end of barrel has been enlarged so as to take case of cartridge. This expanded part-Chamber Foresightattached by sleeve to muzzle covered by hood.

Bolt-Held by bolt stop. To remove bolt, place bolt stop out of barrel and draw. Bolt is in bolt sleeve.

Bolt held by lugs.
Extractor.
Ejector.

Hole in bolt to allow gas to escape.
Bolt is hollowed and has a firing pin in it and projects through the cocking piece.

A coil spring.
Part attached to cocking piece is cailed the "bent."

Safety Catch - "Ready" and "safe." On side of sleeve, grooves; sliding in "ribs" on side of receiver.

On bottom of sleeve two lugs.

## RECEIVER.

"Body."
Attached to receiver is trigger.
5 Ibs . and 2 tbs .
Trigger action : Trigger seer, yolk, safety pawl.

Attached to receiver: Trigger guard and plate, by screws. Magazine also attached. Holds 5 cartridges.

Also attached to receiver: Charger sight-base, charger guides.

On magazine: Two retaining springs to prevent cartridges flying out.

PARTS OF RIFLE-DESCRIPTION 111
Stock.
Fore end.
Butt end.
Small.
Toe of butt.
Heel of butt.
Handguard, held two springs by lower hand.

Recesses in butt for oil bottle and pull-through.

Pull through :
3 loops-
ist. For wire gauze.
2nd. For flannelette.
3rd. For armorers' use.


## CHAPTER XVIII. <br> PROTECTION OF TROOPS ONTHE MARCH

## GENERAL PRINCIPLES.

No body of troops can be considered for one moment safe without the protection of :

1. Advance Guard.
2. Flank Guard.
3. Rear Guard.

Bodies moving in the direction of the enemy will have in advance an Advance Guard consisting of all arms. Before the body (Advance Guard) moves off the Commander of the Advance Guard will receive his orders as to the direction, what is known of the enemy, and our own troops on the right and left. The Commander of the Advance Guard will then telloff his Advance Guard in the following manner :

## Company Advance Guard.

ist. Pointers, usually two men and a N.C.O.

2nd. Flankers, right and left.
3rd. Two connecting files, two each.
When Advance Guard halts one man of each connecting file turns about to receive messages. Must be signallers or understand signalling.

4 th. Advance Party (especially in hilly and broken country), 3 men from right and left of which may be detached for keeping in touch with right and left flankers.

Two more connecting files.
Take remainder of Nos. I and 2 platoons and make them into "supports." These will move in 4 's on road or in line in the open.

This portion of the Advance Guard is known as the Van Guard. The duty of the Van Guard is reconnaissance.

The platoon commander of No. I will place himself where he can best super-
vise the men of his platoon, i.e. with (in front) the Advance Party. (io to I2 men in Advance Party).

Platoon Commander of No. 2 will take command of the supports.

Connecting files from supports will be dropped so as to keep up communication with the Main Guard.

Nos. 3 and 4 platoons form the Main Guard.

## Main Guard.

The duty of the Main Guard is resistance.

From the Main Guard connecting files are dropped back to keep connection with the main body.

The duty of the Advance Guard is to push the Advance Guard of the enemy back and to prevent any checking of the main body. If they find it impossible to push back the enemy's Advance Guard, they will then take up a position if possible. If the ground is no favourable the pointers and flankers an
other bodies will fall back, but they must hold the enemy in check to give the commander of the force time to get his force into a fighting formation.

The Captain usually travels with the Main Guard.

## Flank Guard.

Duties same as Advance Guard, only protecting flank instead of front. It is also their duty to watch that the enemy's cavalry does not avoid meeting the Advance Guard and attack the column in the rear. When the enemy are strong in cavalry they may try to do this. A Flank Guard is sometimes formed by causing Advance Guard to turn right or left.

## Rear Guard.

A Rear Guard to a force advancing does not need to be very strong. A few may be employed as scouts, the remainder to gather stragglers falling out from the column so that they will not get lost.

