INFANTRY TRAINING

Part VIII.—FIELD CRAFT, BATTLE DRILL, SECTION AND PLATOON TACTICS

1944

(This part supersedes Military Training Pamphlets Nos. 33 and 42, 1942, Infantry Section Leading, 1938, Infantry Training, 1937, Supplement, Nos. 1 and 2, 1941, and the Instructors' Handbook on Fieldcraft and Battle Drill (Provisional).

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PREFATORY NOTE

Infantry Training Pamphlets will replace Infantry Training 1937.

They are produced in different parts, each dealing with a particular aspect of infantry training.

- Part I The Infantry Battalion.
- Part II The Rifle Company.
- Part III The Mortar Platoon.
- Part IV The Carrier Platoon.
- Part V The Anti-Tank Platoon.
- Part VI The Pioneer Platoon.
- Part VII Fieldcraft, Battle Drill, Section and Platoon Tactics.

The eight Parts must be read in conjunction, since they are interdependent and, to some extent, overlap.

The tactical handling of infantry will alter as the result of experience in battle. As time goes on some Sections of Infantry Training Pamphlets will become out of date. Infantry Training Memoranda will therefore be published by the War Office from time to time, to give the latest developments in teaching, and to keep the various Parts up to date.

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NOTE FOR THE HOME GUARD

Prepared under the direction of the Commander-in-Chief, Home Forces

1. This pamphlet has been produced for the Field Army. There are certain differences between the training of the Field Army and the Home Guard caused by differences in organization, weapons, and operational role. This note is to help Home Guard commanders to make intelligent use of the pamphlet.

2. Home Guard Instruction No. 51 in its four parts is the training manual on infantry tactics for the Home Guard. Nothing in this instruction is changed by the issue of Infantry Training, Part VIII. The two will be read in conjunction with each other, and, where they differ, Home Guard Instruction No. 51 will be followed.

3. The following sections and paragraphs of this pamphlet do not apply to the Home Guard, but commanders should study them and carefully note how the differences mentioned above between the Field Army and the Home Guard have resulted in differences of technique.

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CHAPTER 1
INTRODUCTION

1. Object.—This part is designed to help junior commanders in handling and training their sub-units for war. It must be read in conjunction with the other parts of Infantry Training and with the various pamphlets of Small Arms Training.

The training system suggested is not the only method and should not be followed slavishly, which would cramp initiative and individuality. Neither is this part intended to be a complete syllabus. Lessons should be added or omitted as found necessary by experience.

2. Importance of minor tactical training.—The section and the platoon are the teams on which the whole training of the infantry rests.

Every infantry officer should know how to train his command for war; every section commander must know his duties and be able to lead his section intelligently; every man must be taught to answer to the command of his section leader, and to be prepared to act on his own initiative.

A platoon should work like a pack of hounds and not like a flock of sheep.

It is easy to teach the tactics of cricket, football, and boxing, because the men's interest in these sports has been stimulated; if training is made interesting, the teaching of war tactics can be equally successful.

It must always be assumed that the enemy is making the best use of the ground available and his probable reaction to each move must also be considered. Only if these things are done will training be realistic. In all training, commanders and others must be taught to consider each problem from the enemy's point of view and to plan accordingly.

3. Initiative.—On a modern battlefield the close formations of past wars cannot survive; dispersion is therefore essential. Dispersion means that small sub-units and even individuals will have to decide on the action they must take to carry out the general intention of their commander.

This situation calls for initiative, intelligence, and military knowledge on the part of every private soldier.
4. Importance of ground.—The power of modern weapons has increased the tactical importance of ground. Every little undulation and fold is now of importance, and men must learn to get the maximum value from ground on their own initiative. They must use ground not only to give themselves cover, but also to enable them to use their weapons to the greatest advantage.

The use of ground is not a natural instinct to most men, as it is to wild animals; and it must be taught, explained, and practised with the greatest care.

5. Fieldcraft.—Fieldcraft is the use of natural and artificial cover and conditions to help movement and the employment of weapons. It is the art of the hunter, and it includes concealment, silent movement, knowledge of his prey, and skill with his weapons.

The hunter has to outwit his quarry; this quarry may have powers of evasion, quickness of eye, sense of smell, and speed of movement, but as a rule has small powers of retaliation. In war the soldier has to outwit his fellow men. Cunning is opposed to cunning and each side has full power of retaliation. The soldier, if he fails, may lose his life.

Skilful fieldcraft therefore demands physical fitness, mental alertness, mastery of weapons, knowledge of ground, and above all discipline. These attributes combined and applied with intelligence and initiative will produce the formidable fighting man required by the infantry. Practise alone will give the experience essential to obtain results.

6. Discipline.—Discipline is founded on the barrack square. Good drill gives a man the habit of obedience and a pride in his appearance and in his unit. Such discipline must be carried on during field training, for it is under the stress of modern war that the highest standard of discipline is required of every man.

7. Control.—Once orders are given, dispersion is generally necessary to carry them out. Subordinates must therefore make certain that they understand their commander’s orders and the intention behind them before they leave him. They must not be afraid of asking questions. If the situation changes, each sub-unit or individual out of immediate touch with his commander must make the plan most likely to fulfil the commander’s expressed intention.

The subordinate leader may find that the situation has so altered since receiving his orders that to carry them out in detail would, in his opinion, be contrary to his commander’s intention. He will first try to get in touch with his commander for fresh orders. If this is not possible, he will act on his own initiative, informing his commander as early as possible of his actions. This is the difference between “blind” and “intelligent” obedience.

8. Cleanliness in training.—Realistic and vigorous fieldcraft training means dirt. It is impossible to crawl up a ditch with a Bren gun and remain clean. Men will not put their energy into work of this kind if they are required to parade in their best battledress with equipment blancoed and trousers pressed. The importance of cleanliness, though, as part of discipline, cannot be over-emphasized. As men are to be encouraged to be dirty for training, then the very highest standards of cleanliness must be insisted on at all other times.

CHAPTER 2,
FIELD CRAFT AND MOVEMENT

SECTION 1.—INTRODUCTORY

9. When teaching fieldcraft the following four points must always be kept in mind:

(a) Fieldcraft is universal.—This is a war of infiltration into the enemy’s position—that is, war in which small parties, such as sections or even individuals, work their way through, relying on their own skill and on the power of their own weapons. Infiltration cannot be carried out unless you are an EXPERT in movement in the field, concealment, and surprise. One bad movement by one individual may ruin everything.

(b) Fieldcraft is offensive and does not mean using ground to cover in a hole out of the enemy’s fire. Ground must be used as a hunter uses it—to get closer to the prey whom he is going to kill. You must use your knowledge and cunning to outwit the enemy.

(c) Observation is paramount in offence; concealment is paramount in defence.—This is a war of concealed posts, of camouflage. You cannot kill the enemy unless you can find him. You cannot even start to attack him, if you do not know where he is.

(d) Cover from view is not cover from fire (especially if you have been seen getting there).—Train yourself to get away from enemy fire unseen. Do not dart behind a bush and stay there; that is suicide.

SECTION 2.—METHOD OF TEACHING FIELD CRAFT

10. Decide on the lesson which is to be taught and make it clear to the class. Most subjects in fieldcraft and elementary tactics can be demonstrated, and experience shows that the soldier learns more quickly by seeing than by hearing.
The men's interest must be aroused: demonstrations interest them; lectures usually bore them.

An officer or N.C.O. who is an expert must demonstrate each movement, showing the wrong way to do it, followed immediately by the right way. Each man must then be practised till he is passed out as efficient. Practice must be continued from time to time, if muscles are to be kept in trim.

Men learn by criticizing and being criticized by others. Mutual criticism is popular and keeps both parties alert.

Training in outwitting an enemy is best done in the early stages by pitting one man or one section against another, thus introducing the spirit of competition. Each will derive benefit and learn his mistakes from his "enemy" and keen training is assured.

Training in fieldcraft or minor tactics requires enough instructors to ensure that all points of training are watched and corrected. Minor errors in fieldcraft and weapon handling should be put right at once without waiting for the exercise to end; major errors in tactics can often be conveniently left till the end of the exercise when they should be discussed and the moral drawn from them.

SECTION 3.—INDIVIDUAL FIELDCRAFT MOVEMENTS

11. Movement by day

(a) Without arms.

(i) The leopard (or stomach) crawl.—Hug the ground from toes to chin, chest and crutch flat to the ground, arms outstretched in front of you. Arms and legs work beside, not under the body. All motive power is provided by a thrust with the inside of the thigh. Roll slightly from side to side rather like the swimming crawl stroke. Try to keep the heels on the ground.

Note:—This movement cannot be done with the respirator at the "alert."

(ii) The hands and knees (the monkey run).—Get down on the hands and knees; clench your fists. Train to go very fast in this way. Go hard 15 yds., drop flat, pause, go on.

(iii) The walk.—Avoid the "ostrich" walk, with the head bent foremost. Keep the head up, and observe all the while.

(iv) The roll.—Learn to roll away keeping the arms to the sides or stretched forward. This is often the quickest way of getting away from a spot where the enemy has seen you. Practice is necessary if dizziness is to be overcome.

(b) Movement with the rifle

(i) The walk.—Hold the rifle in the left hand across the body, ready for instant action or poised in the two hands. Try to keep the body perfectly balanced and to carry the rifle so that it looks as if it is part of you—not just like an umbrella. When you have learned to walk in this way in a perfectly balanced manner you will be able to "freeze" instantly, then gradually disappear from view. This is often the best way of escaping enemy notice. Remember that jerky unnatural movements are sure to attract attention.

(ii) The leopard (or stomach) crawl.—This can be done by working the rifle forward with the right hand over the small of the butt, left hand under the rifle between the point of balance and the outer band.

An alternative method is to grip the rifle with the left hand at the point of balance and hold it diagonally across the body with the small of the butt underneath the right arm pit. A Russian method which is worth learning is to grasp the muzzle cap and foresight, or the upper swivel and sling, with the right or the left hand, with the stock of the rifle resting on the forearm.

(iii) Hands and knees.—Sling the rifle over the neck, or if it is being carried for instant action, grip it in one hand at the point of balance, and hold it diagonally across the body with the small of the butt and knees as before; but the bolt must be uppermost and the butt foremost to prevent dirt from entering the working parts and muzzle.

(iv) The roll.—As you turn over press the right hand hard down on the small of the butt. If rolling to the right side, keep the rifle into the right side, and vice versa. Cover the working parts with the forearm to keep them clean. This can only be done by a high degree of self-discipline and individual training.

(c) Movement with the Bren gun

All men must know all these methods, because high-speed crawls with a Bren gun are often the means of surprising the enemy. As in swimming, the knowledge of a variety of strokes is the best way to avoid fatigue. Close watch must be kept on the soldier during training to make sure that he learns that it is a serious crime to
drag the gun along the ground. If dragged the working parts soon become full of mud and the gun jams.

(i) **Crawling. Method 1.**—No. 1 lies on his side, rests the gun on the instep of the lower leg, which is kept against the ground. Forward movement is achieved by kicking with the upper leg. This is a very tiring method, but useful as an alternative stroke when tired.

(ii) **Crawling. Method 2.**—No. 1 lies on his stomach and folds the bipod legs to the rear. He grips the gun—right hand at the butt, left at the bipod legs. He then either works the gun forward in front of him as he crawls, or lifts the gun forward and rests it on the ground to the limit of his reach and then pulls his body up to the gun—using its weight as a lever.

(iii) **Crawling. Method 3.**—No. 1 and No. 2 work together as a team. No. 1, the firer, moves to the right of the gun and slightly forward. No. 2 crawls forward in the approved manner for about 3 yds., then leans back and grasps the gun by the unfolded bipod legs (the barrel may be hot). No. 1 at the same time grasps the gun by the butt. They then lift the gun together and move it forward a bound. The gun moves in echelon between them. The advantages of this method are that it is very fast, that it keeps the gun perfectly clean, and that the No. 1 is ready for instant action and almost in a firing position during the whole of the movement.

(iv) **Crawling. Method 4.**—The gun after firing is lifted sideways by the No. 2 and the bipod legs folded up. No. 1 then hitches the folded bipod legs on to the back of the equipment of No. 2 (the gun will catch almost anywhere). The No. 1 and No. 2 then crawl forward together, the butt of the gun being kept off the ground by the No. 1 and the barrel and front portion remaining hitched to the back of No. 2. This method is also quick.

(v) **Crawling. Method 5.**—No. 1 grips the small of the butt in his left hand, No. 2 the bipod legs in his right. They both move forward using the leopard crawl.

(vi) **Crawling. Method 6.**—Fold the bipod legs back and grip the gun with the left hand diagonally across the body, the butt under the right armpit. When tired, put the right arm over the gun and grip it by the ejection opening.

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(d) **Method of running**

(i) **Method 1.**—Gun over the shoulder; this is tiring if not varied, and it gives away the position of the Bren gun to a flank observer.

(ii) **Method 2.**—The gun held by the Bren sling, or if this is not available, a loop made out of two rifle slings. This is much more comfortable than method 1, and it has the advantage that the sling provides a good support for firing the gun from the hip or for firing the gun by the hose-pipe method against enemy aircraft.

(iii) **Method 3.**—Gun carried between No. 1 and No. 2 and held between them by the butt and the barrel. If the barrel is hot, turn the gun upside down, No. 2 holding the bipod legs.

(e) **Movement with the 2-in. mortar**

(i) **Crawling.**—Lock the mortar at 90 degrees. Use the stomach crawl mentioned above, pushing the mortar in front of you in your outstretched arms, or balanced over the pack.

(ii) **Running.**—Lock the mortar at 90 degrees and rest the base plate on your haversack with the barrel over your shoulder. This method is easier than the carrying handle and it has the advantage that, for a "quick bomb on the ground," the mortar can be put down just as it is and an instantaneous bomb can be fired if the No. 2 holds the base plate in his hands off the ground, using his judgment to work out the correct angle. With practice accurate results will be obtained; but this method should be used only in emergency.