## CHAPTER XIX.

## PROTECTION OF TROOPS AT REST

OUTPOST.
An Outpost usually has :
A river.
One or more cross-roads.
One or more prominent objects. A railway.
An Outpost is for the protection of troops while at rest. Every body of troops, when halted, will be protected by outpost, so that they may rest without being disturbed.

The duties of an Outpost are :
I. To provide protection against surprise.
2. In case of attack hold the enemy in check to give the Commander of the main body time to get his force into fighting formation. Or if he has previously made his plans give
him sufficient time to put his plans into execution. If the enemy is so constantly watched that they cannot move without being observed, surprise will be impossible. All partial attacks must be warded off and the enemy should be prevented from getting into field artillery range of the main force. There are therefore two other uses for an post

1. Reconnaissance.
2. Resistance.

An outpost of all arms will usually consist of outpost mounted troops and outpost companies. When necessary the reserves with machine guns will generally be included and sometimes artillery, which is usually horse artillery. The reason that horse artillery is used with protective troops is they can move more rapidly from one position to another.

Only three rules can be laid down in regard to strength :

1. Outpost is one of the most strenuous duties which troops are called upor to perform. Therefore, not a man
or horse should be employed more than is absolutely necessary.
2. In close country troops are confined at nights to the roads, therefore roads should be carefully watched as well as the intervening country.
3. The resistance of the outpost must be sufficient to hold the enemy in check until the Commander of the main force can put his force into action.
The strength of an outpost shall be sufficient for this.

## Double Sentry.

Group System : 6 men and N.C.O. and piquet 300 yards in rear, one a sentry, others lie down.

## Duties of an Outpost Commander.

The Commander of an outpost should be told before the force halts :
a. What is known of the enemy and of other bodies of troops of our own.
$b$. The intention of the commander who appointed him if the enemy attacks.
c. Where the force to be covered will halt.
d. The general position to be occupied by the outpost.
e. Whether there are any other outpost troops on his flank.
$f$. The composition of the outpost, and the hour at which they will be relieved.

Detailing an Outpost.
Divide Company into two.
1 and 2 Form the Supports : Platoons-No. i Piquet.
3 and 4 form the Supports Platoons-No. 2 Piquet.
From No. I Fiquet tell off 6 men and N.C.O., which is No. I Group.

From No. I Group place two sentries. Tell sentry frontage he has to watch. Also shortest way to return to his piquet. Also he must not allow anyone close enough to overlook his post. If the party approaching has letters or a parcel to be delivered the Commander of group and a file will move out and receive them and order the bearer to return. If bearer wishes to communicate
with Commander of main force he is blindfolded and brought into piquet, where he is detained till word is received from Commander. No conversation is to be carried on with him except by the Commander of the outpost.

After they have completed conversation or delivered message or completed dealings with Commanding Officer, the messenger will be taken out of the lines, not by a direct route, but led around.

Now station No. 2 Group.
From No. 2 Group put sentry at bridge and give him name of river and railroads and where they come from and go to. He must also be told where rivers are fordable, or where there is a ferry. These points must be closely watched.

Put detached post 6-12 men at crossroads.

An outpost will always be under arms an hour before dusk and an hour before dawn.

Place other groups until frontage of No. I piquet is covered.

Do same with No. 2 piquet as for No. i.

## CHAPTER XX.

## Method of Supplying Troops with Food and Forage in Time of Peace

Government calls for tenders and merchants contract to supply food, forage, etc. In stationary camps or barracks it is delivered daily to the Army Service Corps, if there is one. Indents are made out by the Quarter Master showing the number in his Battalion, giving the number of pounds of bread, etc., required. He is informed by the Company Quarter Master Sergeants the number of men in their Companies. By this means he supplies to each Company the number of rations required. These rations are delivered to ration carriers or to Company ration room, or to Company cooks. When the rations are issued to Company cooks the Company Orderly Sergeant or

Orderly Corporal with the Orderly Officer of the Day should be there to receive and inspect the rations.

Forage is supplied in the same manner, but is delivered to the Squadron or Battery Quarter Master Sergeant

## OFFICERS' MESSES.

Officers' Messes are established for the convenience of the Officers of the Regiment. All single members should be dining members. They are managed by a committee of three Officers of which one must be a Field Officer, who acts as President. They are responsible for the entire management of the Mess and for its financial standing. They are also responsible for the conduct of Officers in the Mess. The President enters first and sits nearest the entrance. All the help employed in the Mess are under the Vice-President.

## SERGEANTS' MESSES.

The object of these messes is to bring all Non. Coms. above the rank of Corporal together and cause sociability amongst them. All such Non. Coms.
must be members of this mess and all single members must be dining members. A subscription fee will be charged each member to meet expenses. Married members will be charged 15 cents, single men 25 cents.

These messes are run by Committees of which the Sergeant Major is President. A Secretary-Treasurer should be appointed, usually a Color Sergeant. Where there is a wine bar attached to the mess, the Secretary-Treasurer should collect the proceeds every night at the closing hour, in p.m. A mess meeting must be called once a month and all business of the mess put straight. Books, such as cash, receiving and consuming ledgers, must be taken to C.O. once a month.

## THE DAILY RATE OF MESSING.

Extra charge is 25 cents, but at the pleasure of the C.O., if funds are good, it may be reduced to any amount he thinks is sufficient.

## CHAPTER XXI.

## WAR OUTFIT

War Outfit is as regards material what war establishment is as regards personnel and animals.

It consists of :
(r) War equipment.
(2) Clothing and necessaries.
(3) Regimental supplies.
(4) Medical and Veterinary equipment.
War Equipment consists of that portion of its peace equipment which a unit retains on mobilization plus its mobilization equipment, the additional equipment which is required for war.

War Equipment is subdivided into two parts, personnel and regimental equipment.

Personnel equipment comprises the arms and ammunition, and accoutrements, belts, pouches, bandoliers, slings, mess tin, haversack, water bottle, and
similar articles, carried outside the clothing, which are issued for the personal use of a soldier.

Regimental Equipment consists of such as arms, ammunition and accoutrements as are not personal equipment, and of the guns, ammunition vehicles, harness, saddlery, stationery and other stores held either as peace equipment or as mobilization equipment.

Clothing and Necessaries comprise the personal kit of a soldier other than arms, ammunition and accoutrements.

Regimental Supplies comprise the rations, forage, and fuel to be carried by a unit for its use in the field.

Medical and Vetesinary Equipment comprises the medicines, drugs, and appliances required in the field by units as well as by Medical and Veterinary Officers.

War Outfit affects transport and therefore war establishment; the normal scale of war outfit is calculated to satisfy the conditions which the circumstances of a General Mobilization would be most likely to impose,

Under other conditions it might become necessary to alter the normal scale, in which case special instructions would be issued.

The table in section (2) shows the scale of ammunition tools and rations, forage and fuel on which the normal scale of transport has been based.

Blankets for men are not included in the normal scale of war outfit, but one blanket per man will be carried as special equipment if ordered. In units where this necessitates an addition to the normal scale of transport, the extra personnel, animals or vehicles required are shown in a "Note" on the war establishment table.

Come in.
This is the list of Abbreviations that are used in Semaphore.


## ALPHABETICAL SIGN.

ist. A to G -Right hand to O and left hand to $G$.
2nd. H to N -Right hand held at A and the left makes a complete circle

3 rd . O to S-Right hand at B and the left hand completes the circle.
4th. T U Y and Annul-Right hand at C and the left hand completes the circle.
5th. Circle V-The right hand at D and the left at G.
6th. W X Z-All made on the left side.

## CHAPTER XXIII.

## PHYSICAL TRAINING

Physical Training is the foundation upon which is built the efficiency of every soldier. "Mens sana in Corpore Sano." Unless a man is physicallỳ fit as a soldier, he is unable to carry out the duties assigned to him. Upon his physical fitness depends his power of endurance, his nerve, his stamina, his morale and therefore his efficiency, and as his value is no greater than his mental and physical fitness, yout realize how important it is that these qualities be developed in him.