12. **Movement by night**

(a) **Without arms**

(i) **The ghost walk.**—For all night movements, silence is more important than speed. Silence depends on perfect balance. Stand up, lift the legs high to avoid long grass and sweep them outwards in a semi-circular motion. Feel gently with the toe for a foothold. Make sure that one foot is safe before the next foot moves, knees slightly bent. Always lie down when you halt at night.

(ii) **The cat walk.**—Get down on the hands and knees and move each hand forward, searching the ground carefully with the hand, making sure there are no twigs,
then raise the knee and put it down on the spot where the hand is. Then move the hand forward again. This is a very slow method but very sure.

(iii) The kitten crawl.—If the ground is covered with twigs, the normal stomach crawl would make noise. When moving very close to the enemy perfect silence is essential and the only sure method is to keep raising the whole body off the ground on the forearms and the toes, pressing forward, lowering the body, feeling carefully with the hands each time. This is a very slow and tiring method which requires considerable practice, but is invaluable. Accurate information at night can often only be obtained by movement very close to the enemy.

(b) With arms.—All the remarks made above on movement by day apply. The balance by night must be even better than by day, and the ability to "freeze" instantly is an absolute necessity in night movement.

SECTION 4.—CAMOUFLAGE AND FIELDCRAFT

13. Object.—These subjects must be taught to be used in an offensive spirit; the aims of personal concealment and use of cover are not merely protective but aggressive; they enable the attacker to work his way forward undetected and to allow surprise action by the defender who has not been located.

Camouflage (appearance) and fieldcraft (behaviour) combine to make the picture we present to the enemy. Concealment alone may prevent observation and effect surprise; if coupled with measures in another quarter which mislead the enemy's observation, surprise is the more complete. Training should aim to teach every soldier that, as well as concealing the real whereabouts of men, weapons, and defences, he must confuse the enemy's observation and waste their fire by misdirecting these elsewhere. Misdirection may be purely tactical—by movement alone, or by the use of dummy figures, models, and false works, or even better, by a combination of both.

14. Rules
(a) Camouflage is tactics.—In training, camouflage should never be treated as a "specialist" subject, but as part and parcel of every tactical move, for it deals with what the enemy sees of that movement.

(b) Against whom?—Differing methods must be employed against a ground observer with field glasses and the observer who is harassed by fire and smoke. The reconnaissance plane at 30,000 ft. is a very different proposition from the low flying fighter. Consider first who your enemy is and camouflage accordingly.

(c) The enemy the critic.—Questions of camouflage are never settled indoors but only from the enemy's point of view. Criticism from this angle should be continued during training and war. On new ground old tricks may fail.

15. Personal concealment.—Every soldier must be as inconspicuous as possible, consistent with fighting efficiency. There must be no confusion with "parade-ground" smartness, where the opposite of concealment is the aim. The soldier in battle should be confident of his ability to make himself a difficult target.

Four factors (apart from movement) make the soldier easy to see:

(a) Tone.—Tone should match the surroundings, but it is always safer to err on the dark side. In a green countryside, dull clothing and dark blanco are essential, and white skin should be darkened with camouflage cream, soot, blanco, or cocoa. Where there is snow, white sheets should be used.

(b) Shine.—Shine catches the eye and must be completely eliminated. A dark hessian cover dulls the steel helmet and every piece of brass on equipment and weapons should be painted with a dark dull paint.

(c) Shape.—The smooth dome of the steel helmet should be broken by natural garnish, which also helps to destroy the distinctive shape of the head and shoulders. The personal net will conceal the latter during observation, but it is not easily worn over head and shoulders during movement through cover. The square shape of pack and pouches should be broken by garnish or foliage.

(d) Shadow.—The shadow under the helmet is eliminated by making the garnish come down all round below the rim.

Details of personal camouflage are illustrated in Figs. 1 and 2. The steel helmet, because of its shape and position on the body, is the most difficult piece of equipment to hide; to hold the garnish vertical, the cord must be laced round the net in short loops. Some knots of coloured hessian garnish are a good basis to which natural foliage can be added. The end of the helmet net must be tied with a slip-knot which can be quickly released if the net becomes entangled with wire or thick cover while the soldier is crawling. Unless the highest standard of personal camouflage is maintained during training unnecessary casualties will result in war. One or two careless men may destroy surprise, jeopardize success, and sacrifice the lives of their comrades. Therefore camouflage must be practised on all tactical exercises and must be taught as a matter of discipline.
'PREPARE FOR BATTLE'

**Helmet**
Hessian knots plus natural garnish to break the dome and shadow under the rim.

**Face, Neck, and Hands**
Highlights darkened with camouflage cream, soot, dark blanco, or cocoa.

**Webbing**
Dark blanco No. IA or 3.

**Haversack**
String holds hessian. Knots, plus natural garnish, to destroy square shape.

**Respirator**
Dark blanco.

**Rifle**
Darken shiny metal with matt paint. Dark hessian cover conceals shiny butt-plate.

**Boots**
Dubbined.

Fig. 1

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1. The helmet still shines through the net.

2. Dark hessian cover, hessian knots and string laced round in 2-in. loops.

3. Too little—dome and rim still show.

4. Too much—rim not broken, and large foliage shines.

5. Just right—dome shape and shadow disappear.

6. Square shape and shiny gas-cape are obvious.

7. Crossed strings hold natural garnish on the flap.

8. Use the personal net when observing.

9. Small screen with hessian and natural garnish give excellent cover against a good background. Fire beneath it.

Fig. ii
"Prepare for battle"—This order should be given before the action begins; a convenient time is during the commander’s reconnaissance and orders. The section commander should then take control and ensure that, working in pairs, men garnish helmets and equipment with materials of the ground over which they are going to fight. He should inspect his men before going into battle in the same way as he would for guard mounting. In the absence of a definite order, it is the duty of every soldier to prepare for battle and maintain his camouflage as required.

16. Fieldcraft.—Behaviour that gives concealment from the enemy on the ground may be of little value against the overhead observer or attacker. It can usually be decided which has the prior claim, or whether both must be considered.

(a) Ground enemy

(i) Shadow is the best protection, keep in it.

(ii) Background.—Never be seen against a smooth background such as a green field, dense shadow, or, worst of all, the sky.

(iii) Cover.—Observe through or carefully round the side of cover, never over the top, especially in smooth cover such as trees, stones, or walls. Folds in the ground are excellent, since they are not definite aiming marks for the enemy. Isolated cover draws fire. Cover from view is not cover from fire. If you have been seen getting there, crawl away at once.

(iv) Water.—Keep back from the edge of ponds and streams. The reflection may show up even at night.

(b) Air enemy.—In vertical view, the ground is seen as a carpet, the pattern of which varies with the type of country. Objects which are at variance with the pattern or form an unnatural pattern of their own, are easily seen. Troops must remain under cover as much as possible with air sentries always on the alert. Unless offensive action is to be taken, concealment is best obtained by keeping still, in the correct part of the carpet.

(i) Movement catches the eye, so remain still under cover or in shadow.

(ii) Pattern.—Keep to the natural pattern and try to imitate it. Move along hedges and never lie in regular lines in the open. The airman admits no dead ground.

(iii) Shadows.—Shadows are vivid to the air observer and must be lost in other shadows or broken up in gorse, scrub, or some rough textured part of the carpet. A regular line of straight shadows is an obvious indication to the observer.

(iv) Grouping.—Amongst gorse or bushes, small groups of men clumped together resemble bushes and pass unnoticed.

(v) Face.—White faces are conspicuous. Do not look up at aircraft unless the face is darkened or covered.

17. Method of teaching.—At the close of every tactical exercise, the summing up should automatically include criticism of personal camouflage and fieldcraft as seen from the enemy point of view.

(a) Personal camouflage

Lecture.—Make use of posters "Personal Concealment 1 and 2."

Demonstration.—Pairs of men, one prepared for battle and the other not, should be shown in similar positions in cover and in the open. The squad under instruction state why some men are more easily seen than others and the instructor points out what is wrong "Tone, Shine, Shape, or Shadow."

Practice.—The order "Prepare for battle" is given to sections which carry out the drill and discipline. The drill will end with the sections in turn quickly occupying fire positions and being viewed by the others from 50 to 1,000 yds. It must be proved to the soldier that he can be well concealed if he camouflages properly and behaves correctly.

(b) Movement.—Turn squad about. Men to give the demonstration (who have been previously rehearsed) then take up different types of position where they will be in view of the squad when it again turns about. (Head looking over broken skyline, men in front of good background in shadow, etc.). The squad is told to spot the demonstrators, who one by one are signalled to give away their positions by movement.

Show by demonstration how a slow gradual movement is less likely to catch the eye than a rapid movement (e.g. head rising above cover), but explain that there are occasions when rapid movement may be better, e.g. when crossing a gap. When a position is left, men should back off it slowly, i.e. "fade-away."

The demonstration should bring out that "freezing" is one of the first natural instincts employed by animals for concealment. When startled, the first action of many birds and animals is to "squat" and keep still; they tone with their surroundings, they don't shine, their shape
is lost by markings and soft outline, and they sit on their shadows. The hare and young plover are common examples, and aggressive concealment, with which defence tactics should be compared, is shown by the leopard, the boa constrictor, and the crab (which garnishes with seaweed), as they lie in wait for their prey.

(c) *Use of cover. Ground view*

(i) *Isolated cover.*—A piece of ground should be selected that contains one small piece of cover, which gives cover from view only, e.g., an isolated bush or patch of gorse. A few men should be bunched in concealment behind this cover. A few more should be lying 50 to 100 yds. to a flank in fire positions in small folds or in grass which gives concealment. When the squad is turned to face the cover, a few rounds of blank should be fired. If individuals are then asked what they are going to fire at, most will select the bush.

Demonstrators stand up when signalled.

The demonstration should stress the danger of occupying isolated and obvious cover, and the danger of bunching behind such cover, if it is cover from view only.

Note.—A dummy bush of cut gorse will often simplify selection of ground.

Another method of teaching cover from view is as follows:

One section advances across country and suddenly comes under heavy fire (blank ammunition) from another section occupying a defensive position. The attacking section will make for cover, each individual choosing his own. The instructor walks round the positions selected by each man, and places a figure target, small, medium, or large, according to his assessment of the value of the cover chosen—in the place where each man went to ground. The attacking section now moves over to the defensive positions and sees the targets they themselves made. The defending section load live ammunition and fire at the group of targets. The most obvious target will always draw fire, while those most concealed will escape. If at the end of the exercise, those who have done badly can be presented with a bullet-riddled figure target with their name written on it, the force of this lesson will not be lost on them.

Note.—Very careful control must be exercised in order to prevent the mixing of live and blank ammunition.

(ii) *Importance of background.*—This demonstration should be on the "wrong and right" principle and might consist of three pairs of men lying, kneeling, and standing, one of each pair with good and the other with poor background. After the squad have searched the ground, each man in succession should fire two rounds of blank on a signal. When all have been found, those with good cover should take up their positions again in full view of the squad under instruction, who should later inspect the actual positions.

Stress during discussion that background is cover. Many animals escape detection by keeping close to the background they resemble, and some change colour with the seasons, e.g., tiger and python in the jungle, grouse in heather, moths on trees, and the mountain hare and arctic fox which are brown in summer and white in winter.

(iii) *Use of shadow.*—This should be dealt with in the same way as background. It should be shown that if a man stands back from a window when observing from a room he will be concealed by the shadow. Emphasize that shadow provides concealment from the air; men, weapons, and vehicles should always be in shadow when available. It is often more important to consider where the shadow will fall than whether the object itself is in shadow. For instance, a tall vehicle placed in partial shadow may throw its own shadow a long distance, thereby disclosing its presence. The vehicle will therefore be less conspicuous if placed to the sunny side of the shadow. Remind men that shadow changes continuously during the day, according to the position of the sun.

(iv) *Folds in the ground.*—Folds in the ground often offer the best cover from ground view by being less obvious to the observer. They are also less obvious to the man seeking cover unless he is well trained. It is suggested that men prepared for battle should be concealed in folds in the ground throughout one or more of the previous demonstrations. Some should be quite close (within 50 yds.) to the squad under instruction. On a signal they should disclose themselves by firing blank. Squad should then
inspect positions in detail. The small individual screen of wire netting garnished with hessian knots or foliage can be shown in this demonstration.

(v) Broken ground.—The object of this demonstration should be to show that it is more difficult to locate a man in broken cover than when he breaks a regular line (looking over a flat topped wall, or mound) and that men should look around and not over cover. The demonstration might be as follows:

A section in position correctly. Squad under instruction searches.

How many seen? Where? Why spotted?
Each man in the section fires one round blank.
How many seen?
Where?
Squad looks away while section withdraws.
Section advances at the double, occupies the same position, and fires one round per man.
Section stands up.

(d) Misdirection.—The aim is to create a false picture, on which the enemy will act. It can be successful even on the individual scale and should be part of all camouflage and fieldcraft training. Training should seek to encourage original ideas from all ranks and should be competitive, with men, sections, and platoons pitted against each other.

There are three simple rules:

(i) Think out what picture the enemy might see and paint the false one you wish him to see.

(ii) Use the factors that spoil concealment—movement, shine, shape, and shadow—to create the false picture; and use them to the degree necessary—for example, the enemy under fire and smoke will be tricked by the crudest of dummies.

(iii) Keep one step ahead of the enemy; as he gets to know one ruse, go one better. Keep him guessing.

Demonstrations on the following lines can be given: (The squad should not be warned that this is an effort to trick their powers of observation).

Sniper.—One man under cover about 100 yds to a flank fires a round of blank (or live round into a butt) and the squad see a steel-helmet showing several yards to the flank of the firer.

The next time, instead of the helmet, the sniper has a length of string tied to a bush a few yards down wind. When the squad hear the shot and turn in that direction, they see a slight movement of foliage near the smoke.

Bren group.—The gunner fires from one position while another man a few yards away distracts the squad’s attention by showing himself, his helmet, a branch, movement of foliage, etc. The gunner keeps changing his position and the instructor asks the squad how many guns are firing and emphasizes that this is one of the most effective methods that any sub-unit may use to give an impression of greater strength.

Platoon attack.—The squad, observing from the objective, are lying down and smoke is drifting across their front. They see little movement on one flank, where two sections are putting in an attack. On the other flank, a few men cross and recross a gap, doubling back under cover, to give the impression that the attack is coming from that quarter.

18. Concealment from air

Lecture.—The use of a simple model of an open landscape with smooth road and fields, some rough ground, and only a little overhead cover, is a good way to show troops what they look like from the air. Standing, lying, and kneeling figures on pins can be used to show how clearly the regular patterns of men and their shadows stand out and how inconspicuous are small groups of men in scrub or hedges. The parallel example of the lost collar stud on the carpet should be given: on a smooth part of the carpet it is seen at once, but in the pattern its shadow is lost, and a dull stud with no shine to catch the eye is difficult to find.

Demonstration.—The squad observe from a high viewpoint while two sections advance from about 300 yds., one in the right way and one in the wrong. The right one moves in three groups along the lines of hedge, or ditch, in the shadow and with an air sentry on the alert. The wrong one, with men at 5 yd. intervals, comes straight across regardless of the pattern, some men sky-gazing. The instructor points out that even in movement, one section is more obvious than the other. On the aircraft warning, the “right” section bob down like three bushes, while the “wrong” section run for a bit and then lie down in the open. When they move on, the “wrong” section leaves casualties.
SECTION 5.—TACTICAL CROSSING OF OBSTACLES

19. General.—As soon as every individual man is perfect in day and night movement with and without weapons, he must be trained to cross the sort of obstacles that he would be likely to meet in the field. A man is more likely to get shot whilst impeded by an obstacle than at any other time. High speed crossing of obstacles with weapons is a matter of personal agility and this agility can only be achieved by plenty of practice.

20. Method of teaching.—Prepare a course that contains:

(a) Walls.
(b) Wire fences.
(c) Wooden fences.
(d) Broken ground.
(e) Ditches.
(f) Streams.
(g) Jumps up and jumps down.
(h) Double jumps.
(i) Windows in walls.
(j) Steep slopes up and down.
(k) Balance walks.
(l) Low obstacles for crawling under.
(m) Loose wire.
(n) Gates.

As soon as each individual man has learned how to take these obstacles, with weapons and at speed, start training the men to go over them in sections. Make sure that the section commander takes control of the section, forms it up tactically after each obstacle and whips in all stragglers. This is very good training for the section commander (see Battle Discipline, Sec. 15).

The emphasis now should always be on the word TACTICAL.

The following points should be specially noted in carrying out this training:

As soon as the section trains together, emphasis must be laid on crossing obstacles at fairly wide intervals to make sure that there is no unnecessary bunching.

Until properly trained, men will always bunch together and make for the easy place to cross an obstacle. Train them to avoid doing so by giving them plenty of practice in crossing awkward streams, hedges, and wire.

Team work is nearly always necessary for high-speed crossing of obstacles, e.g.:

(i) Climbing a high wall or anti-tank ditch.—The section commander must organize this exercise. Two men put their backs against the obstacle and make a ladder by holding their hands together to make a step, giving each man a leg-up so that he can reach up to the top of the wall with his outstretched hands. The remainder of the section go up this ladder and over the wall one at a time, the Bren gun being passed over by the second man and put down in a fire position on the far side of the obstacle as quickly as possible. The last two men of the section remain at the top of the obstacle, reach down, and haul up the two men who provided the ladder, taking their rifles up first.

(ii) Wire fences.—The first two men hold the strands of wire wide apart, enabling the remainder to pass through at high speed. It may sometimes be necessary to cut the wire.

(iii) Gaps in hedges and crests.—The section commander forms the section up in a row, well short of the gap or crest, and all double over together. From the side view, the whole section thus appears as one man.

21. Tactical crossing of obstacles at night.—Silhouettes and sky-lining must be very carefully avoided. Gaps must therefore be negotiated either by crawling across them or by rolling round the side; great care is needed in forming up the section after each gap has been negotiated. As soon as men have been trained in negotiating the obstacle course by day, they should be trained to negotiate it by night, and pieces of difficult ground (e.g., twig strewn country, gravel, shingle) should be included.

SECTION 6.—OBSERVATION TRAINING: HOW TO LOCATE THE ENEMY

22. General.—Your determination to attack and kill the enemy can never be put into effect unless you learn to find him first. The first step in this process is to acquire a high degree of skill in observation.

23. Practice in training eye and ear.—Divide a piece of ground into 20 squares marked with flags. Conceal a rifleman with some live ammunition in each square. These men should be dressed in German uniforms and placed so that some are more easy to see than others. Let the class observe from the foot of a bank. At a given signal each man in turn to fire a live round into the bank over the heads of the observing class. They will thus notice the “crack”
and the "thump" of the bullet and will learn to disregard the "crack" and locate the fire position from the "thump" and from watching for smoke and movement. At a given signal, let each firer stand up, then conceal himself again and repeat the exercise. It is essential that men should not leave their observation training with the idea (very easy to get): "I am very bad at this. I can never see anything." They should be shown how to make progress in observation, and the exercise just referred to is a good way of making steady progress. At the end of the exercise, the observers will be able to pick out all the firers instantly and will be able to see them almost standing out of the landscape and "hitting them in the eye." They will wonder how they came to miss them in the first instance, and it is this feeling of confidence which should be developed. Observation should be extended to reading the battle and also be linked with fire orders.

SECTION 7.—COVER FROM FIRE

24. Object.—To teach all ranks to appreciate the value of the various types of cover as protection against fire from small arms weapons, mortars, artillery, and anti-tank weapons.

25. Demonstrations should be given of the effect of the above weapons against such types of cover as shingle, brick, stone, concrete walls, sandbag walls, loose sand, earth, clay, peat, growing trees of various types. Mark VII ammunition should also be fired against the armoured sides of an empty carrier to show how it is proof against this kind of ammunition. Show the effect of field artillery fire against wire and other obstacles.

A demonstration on the following lines should also be given: Dig a series of weapon pits in well-sited tactical positions. Place in the bottom of the trenches, well under cover, inflated toy balloons, figure targets, or ordinary empty petrol tins. Then engage this defended locality with all types of weapons including 2-in. and 3-in. mortars, field artillery, and, if possible, low level or dive bombing air attacks, and machine gun fire from the air. It will be found that very few of these balloons or figure targets have been touched by this fire, except in the event of a direct hit on a weapon pit by a shell or bomb.

A demonstration on these lines can be combined with most field firing exercises.

26. The following lessons should then be brought out:—

(a) From the defenders' viewpoint

(i) In a weapon slit men are comparatively safe against all forms of fire, except a direct hit from a shell or bomb. Such a direct hit is a matter of chance and is exceptional.

(ii) While the fire is falling round the weapon slit, the enemy infantry are working nearer, taking advantage of the fire which is keeping the heads of the defenders down.

(iii) For safety reasons, these advancing infantry cannot normally get nearer than 100-200 yds, so long as the high trajectory fire on your post (their objective) continues.

(iv) Therefore, the moment the enemy fire ceases look up at once, and you should get a very good view of the attackers, probably thoroughly out of breath by now, assaulting over the 100-200 yds. They still have to cover. They will probably be in the open (if your defended post is well sited) and will be assaulting with little or no covering fire. So hold your fire until they are right close up and they should all be dead men. They are in the open; you are in cover.

(b) From the attackers' viewpoint

(i) Apart from direct hits from shells or bombs, few if any of the enemy will be killed by your covering fire. Do not therefore expect to find only dead men when you assault. A well-trained enemy with good morale will begin firing again as soon as your own supporting fire ceases for safety reasons.

(ii) Therefore, you should do five things:—

First, begin the assault immediately your supporting fire stops or lifts. The enemy may be a bit "rattled" and his shooting may be wild. Therefore, do not give him time to recover his composure.

Second, before you assault, get two Brens in position at very short range, to give you intimate close support over the last 200 yds. These Brens, if well placed, will be able to shoot you right on to and over your objective.

Third, if necessary, be prepared to use smoke.

Fourth, be prepared to fire from the hip during the assault all other weapons you have with you.

Fifth, search all enemy positions thoroughly with the bayonet.
SECTION 8.—SNAP SHOOTING WITH THE RIFLE AND MACHINE CARBINE

27. In order to develop quick reactions, courses should be provided in which the man can:

(a) Fire his rifle down lanes in a wood at targets which are pulled up out of the ground on pulleys.
(b) Fire a machine carbine in a house at targets which are pulled up out of cupboards and dark corners by means of pulleys. (But remember that the Sten machine carbine should not normally be used at ranges of more than about 25 yds.)

SECTION 9.—FIELD SIGNALS

28. Control of troops when deployed can often be exercised better and more quickly by signals than by verbal orders. Signals, the details of which are given in F.S.P.B., Part I, Pamphlet No. 9, are also used for the control of mechanical transport.

In controlling troops by signals, a short blast of the whistle (i.e., the cautionary blast) will be blown before the signal is made, in order to attract the attention of the troops. When he is satisfied that his signal is understood, the commander will drop his hand to his side, on which the units under him will act as ordered. Signals should be made with whichever arm will show most clearly what is meant.

29. Signals with the hand.—The following control signals are used:

(a) Deploy.—The arm extended to the full extent over the head and waved slowly from side to side, the hand to be open and to come down as low as the hips on both sides of the body.

(b) Advance.—The arm swung from rear to front below the shoulder.

(c) Halt.—The arm raised perpendicularly above the head.

(d) Close.—The hand placed on top of the head, the elbow to be square to the right or left according to which hand is used.

The above signal denotes close on the centre. If it is required to close on a flank, the leader will point to the required flank before dropping his hand.

If, when on the march, it is required to halt as well as close, the leader will give the halt signal before dropping his hand.

30. Signals with the rifle.—The following communicating signals are made with the rifle:

(a) Enemy in sight in small numbers.—The rifle held above the head at the full extent of the arm parallel with the ground, muzzle pointing to the front.

(b) Enemy in sight in large numbers.—The rifle held as in the previous signal, but raised and lowered frequently.

(c) No enemy in sight.—The rifle held up to the full extent of the arm, muzzle uppermost.

These signals may be used by scouts sent on ahead of their sections. Care should be taken that the signal cannot be seen by the enemy.

31. Control by whistle blasts.—The following whistle blasts are used:

(a) The cautionary blast (a short blast).—To draw attention to a signal or order about to be given.

(b) The alarm blast (a succession of alternate long and short blasts).—To turn out troops from camp or bivouac to fall in, or to occupy previously arranged positions.

(c) Enemy aircraft in sight (a succession of short blasts).—Since this signal will often be inaudible, a visual signal will also be used to attract attention, viz. both arms held above the head and the hands waved. On this signal, troops either get ready to fire, open out or take cover, according to the orders in force.

(d) Enemy aircraft attack ended (two long blasts repeated at intervals of five seconds).—On receipt of this signal all troops resume previous formations. Troops which have been firing will recharge their magazines before moving off.
SECTION 10.—SELECTION OF LINES OF ADVANCE

32. Object.—To teach the application of points of elementary instruction to movement.

33. Preliminary.—In deciding on a route, all men must be able to weigh up the advantages and disadvantages of the ground (observation points, fire positions, concealment, protection from fire, likely enemy ambushes, and obstacles) and to make decisions logically and rapidly. To this end, constant practice on various types of ground is essential. Men must know instinctively, subject to orders from the section commander, the place to make for, the route to follow, and the speed at which to move.

The ideal line of advance provides concealment and cover from fire throughout its length, and offers good fire positions and positions of observation on route.

The former will usually conflict with the latter requirements, since to get concealment and good cover from fire it is often necessary to go into low ground, while high ground usually gives better positions from which to observe or fire. It is rare to find a route combining all advantages, and the choice will depend upon the relative importance of the two factors in any particular situation.

Positions of observation on a line of advance should enable the observer to see, not only the enemy, but also the progress of neighbouring friendly troops.

34. Exercise.—The instructor gives the general direction of the enemy and a simple tactical setting, defines an area over which individuals will be required to move, and points out objectives to be reached. He also indicates the area from which an enemy is observing.

Men then decide on the line of advance they would take, giving reasons. After a discussion, the instructor and squad follow one or more of the alternatives and then see if their suggestions were sound.

35. Exercise from the enemy’s point of view.—Explain the importance when taking up a defensive position of considering approaches from the enemy’s point of view (i.e., the reverse of the previous exercise).

The instructor should give the direction of the enemy and general line of our defences, and define an area to be examined for features that might be of use to the enemy, e.g., fire positions, O.P.s., and as lines of advance.

The squad is then told to think how the value of these positions is increased or otherwise by the ease with which the enemy can reach them and the degree to which they help our own further advance.

Discussion follows.

The squad then decides on the most probable enemy action, which is discussed, after which it moves to positions from which enemy would have viewed the ground, and revises opinions if necessary.

The instructor finally stresses the importance in defence of actually viewing the ground as the enemy will see it, whenever possible.

36. Competitive exercise.—Two opponents start from behind two ridges some 1,000 yds apart. Each is ordered to occupy a sniper’s position to cover all intervening ground and to shoot anyone he sees. The cover on both sides should be approximately equal. Each man must have a watch. Each will note time and exact position of the other when he sees him. Whoever spots the other first within good sniping range (300–350 yds.) wins.

37. Another exercise.—One man lying in the open is pitted against another who has to move forward with reasonable cover available to a given spot in a given time. Whoever first spots the other wins.

At the end of this and the previous exercise, the two competitors should compare notes, with the instructor as referee, to stress points of training.

38. Advanced exercise.—The instructor selects a general line of advance across country for the section commander, followed by his section, to move over. One or two men from the section acting as enemy have rifles and some blank ammunition. The section take their rifles, but not the Bren gun at this stage of training. The instructor sends the enemy to a pre-selected spot from which they can observe the movements of the section.