The whole stuccess of the British army to date has been based on the physical fitness of the troops and so will it be to the end of this war. The forced marching, the rapid dig in for dear life, the feverish firing from rifle and machine guns, the æroplanes hovering overhead, the night attacks, the hand grenades,
and the terrific bursts of huge explosives ; bayonet fighting, the constant exposure, exhaustion and strain, and the terrible continuity of it all, will wreck all but the strongest nerves, and unless a man be.physically and mentally fit he will go under.

If a man is not physically fit his health will break down; once his health goes, his nerve will go also. The nerve depends of health and health depends on power of physical endurance, and Physical Training is the means of developing this.

Again Physical Training developes all these qualities in a soldier which are so essential for success in war. Executive ability, confidence, intelligence, co-ordination, nerve, discipline and determination.

The set of exercises given below are only a few of many. But they are a special selection intended to begin to build up rapidly, although progressively, the physique of the soldier, who has but a few months to train. They may be called a foundation set which
after the men have become master of they can build upon.

It must not be forgotten that the officers have the same physical tests as the men, but with added responsibility. "Constant responsibility wears out the body as well as the mind," and an officer can never be too fit nor can any man.

Physical Training to be productive of the total of these resules must be carried out properly. Nothing but the strictest discipline must be enforced and a constant alertness of both body and mind to act upon the instructor's every expression of will must be demanded.

The main thing that Physical Training should help make the soldier he is :

Well disciplined, self-confident, a good marcher, intelligent, smart, active and quick ; able to surmount obstacles in the field, and capable of withstanding all the strains and hardships of active service, and also capable of going long distances without undue fatigue; the endurance of discomfort
without complaint and the carrying out of protracted operations in the field.

> J. N. Cantin, ,

Lieut.

## Ist SET OF PHYSICAL TRAINING EXERCISES

## HINTS TO INSTRUCTORS.

Be sure of the exercises yourself. Firstly: Do not bully the classencourage it. Do not overwork it, give an occasional rest. Give exercises in proper progression and intelligently. Explain and always illustrate every exercise. Correct one fault at a time and the biggest fault first, then minors, till exercise is performed correctly. Give a good distinct word of command. The execution of the exercise will be as you command. Insist on absolute steadiness, especially at the halt, attention and stand at ease, and upon the proper performance of the exercises, always. Exercises detailed for one member only are applicable to both. Get thoroughly acquainted with the exercises of each
stage and as you become more so, gradually introduce exercises of the next stage till finally you are master of them all. After which you may add to these by using the Army Physical Training Mantual or the Senior Series of Physical Training now being sold.

## SET OF EXERCISES.

Preliminaries - Fall in - right dress - from the right number - the position of attention-the stand at ease -opening and closing ranks-odd numbers front rank, even numbers rear rank -stepping forward, backwards and sideways-turnings, right, left, aboutknees straight-feet close, open, full open.
I. Quick March - Take a full pace with the left foot, at the same time swing the right arm forward-swing the arms from the shoulders, fingers bent naturally-a pace of 30 inches and about i40 to the minute.
2. Slow March-Stretching the hands and arms well down by the side, cut down pace to about. 80 per
minute, march with a straight knee, body erect, and have toes follow ground.
3. Knees Raise-In little slower time than quick time, raise knees till thigh is horizontal, lower part of leg vertical, toes pointing downward, arms steady by the side, fingers extended, body erect, energetically.
4. On the Toes Raise-Arms stretched well down and steady by the side, fingers together and extended, thumbs in line with the seam of the trousers, shoulders braced back, chin drawn in, knees straight and a lot of spring from the instep, raise on toes.
5. Hopping on alternate feet, beginning on the left foot-with hips FIRM ON THE LEFT FOOT.
Hop (given on right foot). Hips firm, palms on hips, fingers to the front and pointing downwards, thumbs to the rear, body square to the front and erect, elbows and shoulders braced well back. The
hop must be made from the instep and upwards, the other leg straight to the rear and toes pointing to the rear.
6. Double March-Arms bent at the elbows at 90 degrees and swing by the side straight to the front. Hands closed,-a light energetic step on the fore part of the feet $40^{\prime \prime}$ long and about 180 to the minute.
7. Double Mark Time-The arms, still bent, must be kept steady, the feet raised well off the ground.
8. Knees Up - Keeping the arms steady, the knees are brought up in quick time, till the thigh is horizontal, lower part of legs vertical and toes pointing downwards. The spring is got from the instep.

## STANDING EXERCISES.

Preliminaries - From the right number. Open ranks march. Half right or half left turn.
9. Arms bending and stretching upwards, sideways, forwards and downwards (by numbers or taking the time from the front).
Commence on one, two, etc.
At the arms bend, the hands, clenched and turned inwards, should be in line with the shoulders. This exercise to be effective must be done with a lot of snap. Palms always turned inwards and the width of the shoulders apart, except for the arms sideways, stretch, when they face downwards, fingers together and fully extended.
io. Feet Astride and Neck Rest The left foot is carried to the left about 15 inches, at the same time raise the hands quickly the shortest way and place them behind the upper part of the neck, finger tips just meeting, chest well raised, head erect and elbows pressed well back, wrists straight.
Foot In and Arms Downwards Stretch - Bring the left foot to the
right, at the same time bring the hands the shortest way down to the sides.
11. Trunk turning, feet astride and neck Rest. (Sec. io).
Trunk to the Right, Turn-Turn the trunk to the right, keeping the hips square to the front and elbows pressed well back, and so, for front turn and left turn.
12. Arms flinging upwards and backwards:
Arms Upward Fling-2, if 2 , etc.
The arms are flung energetically forward from the position of attention to that of arms above the head, raise, palms turned inwards, and the width of the shoulders apart, fingers closed and well extended, chin drawn in and knees steady. On the word 2 , they are flung from the upward position downwards and brought as far back as they will go. The body must be kept erect. The arms may be brought to this last position by lowering them sideways and backwards.

## Steady.

13. Arms flinging forward with feet astride.
Ready-Carry left foot off to left about $15^{\prime \prime}$ and as the right foot is carried to the right another $15^{\prime \prime}$ bend the arms forward, palms downwards, - fingers together and extended, elbows well back and in line with the shoulders.
Fling-Without allowing the elbows to come forward fling the arms vigorously sideways and backwards to their fullest extent, keeping the palms of the hands downwards and immediately return to the position of arms forward bend.
Feet In and Arms Downwards Stretch.
Bring in the right foot about $I_{5}$ inches and then as the left foot is brought to the right bring the arms down to the sides to position of attention.
14. Body Bending with Feet Closed and Neck Rest-(or with arms above the head). To the right, left, forward, downwards and backwards.

To the Right Bend-Bend body to the right, elbows kept well back, heels on the ground.
To the Left Bend-Bend body to the left, elbows kept well back, heels on the ground.
Forwards Bend-Bend body forward as much as a hollow back will permit, the head must not be dropped, elbows back, chin drawn in.
Downwards Bend-Bend body downwards with a round back.
Backwards Bend-Bend body backwards from between the shoulders, knees straight, chin drawa in.
Upwards Stretch-Arms Downwards Stretch.
15. Knee raising and leg stretching :

With Hips Firm Right Knee Raise, Leg Stretch. Bend. Lower.
The knee is raised till the thigh is horizontal, the lower part of the leg vertical and the toes pointing downwards, body erect, elbows well back.

Leg Stretch, the thigh remaining horizontal, the lower part of leg is brought up in line with it, toes pointing away.
Bend-Knee Bent to Former Posi-TION-Lower.
16. Astride Jumping, with Hips Firm. Commence:
Raise on the toes and then separate legs about 30 inches, knees straight, landing on toes and getting all the spring from the instep. In-OutGive word Steady when feet are out to bring the class to attention.
17. Knee bending and stretching with hips firm (or neck rest) :
On the Toes Raise. Knees Bend. Stretch. Heels Lower. The bending and stretching is done in slow time, unless otherwise stated. Half bend and full bend.
18. Knee bending and arms raising sideways and upwards.
For this exercise the hands are kept straight down by the side.
On the Toes Raise. Knees Full Bend.