The section leader is told that he must lead his section round to a place on the flank of the enemy from which he can deliver an assault and that he must get to that place unseen by the enemy. The enemy are made to lie down and observe from actual fire positions. The section commander is given 5 minutes in which to study the ground carefully and to make up his mind. The route is then followed by the rest of the section accompanied by the instructor, who makes certain that all fieldcraft points already taught are observed by every man during the movement.

The enemy, fire blank ammunition whenever they detect movement by the section. At the conclusion of this phase, the instructor criticizes and brings out any mistakes that have been made. The process is now repeated in a different area of ground using different men as enemy, but this time the section commander is only given 4 minutes to study the ground and make up his mind.

This process should be repeated again and again until the section commander is able to make rapid appreciations of the ground.
SECTION 11.—KEEPING DIRECTION AND MEMORIZING A ROUTE

39. Keeping direction.—This is training of particular importance for runners, guides, and patrols. All men may have to act as guides and may often find themselves the senior members of a patrol. Keeping direction is never easy. It will be even more difficult in darkness or fog, and if detours have to be made to avoid obstacles or to obtain concealment.

40. The following are some of the means of keeping direction:—
(a) The use of compass and map.
(b) The use of a rough sketch copied from the platoon commander's map.
(c) By keeping two distant prominent objects in view.
(d) By using a series of easily recognizable landmarks, each visible from the previous one.
(e) By using the stars. The sun and moon may also be used if their movement is thoroughly understood.
(f) By memorizing the route from the map. Points such as distances, contours, and the direction of streams will all help.
(g) The back view should be remembered, and patrols and others who may have to find their way back should look back at regular intervals to note landmarks behind them for their return journey.
(h) In exposed districts it will be noticed that trees tend to grow away from the direction of the prevailing wind and that moss may grow on the leeward side of the trunk. Such aids may prove valuable in fog.
(i) Direction marks may sometimes be left on the outward journey. (Pegs, small piles of stones, or the blazing of trees.)
(j) If the route is being walked by day with a view to guiding by night, men must take particular notice of skylines and objects that they will be able to recognize by night.
(k) All N.C.Os. should be able to determine the points of a compass by the use of the hands of a watch and the sun.

41. Sequence of training.—The aids described above should first be explained and demonstrated. Subjects such as map reading, use of compass, sun, moon, and stars, will have to be dealt with by special instruction.

Take men over a route and make them describe landmarks or noticeable objects on their return. Discuss the various ways in which the route might have been remembered.

42. Competitive practice.—Men work in pairs. All Nos. 1 are taken along a route. On return, each man describes the route to the Nos. 2 who will have to follow it. The route may be circular and a time limit for describing it may be imposed.

Discussion should follow, in which instructors should bring out why some failed and others succeeded.

In later stages, while showing the route to the Nos. 1, the instructor may indicate certain points on the route as being under observation, contaminated by gas, or otherwise treated so as to make the task more difficult. Impress on Nos. 2 that they must honestly follow exactly the route given them by their No. 1, irrespective of where others may go.

SECTION 12.—THE INDIVIDUAL STALK

43. An individual stalk finishing with a little unarmed combat helps enormously to improve fieldcraft. The individual stalk should be as follows:—
(a) Explanation by instruction.—A point is selected 200 to 600 yds. away, where an enemy sentry group is said to be located. The stalker's task is to approach near enough to shoot with the certainty of killing without being seen.

The squad is given a few minutes to study the ground; they are given a time limit, and told that they must consider the following:—
(i) Final position from which to shoot (objective).
(ii) The best route to it; whether it offers positions for observation on the way; from which fresh decisions or changes in plan can be made; whether cover used is from fire or from view only; the number of obstacles (rivers, walls, fences, open ground, etc.) on alternative routes; means of keeping direction; skyline and background; if open ground must be crossed; the possibility of taking risks early, when there is less chance of being seen or hit.
(b) Questions.—Individuals are then questioned on the final position they have selected and the route they intend to follow. One or more are then detailed to carry out the stalk within a given time-limit. For obvious reasons, the area within which the stalk may take place should be defined.

The instructor takes the remainder to the post to watch the action of the stalkers. Another instructor should go with each stalker as a critic, and a flag signal should be arranged to denote the time of start of each stalk. The critic should be instructed to note all actions of the stalker and to conform to his movements, so as not to give away his position.

(c) Procedure at the post.—The exact position of the post should be denoted by a small yellow flag round which the remainder of the platoon lie. Other members of the squad will perform the following duties:

(i) A flagman, who raises a white flag each time he sees the stalker, and only lowers it on his disappearance. As the stalker is only stalking one man—the sentry—no one else may indicate to the flagman that the stalker has been seen.

(ii) A timekeeper who times the duration of the stalk from the time when the critic with the stalker gives the signal to start, to the time the stalker fires. He also times the length of each exposure of the stalker by watching the flagman.

(d) A discussion should take place at the conclusion of all stalks. In addition to the points given above, discuss:

(i) Reconnaissance and the necessity for looking before leaping. Did the stalker select a fire position first and then the best route to it?

(ii) Concealment.—Did the selected route offer the best chance of surprising the sentry?

(iii) Mobility.—Was the “going” of the route selected good or difficult? Was the pace well regulated according to the ground? Crawling should be avoided except for very short distances. Where crawling was necessary, was the best method adopted? When crossing an open space, did the stalker dash across?

The necessity for looking ahead must be stressed. Men are too inclined to take the easy bound first, which will very often land them in difficulties later. When a man stops, he should remain motionless. Any incident that might distract the enemy’s notice should be used to cover movement. The stalker must realize the advantage conferred on him when wind, rain, or sun are in the enemy’s face.

SECTION 13.—MOVEMENT BY NIGHT

44. General.—Darkness gives protection against aimed fire and enables surprise to be gained. Night training should be designed to accustom men to moving in the dark, so that individuals and units can act with confidence at night.

The main differences between night and day operations are that by night:

(a) Enemy fire is normally inaccurate.

(b) Sight is largely replaced by hearing; avoidance of noise is therefore of the greatest importance and ears should be used rather than eyes.

(c) Objects are generally visible only on skylines, which increases the importance of low ground for both movement and observation.

(d) The difficulty of maintaining direction makes previous daylight reconnaissance most important.

(e) The difficulty of control. Close formations are therefore very necessary.

45. Movement.—At first individual instruction should be given without arms; later, men should be trained to move fully equipped. They should be practised in daylight in moving silently on roads and across country in various formations with whispered words of command. The same practice should then be carried out at night.

Precautions should be taken to prevent equipment rattling, and weapons must not be allowed to clash. In some circumstances, strips of sandbag material may be tied round equipment.

On soft ground it is generally better to place the feet on the ground, heel first, and on hard ground, toe first. When walking on grass, the feet should be raised above the grass; when crossing a difficult piece of ground, advantage should be taken of other sounds to cover noise.

These methods should first be demonstrated, and later may be carried out as a competition, to see which men can advance nearest to a blindfold section without being heard.

When a light goes up, men should fall flat on the ground before the flare ignites; if caught unexpectedly by a flare they should remain motionless and only fall flat if the enemy opens fire. A flare
should never be looked at since it makes it impossible to see in the dark for some minutes afterwards.

These points should be demonstrated, the flares being sent up to disclose a squad about 100 yds. away.

46. Crossing obstacles.—The first task in training men to cross obstacles is to train them to help each other. It is an exceptional man who can cross obstructions of all sorts without help and yet make no noise.

A simple method, which will make crossing an obstacle much easier, is for one man to remain at the obstacle, assisted by another man, if it is a very difficult one, to act as a "helper." The "helpers" first take the man's load and then assist the man himself across the obstacle. When the whole party is across, the helpers move forward to the section commander or leader who makes certain that all have crossed successfully before moving on.

Most men like to sit or stand up on the tops of banks and walls—it is the natural thing to do, but it creates an artificial skyline and therefore troops must be trained to roll or slide over such obstacles. They must not jump down on the other side, because it is almost impossible to do so without making some noise and jumping itself is a movement which is likely to attract attention. If a "helper" is on the far side, he can assist the men coming over and they will not have to jump.

Thick hedges present some of the most awkward obstacles that can be encountered. If there is no gap, the only way to get through them without making a noise, is to spend time cutting back the foliage with a knife. A machete should not be used as it makes too much noise.

When crossing streams or running water a place should always be chosen where the water makes a noise, i.e., where it passes over stones or boulders. Men will then be able to wade through or jump across without attracting attention.

47. Keeping direction.—Men should know how to recognize the Pole Star, and how to use the moon and the wind. They should be trained to pick out landmarks by day, landmarks which by night will stand up in silhouette against the sky and ground contours.

Preliminary reconnaissance is of the first importance. Men should be shown by day a piece of country over which they will be required to move in the dark, and their plans should be followed by discussion on the route selected with regard to avoidance of noise and skylines, keeping direction, and obstacles to be crossed.

To train men, take them over a route by day and let them take notes as they go. For example: "600 yds., forked track, keep left; 1,000 yds. on, track crosses stream flowing to right; lone pine on skyline, half left from line of advance." Then with their notes let them follow the same route by night. In more advanced stages, notes may be made from a map and from an observation point instead of from the actual route.

48. Carriage of tools.—Men should be taught and practised in carrying tools quietly.

49. Intercommunication.—Messages, where necessary, should be passed in a whisper. A simple non-human noise (e.g., scratching on a gaiter can be used with a simple code, e.g., 1 scratch means "stop and get down." 2 scratches "get up and move on."

50. Keeping touch.—White distinguishing patches on the back often help in keeping touch. The members of a small patrol crawling close to the enemy on a dark night can keep in touch and signal to each other if each man keeps a hand on the ankle of the man in front. Signals should be arranged.

Loss of touch always leads to delay and loss of morale. In ordinary movement in file, if each man holds the scabbard of the man in front, touch will be maintained. It should be a rule that a message is passed forward the moment men behind are not closed up.

51. Compass march.—Officers and senior N.C.Os. should be trained to move across country by the use of compass bearings and distances. A course should be laid out with a series of control points. At each point there should be an observer and a yellow flag (or shaded light on very dark nights) visible about 15 yds. away. Those under training are sent off at intervals from the starting point A, where they are given the true bearing of and distance to B. At B they are given similar instructions with regard to C and so on. Points should vary between 100 and 400 yds. apart.

Observers should note time taken and how near each man gets to his post before being observed.

52. Individual stalk.—The individual stalk (see Sec. 12) may also be carried out at night.

53. Digging and wiring.—Constant practice in digging and wiring by night should be carried out. It is seldom in war that extensive digging or wiring can be carried out in daylight, therefore every man must be trained to work quickly and quietly at night.

A silent, quick, and simple method of getting men on to their tasks at night must be frequently practised.

SECTION 14.—OBSERVATION BY NIGHT

54. Visual training.—One man of a section should march away and be stopped as soon as he is out of sight. He should then call out the number of paces he has taken. He should then advance
towards the section from some distance farther off and be stopped when he again becomes visible, later counting his paces to the section. This action should be repeated on nights with varying visibility and with the moon both behind and in front, and with different types of background.

Points to bring out are:

(a) To show men how far they can see at night.
(b) The ability to see at night increases with practice.
(c) A man may stand up when he has a good background, but otherwise should lie down.
(d) The lower the observer is to the ground, the more extensive is his skyline.
(e) That it is easy to mistake natural objects (bushes, posts, and trees) for men at night. The ground in front should therefore be studied carefully by day.

When men have been practised in observing a man approaching and walking erect, they should be similarly practised in observing a man who is trying to approach unseen. By comparison they should be made to realize the advantage of observing from low ground. As observation by night or in fog is a great strain, men should work in pairs. The use of field glasses at night must be practised.

55. **Training in hearing.**—Instruction should be carried out on similar lines to visual training. At first the advance of a single man should be listened for; gradually the number should be increased so that men can judge the strength of the party approaching.

Listening should be practised on various types of ground (e.g., open and close country, across valleys, and in woods) and in different weather conditions (wind blowing towards or away from the enemy, fine or wet).

Demonstrations should be given to show how far noises, such as whispering, talking, coughing, and the noise made by rattling equipment and water bottles, carry at night.

To exercise men, place them in a position of observation and arrange for noises to be made at pre-arranged times and distances and in different directions, e.g., talking, digging, wiring, wire cutting, coughing, opening assault boats, carrying tools. Each man should then explain the sound, estimating its distance and direction. This exercise should be carried out in varying types of weather.

It will be found that at night the tendency is to over-estimate numbers and to underestimate distances, when judging by sound.

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**CHAPTER 3**

**SECTION AND PLATOON TRAINING**

**SECTION 15.—LEADERSHIP TRAINING—ASSAULT COURSES, BATTLE DISCIPLINE, AND BATTLE INOCULATION**

56. **Previous training.**—As soon as every individual man has completed his fieldcraft training and the section has learnt to move as a whole over obstacles, section training proper should begin. During this period, training of the leader to command and control the section should be stressed throughout and emphasis should be laid on the section learning to work together as a team under his leadership.

It is vital that the personnel of sections should be altered as little as possible, and everything should be done to foster the team spirit of each section and to develop "group morale."

57. **Training the leader.**—In section training, the leader will now be combining for the first time his theoretical training with the actual problems of command and control in the field. His ability to command will depend to a great extent on his self-confidence, and it is to be hoped that this will have already been fostered by his previous training. The feeling that he really knows what he is talking about will in itself give confidence both to the section leader and to the men under his command, and everything possible must be done to foster this feeling.

If possible, therefore, section training should be preceded by a section leader's course under unit arrangements, during which the section leaders are formed together into a platoon which is trained by the most experienced officers available.

58. "**Total war**".—This is a "total" war in which the soldier moves from 100 per cent. peace to 100 per cent. war overnight. In the last war troops had time to get "seasoned". They were usually taken to France, put in a quiet sector of the line, and gradually worked up to more lively sectors by easy stages. Troops now have no opportunity to get seasoned. They move direct into "total" war, a form of warfare designed to attack morale as well as flesh.