Arms Sideways and Upwards Raise.
The palms are turned outwards and the arms fully extended are raised slowly to the position of "Arms above the head."
Lower. The arms are brought down slowly, palms upwards.
Steady. The palms are turned inwards.
Knees Stretch. Heels Lower.
19. Left Arm Upward. Right Arm Downwards-Stretch.
Firstly come to position of arms bend. Secondly, stretch left arm upwards and right arm downwards.
Trunk to Right or Left Bend-

- (Always bend opposite to the arm which is up. Stretch. The head must be kept erect and not dropped nor leaned towards upstretched arm.
Arms Change - Bend the arms and stretch them in opposite directions, body bending.
Arms Downwards Stretch-Bend the arms and stretch them downwards.

20. On the Hands Down:
I. Spreading the knees out well, come to a full knees bend, at the same time bringing the hands in between the knees, put them on the ground and slightly turned inwards, the width of the shoulders apart.
21. Shoot the feet to the rear, heels together, toes very slightly separated, arms stretched and body perfectly straight, chin drawn in and eyes looking about $18^{\prime \prime}$ in front of the hands.
Arms Bend-Keeping the body perfectly straight, bend the arms till it merely clears the floor.

## Stretch.

Right leg raise; left leg raise.
Raise right or left leg till heel of same is no higher than shoulders, straight to the rear and toes pointing to the rear. Arms Bend-Stretch.
21. On the Right Arm Turn:

Turn on right arm, body straight, head well back, chin drawn in, left foot on right foot, hips firm with free hand.

Left Leg Raise :
Raise left leg as high as it will go, toes pointing away from you. Keep body straight.

## LOWER.

Front Turn, etc.
22. Forwards Lying Down-It's on the hands down and arms bend.
Hips Firm. Backwards Bend. Chin drawn in, bend back as far as possible, elbows back, feet together and toes pointing away from you.

## Stretch.

23. On the Hands Ready-Come to position of forwards lying down.

## 24. Leg raising :

On the Backs Orer-From the position of forwards lying down, roll over on the right side, bringing the hands as in the position of attention, toes together and pointing away from you.
Arms Above the Head RaiseRaise the arms straight above the head, palms inwards and the width of the shoulders apart.

Right Leg Raise-Raise right leg straight and toes pointing away, to an angle of 45 degrees, slowly.
Lower. Lower leg slowly.
Both Legs Raise-Toes together and pointing away from you, knees straight, raise legs to an angle of 45 degrees, hold them there till given legs lower, when they are lowered very slowly and quietly.
25. On the Feet UP-Swing the arms forward and at the same time bring in the heels towards the seat and give yourself a good push up with the hands, or you may roll over on the right side to the position of forwards, lying out from that position "on the feet up."
26. Back Bending; Front Rank Sitting Down; Rear Rank on the Left Knee SUPPORT.
The ranks face each other at a distance of 2 paces and cover off on the word support. The front rank knees full bend with arms to the side and to the rear, and then shoot your legs to the front. Palms on
the ground and sitting erect. The rear rank take a step forward with the right foot and sink on the left knee, having the heel of the right foot in line with the heels of the man lying down, lower part of right leg straight and thigh of left leg straight, body erect, chin drawn in and tips of the fingers on the toes of the man in front of them.
Front Rank, Hips FIRM or Neck Rest Backwards BEND.
With a perfect hollow back and chin drawn in, bend backwards till the weight of body is on the ground.
STRETCH.
Raise shoulders off ground first and come up with a hollow back to sitting position.
On the Feet UP.
I. Right hand to right hand.
2. The man sitting down brings his right knee under him and gives himself a good shove up with the left hand, at the same time the supporting man rises and gives his man a pull up.
27. Arms Raising Sideways with Breathing in Your Own Time. COMMENCE.
The arms are raised sideways, palms downwards and as they are raised the lungs are filled by inhaling through the nose. As the arms are brought down, palms downwards, the lungs are emptied by exhaling through the mouth.

PRELIMINARIES.
ist Stage-i, 2, 3, 4, 6, 7, 8, 9, io, if, 12, $15,27$.
2nd Stage-5, 13, 14, 16, $17,18,19$.
3RD Stage-20, 21, 22, 23, 24, 25, 26.