The enemy has exploited this difference. For several years before the war he employed trained psychologists to design weapons and to help him in methods of warfare. He realized the enormous value of sudden shock and noise. Examples are legion, e.g., the dive bomber, a very expensive and inaccurate lethal weapon, but a very terrifying one; the screaming bomb, in which accuracy is sacrificed for noise; the enemy mortar bomb, noisier than our own.
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but less lethal; encirclement tactics—exploiting the psychological effect from behind. In other words it is not always necessary to kill or wound a man in order to defeat him. You can beat him equally well by destroying his morale, by removing his desire to go on fighting, by making him think he has been beaten.

59. Methods of dealing with the new problem.—There are three methods that can be used to rob this form of “terror” warfare of its effect. They are:

(a) **Battle discipline.**—A high standard of discipline in the field, enforced through leadership by section leaders and platoon commanders, who know all about the enemy methods and have trained themselves to expect them and to deal with them.

(b) **Battle inoculation.**—By putting all officers, N.C.O.s, and men through a realistic course of training for battle, during which fire from all types of weapons is put down near them, and the noises of war are simulated to the greatest extent possible.

(c) **Maintenance of high morale.**—These methods are discussed separately below.

60. **Battle discipline.**—This is largely a matter of section leading. Great care should be taken in the first place to make sure that the section leader is chosen primarily because of his ability to lead men; he must be the sort of man whom others will instinctively follow. The necessary qualities can only be discovered by putting potential officers and N.C.O.s, through a series of vigorous tests in which their qualities of leadership are given full play. Men are more likely to follow a leader whom they know has been selected on merit.

A series of such tests might be as follows:

(a) A short period of squad drill in which N.C.O.s. and potential N.C.O.s. are allowed to take their own sections. Squad drill gives the N.C.O. a chance he rarely gets—the chance to command on his own.

(b) A short period of battle drill (see Sec. 21). This is merely squad drill in a more interesting form which gives the N.C.O. more scope and variety, and requires a higher degree of intelligence and understanding on his part.

(c) A period of battle discipline. The N.C.O. takes his section out for about 15 minutes and exercises himself in giving his men the sort of orders that he will have to give them on the battlefield, e.g. “Line that bank”; “Cross this hedge after me”; “Get that Bren into position over there”; “Move into the bomb crater.” During these periods the N.C.O. should be watched to see whether he is able to spot any detail which goes wrong and to correct any slovenliness on the part of the men in their fieldcraft, handling of weapons, concealment, or observation work.

(d) The N.C.O. takes his section over the obstacle and assault courses putting in a controlled bayonet assault at the end of each.

(e) The N.C.O. commands a section during the battle drills set out later in this book, and during realistic exercises based on these drills.

61. **Obstacle course.**—The following are two suggested methods of testing the leadership of N.C.O.s. and potential N.C.O.s., who practise at the same time the work of a section in the field:

(a) **Miniature course.**—This can be constructed in almost any field near a unit’s particular station. Use should be made of any natural or artificial cover and obstacles. Branches cut from trees and hedges can be used to form artificial hedges. Obstacles should consist of the following:

(i) A continuous five-barred gate about 20 yds. long—easily made from posts and old timber.

(ii) A post and wire fence about 20 yds. long.

(iii) An anti-tank ditch, about 8 ft. high, made from corrugated iron and supported by iron tubing.

(iv) A 50 ft. triple concertina wire fence.

(v) A gap in a hedge about 30 yds. long—made in an artificial hedge if necessary.

(vi) A hawthorn hedge beyond the enemy post through which the section must go to consolidate.

Various section exercises can be based on these miniature courses and, in making full use of them, N.C.O.s are given an excellent opportunity of demonstrating their powers of leadership and command.

(b) **Full scale course.**—This should be on similar lines to the miniature one, but several different situations can be presented. Full use should be made of natural cover and features. Live ammunition should be used wherever possible to produce realistic situations, butts being constructed where necessary and camouflaged. The following
are some suggested situations which might be introduced:—

(i) Locating the enemy—scout section fired on from 200–300 yds. range.

(ii) Action of the fire section—live ammunition being used to make the section commander dodge his groups about and get them into better positions.

(iii) Clearing of small hut or outbuildings—section attack followed by normal house clearing drill (see Sec. 36).

(iv) Flank interference—a platoon objective is indicated, the section meets with interference (live ammunition) but continues towards its objective by covering its advance with Bren group, 2-in. mortar, or smoke grenades.

(v) Interference in the line of advance—one man throwing a grenade (thunderflash)—quick, decisive action by the section commander and leading riflemen or bomber—straight in with Sten machine carbine or rifle butt; two or three men opening fire, necessitating a section attack.

A N.C.O. chosen by such a process must be allowed to keep his hand in by frequent practice in these methods. It will be found that the quality of leadership can be developed and strengthened in training and can often be discovered in people not originally thought to possess it. On vigorous all-day exercises, it will be found possible to test N.C.O.s. when under the strain of fatigue, hunger, noise, and exhaustion. It is at times such as these that the man shows his real worth.

62. Maintenance of battle discipline.—Discipline during battle is the ultimate end of any form of disciplinary training, and must itself be practised rigidly and constantly if a "military conscience" is to be generated within the men. As with all forms of discipline, it must first be explained by the platoon commander, who should point out to his men that battle discipline is essential to the teamwork which wins battles, and is a vital form of training which may save many lives. After this explanation, carelessness during training must be stamped out.

It is suggested that units should adopt an attitude in which the maintenance of field discipline is of paramount importance. Crimes (due to disobedience or inattention on parade), such as failing to observe to the correct flank, bad fieldcraft, exposure on a skyline, failure to set sights at the correct range, hesitating when crossing an obstacle, must be dealt with in exactly the same way as the ordinary military "crimes" of everyday life. Men who commit these crimes must be charged with them and brought before their company or battalion commander.

63. Battle inoculation*.—This is the process of making men accustomed to the noises and shocks of war by reproducing all these things as realistically as possible. It is of the utmost importance that it should be carried out as much by night as by day. The following are a few suggestions:—

(a) The enemy should always include a few marksmen who can be trusted. Their task is to snipe, always making sure that they miss their opponents by a safe margin. If the places where this form of shooting is done are carefully chosen (e.g. where there is a bank of shell holes which can be used to act as a safe stop-butt) it can be carried out with safety.

(b) Field firing practices in which the troops are allowed to use ball ammunition, live mortar bombs, and smoke.

(c) Later these exercises lead up to company and battalion exercises in which the supporting weapons, e.g. carriers, 3-in. mortars, and 25-prs., fire H.E. and smoke.

(d) Men should be grouped as a section on a bank and concealed marksman fire rounds as near to them as safety permits. While this fire is going on men should observe and try to discover where the fire is coming from. At a later stage they should crawl behind a bank about 2 ft. high, over which a L.M.G. is being fired. Care should be taken to ensure that the strike of the bullet is always beyond the observer.

(e) On all exercises thunderflashes should be used as liberally as possible to represent enemy mortar fire. Buried charges of ammonal fired electrically can also be used on bigger schemes to represent enemy artillery fire. When fired these throw up a column of soil high into the air, and since they come as a complete surprise whilst the noise of live ammunition fills the air they have a most realistic effect.

(f) Every man in the platoon, while in a weapon slit, will be overrun by tanks. He will regard this experience with considerable misgiving in the first place, and will feel an almost irresistible inclination to get out of the trench and run away. As soon as he finds out that the tank cannot possibly harm him, and that this form of weapon pit is tankproof, he will gain a great deal of confidence, and on the third or fourth run will be able to bob up again as soon as the tank has gone by and throw a grenade or aim his rifle at the following infantry.

*For Safety Rules for Battle Inoculation and Field Firing see S.A.T. Vol. 1 Pamphlet No. 1 section 17.
Aircraft.—Arrangements should be made for aircraft to make realistic dive-bombing and machine-gun attacks. Troops must learn to treat attacks by aircraft as an everyday occurrence.

64. Maintenance of high morale.—In modern war, rigid discipline is not sufficient; it must be coupled with high morale and enthusiasm. The Boers had bad discipline but high morale; in a convict prison there is rigid discipline but poor morale. In artillery barrages and the covering fire of machine guns, and the conception of discipline, as absolute obedience, was essential. In this war men may be surrounded or may have deliberately penetrated deeply behind the enemy's main positions, fighting in isolation, unsupervised by a senior commander. They may have accomplished their immediate task and be in a position where there is no chance of praise or punishment or supervision. The ability to decide to carry on fighting and use their initiative will depend not so much on obedience, uniformity, and subordination as on morale, and the enthusiasm, initiative, and aggressiveness which spring from it. False discipline, the kind which is not founded on high fighting morale, may lead to a dangerous sense of complacency. True discipline is the harnessing of enthusiasm.

For this war, more than ever, we need this enthusiasm, this determination to destroy the enemy, this high fighting morale which makes discipline a source of pride, and initiative a matter of course, so that each man will act intelligently and bravely without waiting to be told what to do when a new and surprising situation arises. We need fighting morale. To generate high morale each man must be aware of his own genuine skill and power as a fighting unit, and feel his own importance to his comrades and his nation; he must know of the efficiency and high morale of his comrades and be infected by the energy, vitality, and enthusiasm of his officers.

Each man must understand fully the cause for which he fights and must know and approve of the determination of his leader to fight to the death. The leader of any group must understand the difference between morale and discipline, and aim at both. He must set himself the deliberate task of inspiring his men and adding to their skill the determination which wins battles.

SECTION 16.—ORGANIZATION AND EQUIPMENT OF THE PLATOON

65. The allotment of duties and carriage of weapons and equipment among the men in a platoon must depend on the platoon's strength and the type of operation in which it is engaged. A possible organization is given below, but must not be regarded as invariable.

### Table: Suggested Organization of Infantry Platoon

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**Note:**
- 3 sets utility pouches carried by each man, in addition to their basic pouches.
- 20 ammunition pouches per section armed by T. C. and No. 2. 2 Ensigns additional to basic pouches.

### Legend
- H. Q.: Headquarters
- Pl.: Platoon
- S.: Section
- M.: Machine Gun
- R.: Rifle
- T.: Trench
- C.: Company
- B.: Battalion

**Total H. Q.:**
- Rifles: 8
- Machine Guns: 4
- Grenades: 10
- Total: 12

**Total Pl.:**
- Rifles: 38
- Machine Guns: 16
- Grenades: 50
- Total: 54
SECTION 17.—SECTION FORMATIONS

66. Section formations.—Section formations depend chiefly on ground and the type of enemy fire likely to be encountered. When within range of enemy small arms fire, sections must deploy unless adequately protected by ground. Sections must not deploy too early, otherwise slowness and stickiness will result. It is easier for section commanders to control their sections when closed up, but it may be necessary to dispense with a certain amount of control in order to avoid losses. The formation will also depend on whether it will be necessary to fire. The formation to be adopted will, therefore, depend on:

(a) Control.
(b) Ground.
(c) Fire production.
(d) Enemy’s fire.

These four points are conflicting, and the section commander must strike a balance that will give his section the best advantage.

67. The main formations with their advantages and disadvantages are as follows:

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<th>Formation</th>
<th>Advantage</th>
<th>Disadvantage</th>
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<td>Blobs (of two, three or occasionally four men).</td>
<td>Best concealment and good control.</td>
<td>Not good for fire production.</td>
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<td>Single file.</td>
<td>Useful for certain types of cover such as hedges.</td>
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<tr>
<td>Loose file (normal file formation, but broken, so that men are not covered off laterally or from front to rear).</td>
<td>Good control and assists rapid movement or change of line of advance.</td>
<td>Vulnerable and not good for fire production.</td>
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<tr>
<td>Irregular arrowhead (Normal arrowhead formation, but broken so as to avoid regular pattern visible from the air).</td>
<td>Facilitates rapid deployment to either flank.</td>
<td>Control less easy than any of the above.</td>
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<tr>
<td>Extended line.</td>
<td>For final assault, occasionally for Very vulnerable crossing open to fire from a ground.</td>
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In all formations, except blobs, there should be about 5 yards between men except on very dark nights.

68. During an advance the section commander should change formation to suit the ground and the tactical situation. He should never adhere rigidly to a certain formation because it has been shown in the training manual, but must be prepared to maneuver within the section so as to make the best use of all available cover.

69. When sections are deployed orders will be replaced by signals, or brief instructions from the section commander, e.g. “Behind me in file,” “Across that bridge and line the bank,” “Arrowhead.” Such instructions should be brief and to the point. The better the training and discipline of the section, the shorter can be the orders.

SECTION 18.—ADVANCED OBSERVATION TRAINING

70. The observers watch a number of typical battlefield sights taking place at irregular intervals at varying distances, e.g. a group of riflemen firing live ammunition to a flank, a 2-in. mortar firing from behind cover, a 3-in. mortar doing likewise, a L.M.G. firing bursts from a concealed position, an enemy “R” group carrying out a reconnaissance. They are supplied with a panorama and have to record what each incident is, where it took place, and the range.

71. Use of field glasses.—As soon as N.C.O.s. and officers have learned to locate without field glasses they should be further trained in the use of glasses. Glasses are useless if kept in the box, because it takes too long to get them out and adjust them. As soon as contact has been gained the glasses should always be hung round the neck, correctly focused, and the hands should feel for them instinctively and instantly as soon as there is anything to see. Field glasses are most useful at night.

72. Observation by the section as a team.—As soon as a reasonably high standard of individual skill in observation has been reached, the section commander should organize his section to observe collectively. In leading sections, nothing can be done without eyes—intelligent eyes watching continuously. He who sees first shoots first. It is furthermore of the greatest importance that practice is gained in instantly passing the information seen by the eyes to the section leader or the platoon commander. When a forward platoon is approaching an area where the enemy are reported to be, observation must be organized before movement starts, each individual man being detailed for a quarter of the circle. The procedure should be on the following lines:


Report any enemy movement and the direction of any enemy firing you may see. Report any action by our own troops when possible.”

The section commander can now devote himself to directing the advance of the section and taking control. Let us suppose that
shortly after giving these orders, the section is driven to ground by some bursts of enemy machine-gun fire.

The following should happen:

Observer: "Enemy opened up on the right, corporal."

The section leader goes to Pte. Smith who points to the area from which he judges the fire has come. Meanwhile, all other observers continue to watch in the directions assigned to them. The section leader wants better observation. Assuming that there is a house close by, he says to Pte. Smith: "Get up into a top room of that house and watch that area for enemy movement. Pte. Gray, go with him and remain at the bottom of the stairs. Smith will tell you what he sees and you come and tell me. I shall remain here."

In this way the section leader has ensured that those of the enemy who have disclosed their presence by firing are watched as effectively as possible.

The section leader (or platoon commander) at every stage must place his observers as a cricket captain sets his field. This rule applies both in daylight and darkness.

Observers should use their ears as well as their eyes. An experienced man can "read the battle" from the sound of firing from both sides.

Every burst of small arms fire, every shell or mortar burst from the enemy or from ourselves, has been fired with an object. A good man can interpret them all.

Observation must be intelligently planned and quick passing of information arranged for by the section leader and platoon commander. This process must be carried out continuously.

73. Locating the enemy when observation alone fails.—The enemy may be so well concealed that eyes alone fail to locate him. It is highly probable that if he is well disciplined he may withhold his fire, after the initial burst, in order not to give his position away. Yet the enemy must be located before any plan can be made to attack him. The practice in training of indicating enemy posts by means of flags or by accurate description must never be allowed. On training the enemy must always be well concealed and he should whenever possible be encouraged to fire live ammunition (into a safe bank), and to behave in every way as an enemy would do.

74. Patrols. (See also Chapter IV, Sec. 34.)—Patrols are one of the best means of locating enemy posts with accuracy, but the process may take a long time. There have been many occasions during this war when patrols of both sides have succeeded in getting behind and beyond the foremost posts; by lying concealed in observation for long periods, very accurate plans of enemy dispositions can be obtained by patrols.

75. Observation methods.—All the above methods and instances are mentioned to indicate that the task of locating enemy positions is no easy one. It is both an art and a science, and it must be very closely studied if we are to succeed in it. Of the above methods, only the following can be regarded as within the scope of the normal platoon commander:

(a) Observation.
(b) Searching fire, to force the enemy to betray his position either by returning the fire or by moving.
(c) Movement of our own troops, to tempt the enemy to fire.
(d) Special scouts or snipers.

76. The control of fire.—A highly trained enemy who can resist the temptation to blaze away whenever he sees a target, however attractive, will be difficult to locate. There is a very widespread idea in many soldiers' minds that it is their duty to open fire as soon as they see a German or Jap. The only way to abolish this idea is by constant practice to get them to understand clearly:

(a) That the task of location is an extremely difficult one.
(b) That this difficulty is vastly increased if fire is withheld.
(c) That indiscriminate firing in defence means presenting a plan of your positions to the enemy.
(d) That careful control of fire in defence is vital.

SECTION 19.—SELECTION OF FIRE POSITIONS

Note.—Instruction in this subject should be preceded by S.A.T., Vol. I:
Lessons 7 and 8. Pamphlet No. 3.
Lessons 10, 15, and 16. Pamphlet No. 4.
Lesson 2. Pamphlet No. 8.

77. Object.—To train men to select fire positions that combine cover from fire with cover from view. It is at this point that weapon training and minor tactics merge. It is essential that as early as possible during a weapon-training course the weapon should be used on the ground, i.e., the pupil should be taken out on a piece of typical rough country and trained to select his fire position, using fieldcraft and concealment to enable him to select those positions. Minor tactics are sometimes defined as the application of weapons and formations to ground. They demand from the private soldier the highest standards of weapon training and fieldcraft combined. The one without the other is of little value.

78. Selection of fire positions.—The selection of a fire position for any task depends on:

(a) Ability to use weapons freely.
(b) A good view of the ground or target to be covered by fire.
(c) Cover both from observation and fire.
(d) Ability to approach the position under cover.
(e) Suitability for developing the characteristic of the weapon, e.g., enfilade fire for L.M.G.

In addition, fire positions for a section must be selected with a view to control and local protection.

79. **Method of instruction.**—The instructor should give a simple situation and fire task, and order the man under instruction to select a fire position within a defined area.

The first task might be a defence situation that would require reconnaissance; later tasks should deal with attack or situations involving the quick selection of fire positions.

Selection should be followed by mutual criticism and discussion on the following lines:

(a) Was it possible to use weapons freely?
(b) Was the view sufficient?
(c) Was it cover from fire or from view only?
(d) Was the cover the best obtainable, and was the best use made of it?
(e) Would it have been easy to advance or withdraw if it had been necessary?
(f) Did the position admit of enfilade fire?
(g) Would it have been possible to surprise the enemy with fire? (Ask men at what point in enemy’s approach they would have opened fire.)
(h) Was the position conspicuous or close to well defined landmarks?

80. **Advanced instruction in the selection of fire positions for the Bren gun.** (See S.A.T. Vol. I, Pamphlet 4).—The section advancing across country comes under fire from concealed post (a Bren gun operated by remote control firing live ammunition into a bank is the best target). The section commander is told that he must carry out the drills he has learnt for locating the enemy and then work his Bren group round to a concealed position and bring it into action.

Situations should be found which involve a long crawl with the gun, and getting the gun across open ground. Great emphasis should be laid on care in emerging from cover and in bringing the gun into action. Jerky movements caused by excitement at this time may waste all the effort that has gone before.

81. **Selection of positions for the 2-in. mortar.**—This weapon is probably the most important of the platoon weapons. A 2-in. mortar emits a puff of smoke with every bomb that is fired, and it is therefore the most difficult of the platoon weapons to conceal. Except for a “quick bomb on the ground,” this weapon must always be fired from a carefully concealed position, behind bullet-proof cover, the cover being sufficient to give concealment both to the firer and to the smoke from the barrel.

The drill for the handling of the 2-in. mortar is in S.A.T. Vol. I, Pamphlet No. 8.

82. **Improvement of fire positions.**—Training in the use of the entrenching tool for the rapid improvement of fire positions both by day and night is essential.

**SECTION 20.—SELECTION OF LINES OF ADVANCE BY A PLATOON**

83. The selection of the line of advance by a platoon commander is largely a matter of map reading. A high standard of map reading is not an ability merely to read co-ordinates quickly or to find one’s way along roads. A map is the result of a very careful reconnaissance recorded on paper by an expert, and a high standard is reached only when the reader can get an accurate mental picture of the ground that lies ahead, by studying the map. It is also essential that the reader should be able to select suitable O.Ps.

84. The best method of learning this subject is to follow the keyword “ground,”

G. General.
R. Ridges.
O. Observation.
U. Undergrowth.
N. Non-passable.
D. Defilade.

After deciding on the area to be studied—which must be considerably wider than the area to be occupied or crossed—apply the headings as follows:

**G. General**
- Get a rough idea of the character of the area. Is it high rolling downland, or flat low-lying fields, open or close country?
R. Ridges
Take a grease pencil (any other colour except blue) and mark on the talc with a single line the highest part of all ridges and spurs (i.e., the watersheds). Mark the streams or lowest lines of valleys and re-entrants in blue (i.e., the water-courses).

O. Observation
Mark with the first pencil any particularly good viewpoints or detached features with a circle. (You will now have the skeleton of the ground.)

U. Undergrowth (or cover)
Study the location of villages, woods, belts of trees, scrub, or rough ground.

N. Non-passable
Study the obstacles, the woods, villages, rivers, canals, and railway lines.

D. Defilade
The covered lines of approach to any point, and the areas that afford cover, will now be easily picked out.
A clear picture of the ground as a whole, its possibilities and its disadvantages, will now have been formed in the mind. Clean the talc, and make up your plan.
The study of the ground carried out by such means may often give you the probable enemy positions and action as well as our own. It will be easy to remember and read the ground from the contours without the markings. A clean talc will be wanted on which to record the plan.

85. Practice.—As soon as the above system has been mastered, practice can be given by moving across country following a route on a given axis of advance, much the same system being adopted as that referred to in Sec. 10 (Selection of lines of advance).

86. Reconnaissance for lines of advance.—"Time spent in reconnaissance is seldom wasted," but most of the time spent during the reconnaissance is often wasted. A man making a reconnaissance must know what he is looking for and how to look for it. His reconnaissance must be confined to essentials and must be made from the nearest point from which these essentials can be seen.
Reconnaissance for lines of advance can be divided into:
(a) An endeavour to locate the enemy positions.
(b) A decision on the line of advance it is intended to follow.

Methodical ways of dealing with both (a) and (b) above have been set out earlier in this book. If these methods are followed reconnaissance will be reduced to a matter of minutes.

It is very often unwise to decide on the whole of a line of advance from the original reconnaissance point. The ground may be quite different when it is reached, and fresh decisions may be necessary at each bound. The N.C.O. required to lead his section round a flank may merely be told "Left or right flanking" and the general direction he is to take. He should be trained to use ground himself and he must be relied upon to use his own skill and judgment. It is fatal to attempt during orders to detail a lengthy line of advance to a N.C.O. It is unlikely to be the best line, and unforeseen circumstances may soon require a deviation from it.

CHAPTER 4
THE BATTLE DRILLS FOR THE ATTACK

SECTION 21.—GENERAL

87. The primary object of battle drill is to ensure a uniform standard of battle procedure throughout the Army. When every officer, N.C.O., and man is taught the same procedure, the fullest co-operation in battle is assured even when casualties occur and changes have to be made.
It is clear that a good system of battle drill, wisely used, will enable deployment to be speeded up and the unit or sub-unit to develop its maximum battle power quickly.
"Battle drill must be our servant and NOT our master."
"It must be wisely used and applied."

A danger that must be guarded against in our training is the desire for speed in getting the sub-unit into action. This must not be allowed to develop into such haste that all sound military principles are discarded. FOR EXAMPLE, IN THE INFANTRY, THE PLATOON COMMANDER MUST ALLOW TIME TO FIND OUT WHERE THE ENEMY IS, TO APPRECIATE THE PROBLEM AND THE GROUND, AND THEN TO ISSUE CLEAR ORDERS. If the platoon is not put into the battle properly, it will merely suffer a lot of casualties, however brave the men may be.
It must be emphasized that all the drills which follow in this book are the basis on which to work. They are simple guides for the simple soldier. As sections and platoons become expert in these drills, they must learn to modify them and adjust them to the situation and ground. No one drill can suit all circumstances, and variations on those set out in this and other chapters must be encouraged and taught as soon as the "basic stroke" is mastered.
SECTION 22.—APPRECIATIONS

88. Sequence.—Whether written or mental, appreciations should always follow the same logical sequence:

(a) The object to be achieved.

(b) Factors which effect the attainment of this object.

(i) Relative strength. Present dispositions, mobility, armament, and morale of the enemy, in relation to one’s own forces.

(ii) Ground.

(iii) Time and space.

(iv) Weather.

(v) Hours of daylight and darkness.

(vi) The need for security.

(vii) Communications.

(c) Courses open to:

(i) Own tps.

(ii) Enemy.

(d) The plan.

89. Battle drills do not give you the answer to every problem; they do not absolve the commander from thinking, but they do help him to think on the right lines. Appreciations of enemy, or ground and fire-power, have still to be made, but they can be made simply and quickly if the commander knows how to go about them.

It will be obvious that all the headings mentioned above will not be relevant for every appreciation. On occasions, some will be omitted, while on others, some may be added.

Consider, for example, a simple situation:

A platoon of infantry, moving across country in irregular arrowhead formation ahead of the rest of the company, suddenly comes under effective fire from a ridge in front. The leading section drops to cover, returns the fire, and tries to get forward, with no success. The other two sections of the platoon are not under fire and are able to get to suitable cover. The platoon commander has his “O” group with him. What must he do?

A rapid and hastily thought out plan without consideration of the ground might lead the platoon into trouble. A plan put into execution after too much weighing up of the pros and cons may be too late to be of any use. So he must APPRECIATE the situation.

Battle drills do not absolve him from this task. Thus:

(a) What is my object? In this example it is to capture the ridge and to destroy the enemy who are holding it.

(b) Where are the enemy? Have I got their positions accurately located? What is their strength?

(Note.—The platoon cannot be launched into an attack until the positions of the enemy are accurately located.)

(c) Before any movement can take place I must have some form of covering or supporting fire. Have I got this? The leading section is checked, so they can be used and can become the fire section. Is any more fire wanted? (Remember, you must obtain fire superiority.) What about the 2-in. mortar? Is the range all right?

(d) Now I’ve got my fire support, what about the manoeuvre? Where is there suitable ground to allow my assaulting sections to get close to the ridge? On the right, left, or in the centre? Shall my main effort be put in to the right or left? (A frontal attack will not do very much unless very well supported by fire. In the early stages of the encounter battle it can nearly always be ruled out.)

(e) How can I co-ordinate the fire of the fire section and 2-in. mortar and the manoeuvre of the flanking sections? Can it be done by observation? Or are signals necessary? In this way the platoon commander can arrive at a decision very rapidly by a quick appreciation. His orders can then be given out clearly, simply, and briefly, and his troops will be launched into the attack correctly.

SECTION 23.—ORDERS

90. The test of all orders is whether, at the end of them, every recipient understands perfectly what he has to do.

91. There are two types of orders:

(a) Those given before the battle is joined, where the commander must make certain that each man knows exactly what he has to do and the part he is playing in the main battle.

(b) Those given in the heat of battle—“snap” orders of the kind used in the battle drills set out in later sections of this pamphlet.

Orders in the first of these categories may take a long time to give out, since every man must know exactly what is required of him, the route he is to take, and all there is to know about the enemy. Examples of this type of order are:

(a) Orders given to patrols before setting out.
Orders given to a sub-unit, which is to carry out a special task, i.e. mine clearing, infiltration through the enemy lines, or before a major attack which requires previous training and rehearsal. The other type of order is brief and to the point. Tactical terms which convey a wide meaning are used, and, provided that they are understood, orders of this kind will only take a few minutes to give out.

These two types of order must not be confused with one another. If they are, troops will either be launched into the battle without sufficient information about the enemy, or time will be wasted in unnecessary explanations when speed is essential.

92. At all times, section and platoon commanders must have a clear picture in their minds of the higher commander’s intention, and then in an emergency they will act in the way that conforms to that intention.

**SECTION 24.—METHOD OF TEACHING THE BATTLE DRILLS**

93. The method of teaching all the following drills should be:

(a) A short talk outlining the details and giving any special points to note.

(b) If possible, a demonstration should be given by a demonstration platoon showing one of the ways in which the drill should be done. If a demonstration showing the wrong way to carry out a drill is given, care must be taken not to exaggerate unduly. The right and wrong way of giving demonstrations needs careful control, because the wrong method is inclined to show men up in ridiculous situations that would not occur even with the worst trained British soldier.

(c) After the demonstration the unit should practise the drills non-tactically, i.e. they simply learn the drills as patterns on which to base their further training.

(d) The unit practises the drills either in a tactical or a non-tactical setting.

(e) Section leaders and N.C.Os. carry out a typical exercise as a T.E.W.T. The essentials of such a T.E.W.T. are that:
   (i) All details must be carefully gone into.
   (ii) There should be no syndicates—each man arrives at his own solution.
   (iii) Only such time as would be available in practice is allowed for arriving at these solutions.

(f) The platoon carries out a tactical exercise in which they are given opportunity for putting into practise the drill they have learned.

**SECTION 25.—MOVEMENT BEFORE CONTACT**

94. **Movement along roads.**—When moving along a road leading companies or flanking companies (i.e. any troops who are not in contact with the enemy) should adopt the AA. formation. This is shown in Fig. iii. The following points should be particularly noted about the above formation:

(a) Sections are in echelon on opposite sides of the road with at least 5 yds. between men. The leading section should be a tactical bound ahead of the “O” group. Distance between rear sections should be 15-25 yds. Rear companies can move at closer intervals, i.e., 1 yd. between men and 5 yds. between sections, but should do so only if it is necessary to save road space, since this closer formation may lead to losses from air attack. The advantages of this formation are threefold:
   (i) Dispersal is sufficient to avoid heavy casualties from the ground.
   (ii) The unit is practically invisible from the air; but note that in bright sunshine, casting shadows across the road, it will be necessary for all personnel to move on one side of the road only.
   (iii) The movement backwards and forwards of our own M.T. is greatly helped. For this reason, the AA. formation should always be used even in back areas.

(b) Commanders and N.C.Os. must conform and must not be allowed to march in the middle of the road.

(c) The platoon “O” group moves ahead of platoon H.Q. The “O” group consists of the platoon commanders, section commanders of the other two sections, the platoon runner, N.C.O. I.C. 2-in. mortar, the batman carrying the 38 set, when allotted, and possibly a runner from the leading section.

95. **Platoon movement across country.**—Sections or platoons moving across country can adopt any of the following formations: Loose file, single file, irregular arrowhead, according to the type of ground being covered. As infiltration tactics rest very largely on penetrating between enemy defended localities, it will usually be found that an advance must be made on a narrow front. If the gap is very narrow, it may mean that the advance will be made with sections moving in single file.

When moving across very open country before contact, the most suitable formation is sections in irregular arrowhead, the three sections also forming an irregular arrowhead pattern. The two rear
sections will always be a tactical bound behind the "scout" section, leaving enough room for them to manoeuvre if the leading section should be checked by fire.

In some instances where the task is reconnaissance rather than infiltration, better control is maintained by sending only the "scout" section forward in arrowhead, and keeping the remainder of the platoon in some closer formation, e.g., loose file.

SECTION 26.—THE ATTACK

96. Principles

(a) Covering fire.—Covering fire is essential to any advance. Without it, forward movement will often be impossible. The nearer the section get to the enemy position, the greater the need for covering fire.

(b) Assault from the flanks.—In order to allow covering fire to continue right up to the moment the assault goes in, every effort must be made to assault from a position off to one or other of the flanks.

(c) Timing the assault.—There must be no interval between the cessation of covering fire and the beginning of the assault. If there should be such an interval, the enemy will be able to begin shooting again. Remember that if the enemy is dug in, covering fire seldom kills him; it merely makes him keep his head down so that he is unable to shoot back.

97. Every section is designed to provide its own covering fire within itself. It can, if necessary, rely on itself to get forward. This provision of covering fire is the primary task of the Bren gun in the attack; i.e., to help get the riflemen forward. The object of the attack is not only to capture important ground which is held by the enemy, but also to kill all enemy holding that ground. Therefore, the Bren gun must also try to work round as far to the flank of the enemy as possible so as to threaten the rear of the enemy. This tactic has three advantages:

(a) It will ensure extermination of the enemy.
(b) It will prevent reinforcement.
(c) There is the psychological value of opening fire from the flank; and the enemy may think he is surrounded and may either retire or surrender.

98. Drills for the attack.—Applying the above principles, the following are the drills:

(a) The section must go into battle organized, every man knowing his own job. The section is divided into two groups:

(i) The Bren group.—No. 1 and No. 2 on the gun commanded by the second-in-command of the section,
(ii) The rifle group.—The remainder of the section led by the section commander. This group delivers the assault.

(b) The section moving forward organized as above comes under effective fire from the enemy and then every man carries out such anticipatory orders as he has received from the section commander. If none are received, and if he comes under effective fire, he drops flat instantly as if shot and crawls forward or sideways to a fire position. All riflemen observe as quickly as possible and return fire independently (if within effective range) until they receive the order "Stop." from the section commander.

Slogan: "Down—Crawl—Observe—Sights—FIRE."

(c) The section commander assumes control. He asserts his authority, ordering the section to make for suitable cover, e.g., "Line that bank," or "Follow me."

The section commander must get his section moving again as soon as he has either found a covered line of approach or has arranged to continue the advance by fire and movement.

(d) If it is necessary to advance by fire and movement, the section commander indicates to the Bren group a suitable fire position for the Bren gun (if possible a surprise position).

(e) The section commander orders the rifle group "right or left flanking."

(f) The rifle group covered by the Bren group, who are now in a fire position, moves round behind the Bren group making its first bound led by the section commander, and the two groups move on in bounds until the rifle group has reached its assaulting position, and the Bren group has reached a position from which it can support the assault. Fig. iv illustrates these movements.

(g) The assault goes in.

99. This drill is designed to ensure logical and orderly action and the proper but quick dispersal of the section when first fired on. It ensures control by the section commander at a vital period when an anticipatory order to the section may save the situation. For instance, the section commander might say to his section, "If we are fired on crossing this open ground, each man will double over into the dead ground behind that bank." Should the section commander forget to give such an anticipatory order, the first burst of enemy fire may act as an unpleasant reminder, in which event a snap order is necessary to get his section to cover. There must be no hesitation, otherwise the section will disperse quickly on its own initiative and the section commander will temporarily lose control. The above will keep the section together and make every man do something offensive.

Practise every N.C.O. frequently in giving anticipatory orders and in giving "snap" orders to the section to move to cover if caught by fire unawares. Make sure that the men understand that they go to ground ONLY if no orders have been received to the contrary, and train them to expect to receive orders.

Always stress that the section will only go to cover if effective fire is brought to bear ON THEM. They must never go to cover just because they hear the noise of fire directed at someone else.

100. Points to note

(a) One group must always be either firing or down in a position from which fire can be instantly opened. Always have "one leg on the ground."

(b) The ideal angle between the Bren group and the rifle groups at the assault is 90 degrees. This enables the gun to give covering fire up to the last possible moment. It is of course an ideal which will not always be attained.

(c) Groups must try to keep within voice control of each other, but often it will not be possible. When continuous voice control between groups is not possible, inter-communication between them can be achieved by:

(i) The noise of firing. The opening of fire by one group tells the other that it is time to move on.

(ii) Visual signal, e.g., one man of the rifle group can crawl to a position from which he can observe and wave on the Bren group.

(iii) Team work. Careful observation and practice will lead to an almost instinctive movement as a result of intelligent anticipation.

(iv) Voice control. Section commander or a runner can speak to the 2 I.C. as one group moves behind the other. This opportunity can also be taken to collect magazines, if additional ammunition is required for the Bren group.

(v) Runner only if all else has failed and something has definitely gone wrong.

(d) The Bren group must know the assault position as soon as it has been selected.
101. The assault.—The section works forward or round successfully and is now in position to assault. The drills for this are:

(a) On orders from the section commander, the rifle group assaults, firing from the hip as they go in.

(b) The section commander controls the assault throughout from the centre.

(c) As soon as the post is captured, the group wheels and assumes its original line of advance.

(d) The rifle group without halting consolidates at least 50 yds. beyond the enemy post.

(e) The section commander calls up the Bren group to join in the consolidation.

(f) The section commander checks section casualties and ammunition, redistributing this if necessary.

(g) The advance continues.

102. Points to note

(a) Smoke grenades will be very useful in the assault. Being instantaneous, they give off smoke at just the right moment to cover the last phase of an attack. (For further details regarding the use of smoke, see Sec. 33.)

(b) A possible use of the smoke grenade is as a signal to the 2-in. mortar, calling for smoke. The grenade should be taken by the Bren group and thrown when they see the assault group to be in a suitable position. On seeing the smoke from this grenade the 2-in. mortar will immediately put smoke down to screen the enemy post.

(c) The section must not be allowed to linger in the area of the post because such lingering is likely to attract enemy mortar fire. If it is the intention to remain on the captured ground for any length of time, immediate attention must be paid to digging in with the entrenching tools and to camouflage.

NOTE.—Bren and rifle groups move by bounds covering each other.
The section organized into three groups

(a) The main task of the section commander is to control and lead his section in battle. If the number of the men in his section is large, control becomes very difficult and can be maintained only by close grouping, which, in war, is to be avoided.

(b) In order to allow for this control and for greater tactical dispersion, it is suggested that the section may be organized into three groups—two rifle groups and one Bren group. This is not the normal way of handling a section, the normal being two groups as mentioned above.

Before organizing their sections into three groups platoon commanders must have the authority of their commanding officer and must ensure that:

(i) the section is fully up to strength.
(ii) the group commanders are really good leaders.
(iii) the men have sufficient battle experience to justify their operating otherwise than under the control of N.C.Os.

c) The idea is designed to exploit the herd instinct, which expresses itself in the natural tendency for friends to group together in order to fight together, and for men to group round their leader. It is intended for tactics only, but it could be expanded to cover all activities.

d) The section commander, instead of commanding each man in his section, will command three groups—Nos. 1 and 2 Rifle Groups and No. 3 Bren Group. Whatever the size of the section, these three groups should be maintained, so that the section commander has only three men under his direct command. The section commander will decide to be with whichever group is most suitable in accordance with the situation and particular task in hand.

e) Groups are formed from friends as far as possible, in order that friends keep together and fight together. One man in each group, which is not commanded by an N.C.O., acts as leader. He should be chosen because of his natural gifts of leadership and because the rest of the group look to him as a leader. This leader can be changed whenever it is considered necessary.

(f) Groups can be used in any formation and at any intervals, to suit the ground and the tasks in hand; but they must keep in touch with the section commander and not be with them. There is nothing to prevent the section from being handled at any time as one or two groups, as mentioned in previous paragraphs.

SECTION 27.—BATTLE DRILL FOR SECTION IN THE ATTACK

104. The object of this drill is to show the soldier diagrammatically how the section fights, and exactly what every man in the section has to do. It also relates the discipline of the parade ground to the discipline required in the field. The soldier should be practised in the tactical application of the drill at an early stage so that he can understand the value of the drill.

105. The following points should be noted:

(a) All movements are carried out at the double, once the section is under effective fire.

(b) Rifles will be trailed until the section comes under fire, when they will be canted in the left hand.

(c) On the command "Halt", the action is to halt, order arms and stand at ease.

(d) "Fire" is represented by standing at attention with the rifle at the order. "Cease fire" by standing at ease again.

(e) "Enemy" is represented by a flag in the middle of the parade ground. It is presumed that the section locates the enemy immediately it comes under effective fire.

(f) Distance between men throughout will be 5 yds. They will fall in at 5-yd. intervals.

106. Before the drill begins, the section will be fallen in in line in the centre of one end of the parade ground at right angles to the flag and numbered as for battle drill in the following order by the instructor:

Section commander, No. 1 rifleman, No. 2, No. 3, No. 4, No. 5, No. 6 rifleman, second-in-command, No. 1 Bren, No. 2 Bren. The section moves with the Bren group in rear, so that the section is less likely to be checked when it comes under effective fire.

The instructor then points out the enemy and tells the section commander how many bounds he is to make before the assault.

<table>
<thead>
<tr>
<th>Drill No.</th>
<th>Word of command given by</th>
<th>Word of command</th>
<th>Action taken and by whom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sec. comd.</td>
<td>Number—standing load—move to the right—right turn—observe—prepare to advance—first bound, then—advance.</td>
<td>Section number as for battle drill from right to left—right turn—turn and face direction in which they observe:— Riflemen, odd numbers to right, even numbers to left. No. 2 Bren about turn. Remainder continue to face front. All face front and advance in step in quick time.</td>
</tr>
<tr>
<td>Drill No.</td>
<td>Word of command given by</td>
<td>Word of command</td>
<td>Action taken and by whom</td>
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<tr>
<td>2</td>
<td>Instr.</td>
<td>Under effective fire.</td>
<td>Rifle group come up at double on either side of section comd. and shout: &quot;Down crawl observe sights fire.&quot;</td>
</tr>
<tr>
<td>3</td>
<td>Sec. comd.</td>
<td>Rifle group—stop. Enemy flag 400. Rifle group fire when you see target. Bren group there.</td>
<td>Rifle group halt on &quot;Under effective fire.&quot; Bren group follow me. Bren group halt—enemy—left (or right)—400 covering fire.</td>
</tr>
<tr>
<td>4</td>
<td>2 I/C</td>
<td>We will kill all enemy in that post. Right (or left) flank. Rifle group follow me. Halt. Enemy left (or right) 200 covering fire.</td>
<td>Rifle group—stop. Right (or left) flank. Rifle group follow me. Halt. Enemy left (or right) 200 covering fire.</td>
</tr>
<tr>
<td>5</td>
<td>Sec. comd.</td>
<td>We assault from here. Bren group there (points to 10 or 2 o'clock to post; or if another bound is to be made—Bren group next bound there).</td>
<td>Bren group—stop. Right (or left) flank. Rifle group follow me. Halt. Enemy left (or right) 200 covering fire.</td>
</tr>
<tr>
<td>6</td>
<td>2 I/C</td>
<td>Halt—left (or right) turn and shout: &quot;Down crawl observe sights fire.&quot;</td>
<td>Halt—left (or right) turn and shout: &quot;Down crawl observe sights fire.&quot; (See note for drill 4).</td>
</tr>
<tr>
<td>7</td>
<td>Sec. Comd. (as Bren group pass behind him).</td>
<td>Section for battle drill re-number. 2 I/C takes over.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>2 I/C</td>
<td>Section number. 2 I/C moves to take charge of section. Sec. comd. reports &quot;ammunition, casualties and intelligence&quot; to instructor and returns. 2 I/C moves back to his original position. Section advances at fast walk rifles again at trail, shaking out into original order. Instructor halts them for criticism. Before repeating the drill, the instructor should fall out No. 1 Bren.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Sec. comd. (if moving to his assault position, otherwise drills 5-8 are repeated, less the intention in Drill 5).</td>
<td>Advance will continue on original axis—first-bound there—advance.</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 28.—THE PLATOON IN THE ATTACK

107. When all sections have mastered the above drill, they are ready to work as a platoon. The following is the procedure for the platoon in the attack:

(a) The platoon advances in the correct order, with the scout section leading, a tactical bound ahead. (See Fig. v.)

(b) The scout section comes under effective fire. It carries out its normal drills, i.e., it tries to get on alone. If it fails in this task owing to heavy weight of enemy fire or if the platoon commander (who is close behind, observing the fire) considers that a platoon attack is essential, the leading section will be ordered to stop, and then becomes the "fire" section. Its task now is to beat down enemy fire, to gain and keep fire superiority whilst the remaining sections put in an attack. The orders to the fire section commander can be given either by the platoon commander himself, if he is able to get up to him or sending a runner forward to tell him (i) that he is to be fire section and (ii) the outline plan.

(c) The platoon commander with his "O" group very close behind him makes his reconnaissance, appreciation, and plan. (See also Sec. 22.)

(d) The platoon commander then issues his orders. They should be as short as possible, dealing only with essentials.

Specimen orders for an attack of this nature are as follows:

"Enemy—in front of farm buildings—about 400 yds away (the pointing out of the enemy positions will in actual fact require more detailed orders).

"No. 7 Platoon will capture farm buildings and destroy the enemy—left flanking—making use of that low ground over there and that line of trees.

"No. 1 Section—fire section.

"Order of march: No. 2 Section followed by No. 3. I will be with No. 3.

"Mortar: Smoke farm area to cover movement to flank and then H.E. (number) bombs on my signal—white verey light.

"Any questions?

"Move."

(e) The platoon consolidates as follows:

Leading section in the flanking order of march takes the centre (original axis of advance). Second section goes straight on across the post to the far flank. Fire section takes the open flank.

PLATOON MOVING ACROSS COUNTRY AGAINST AN UNLOCATED ENEMY

(Diagrammatic only—not to scale)
Platoon commander checks the casualties and ammunition and redistributes if necessary.

The advance continues (see Fig. vi).

Notes.—The 4 or 8 o'clock Bren will be used for gaining fire superiority over the enemy when possible. But it has the primary task of dealing with enemy opposition on the flank.

2-in. mortar may use H.E. on the objective before laying a smoke screen.

108. Points to note

(a) Always choose a covered approach which is not obvious. You may be sure that the enemy has appreciated the ground also and he is likely to have the obvious covered approach very carefully covered.

(b) Position of 2-in. mortar group. If the 2-in. mortar group is within range of, and can observe, the target area and the assault position of their own troops from the area of the fire section, they may remain in that area. They can get into action quickly there and it is easier for the platoon serjeant to control them. On the other hand, if the flanking movement is long and down a difficult covered approach it will be better for the mortar group to accompany the flanking sections. Orders will be issued by the platoon commander to the "O" group and the mortar group will then usually move as close to the platoon commander himself as safety will allow.

(c) The leading section should be given bounds just as in the approach before contact.

(d) If the opposition which the platoon encounters is too great for it to overcome by its own resources, it is for the company commander to continue the attack on the same system. Even if a platoon fails in its task it may still help others to succeed elsewhere. The enemy can only stop the advance by means of fire, and in opening fire they must give away their positions. The company commander who is well forward will be "reading the battle" and every burst of fire will give him new information about the enemy's positions. The details of the company in the attack are given in Infantry Training, Part III.

Section 29.—The Flanking Movement. Some Complications and Their Solution

109. It is probable that a platoon meeting opposition and attempting to counter it by turning a flank will find that the opposition is not an isolated locality, but part of an enemy system of
mutually supporting localities or posts. This discovery may not be made until the flanking movement has begun, since the supporting enemy localities may withhold their fire till the last minute.

The platoon commander should accordingly be alert at all times; he should anticipate this form of interference and he should not be surprised when it happens.

110. The opposition may be of two kinds:

(a) From a flank.

(b) From the area of the covered approach down which the flanking sections are attempting to infiltrate.

In either event the platoon commander’s task is clear—“maintenance of the objective.” He must try to carry out his original intention, namely, to attack and destroy the enemy post which first barred his line of advance. This post is already under fire from his fire section and if he permits himself to be drawn away into a struggle with other posts, his platoon will soon become broken up and may be defeated in detail.

The platoon commander must therefore press on with his original plan, detaching as small a portion of his force as possible to counter the enemy fire and to enable him to move on.

111. Opposition from a flank

(a) The Bren group of the leading section will be known as the flank protection Bren. If the flanking sections are fired on effectively from a flank as they move round, they will drop into cover as quickly as possible. The flank protection Bren group will move into a position from which it can engage the enemy post. Under cover of this counter-fire the remainder will try to push on and complete their original task.

If this immediate action is inadequate the platoon commander may order the Bren group of his second section to augment the fire of the flank protection group.

(b) If the enemy fire from the flank is very severe the platoon commander may at once appreciate that he will have difficulty in going on even though he has put “a leg on the ground.” In this event he may order the mortar group to put down smoke to create an artificial defilade between his line of advance and the enemy post which is holding him up. In a well practised platoon the platoon sergeant may order smoke to be put down immediately without waiting for orders from the platoon commander. As soon as the smoke comes down the platoon commander will move the flanking sections on and try to complete his original task.

Note.—If the wind is favourable (i.e. blowing down the flank selected for the line of advance) smoke grenades can sometime be used as an alternative to the 2-in. mortar in this role.

112. Opposition from the area of the covered approach itself.—It is the enemy's policy to site their weapons in defences so that they can make use of their range as far as possible. Covered approaches between their posts are often dealt with by mobile patrols. It is therefore quite probable that any likely covered approach will be barred by a mobile patrol armed with a light machine gun. Such a mobile patrol will of necessity be in close country, and it will therefore be at a disadvantage and will have to withdraw if you can succeed in getting to close quarters with it at a point where you can employ your numerical superiority.

As soon as the enemy fire is opened by such a patrol all the flanking party should go to ground. The rifleman of the leading section should get into a fire position as quickly as possible and return the enemy fire. The platoon commander will still attempt to carry out his original intention and must try to force a passage down the covered approach. His best weapon for this task is the 2-in. mortar H.E. bomb and he will now have to issue immediate orders for dealing with this situation. These might be as follows:

Specimen orders

"Mortar. Put down three H.E. bombs immediately. No. 2 section on the bursting of the second mortar bomb, send your Bren group forward to that hedge. On the bursting of the third bomb assault with the rifle group. No. 3 section is reserve under me.”

Note that in this plan the platoon commander does not fall into the trap of attempting a wide encircling movement and deploying his troops into the open out of the narrow covered approach. He realizes that since he has encountered a system of mutually supporting enemy localities he would expose his men to severe enfilade cross fire if he were to do this. He therefore prefers to keep the fighting at close quarters and so to use his superiority in numbers.

Section 30.—Drill for Platoon Flanking Attack

113. It is stressed that this drill, like the section attack drill, possesses no intrinsic value of its own. Its object is to show the soldier diagrammatically the ideal flanking attack, showing him in detail exactly what he has to do and what everyone else in the platoon team is doing. As such, its training value is very great and it also relates the discipline of the parade ground to the discipline required in the field.
114. Before the drill begins, the platoon will be fallen in in threes in one corner of the parade ground. Platoon H.Q. will be on the left, the platoon commander in front of the platoon facing the instructor and the platoon numbered as for battle drill.

Once the platoon comes under effective fire, distance between men will be 5 yds. interval throughout.

This drill should not be attempted until the platoon is trained in the section attack.

If sections are of strength less than one and seven, the Bren group should be reduced to the second-in-command and No. 1 Bren.

Order of march for platoon will be as under:

**Leading sec.**  ...  Sec. Comd.  ..........  ..........  Marker.
                   No. 1 rifleman.
                   No. 2.
                   No. 3.
                   etc.
                   2 I.C.
                   No. 1 Bren.
                   No. 2 Bren.

**"O" G.**  ...  Pl. Comd.
              Runner from No. 1 sec. (present in the drill,
                but not always when carried out tactically).
                   No. 2 Sec. Comd.
                   No. 3 Sec. Comd.
                   Mortar N.C.O.
                   No. 1 mortar.

                Batman (can be in "O" group, if carried
                out tactically and carrying a No. 38 set).
                   No. 2 mortar.

**Two rear secs.**  ...  2 I.C.  ..........  ..........  Marker.
                   No. 1 Bren.
                   No. 2 Bren.
                   No. 1 rifleman.
                   No. 2 rifleman.
                   No. 3 rifleman.
                   etc.

<table>
<thead>
<tr>
<th>Drill No.</th>
<th>Word of command given by</th>
<th>Action taken and by whom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Instr.</td>
<td>Pl. comd.—fall in platoon for battle drill. Headers double out and faces platoon.</td>
</tr>
<tr>
<td>2</td>
<td>Pl. comd.</td>
<td>Platoon as for battle drill markers.</td>
</tr>
<tr>
<td>3</td>
<td>Pl. comd.</td>
<td>On parade.</td>
</tr>
<tr>
<td>4</td>
<td>Pl. comd.</td>
<td>Platoon as for battle drill. Number—left turn—standing load—right turn. Platoon numbers from the front, each man springing to attention in turn and calling out his task. Riflemen go through motions of loading.</td>
</tr>
<tr>
<td>5</td>
<td>Pl. comd.</td>
<td>Platoon observe—prepare to advance—1 section first bound there—move. Men in sections face observation directions detailed in Section Drill. &quot;O&quot; groups and platoon H.Q. remain at ease facing front—see face front again—Pl. comd. then falls in in front of &quot;O&quot; group and gives orders for advance.</td>
</tr>
<tr>
<td>6</td>
<td>No. 1 sec. comd.</td>
<td>Section—first bound there—advance. Leading section only moves off at fast walk, rest of platoon remain at ease.</td>
</tr>
<tr>
<td>7</td>
<td>Instr.</td>
<td>Under effective fire. Leading section acts as in section drill until halted by runner from pl. comd.</td>
</tr>
<tr>
<td>8</td>
<td>Pl. sjt.</td>
<td>All round protection. 2 section right there, 3 section left there. 2 I/C leads sections 20 yds. to right and left of axis of advance as indicated by pl. sjt.</td>
</tr>
<tr>
<td>9</td>
<td>2 I/C, 2 and 3 sections.</td>
<td>All round protection 12 o'clock there (points). Bren group right (or left). Rifle group left (or right). Section forms arrowhead on 2 I/C as ordered. Flank men face section flank. No. 2 faces section's rear. Pl. comd. and runners move forward toward right flank, if leading section is dodging to right, keeping 10 yds. behind. &quot;O&quot; group under 2 sec. comd. follow 20 yds. behind runner.</td>
</tr>
<tr>
<td>Drill No.</td>
<td>Word of command given by</td>
<td>Word of command</td>
</tr>
<tr>
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</tr>
<tr>
<td>10</td>
<td>Pl. comd. (as rifle group move past Bren group).</td>
<td>Reconnaissance — Runner, tell No. 1 section they are fire section. Platoon right flank.</td>
</tr>
<tr>
<td>11</td>
<td>No. 1 section runner.</td>
<td>No. 1 sec. comd, We are fire section. Platoon right flank.</td>
</tr>
<tr>
<td>12</td>
<td>No. 1 sec. comd. (when past Bren group).</td>
<td>Rifle group HALT — we are fire section — platoon right flank — enemy left 400 covering fire.</td>
</tr>
<tr>
<td>13</td>
<td>Pl. comd.</td>
<td>Runner — &quot;O&quot; group here — tell pl. ajt. platoon right flank. assemble there.</td>
</tr>
<tr>
<td>14</td>
<td>Instr.</td>
<td>Fire section, enemy have located your position.</td>
</tr>
<tr>
<td>15</td>
<td>Fire sec. comd.</td>
<td>Fire group stop. Left turn, follow me. (Leads group behind Bren group and when just past). Halt — enemy right 400 covering fire.</td>
</tr>
<tr>
<td>16</td>
<td>2 I/C fire section.</td>
<td>Bren group stop — left turn, follow me (as they pass rifle group, sec. comd. gives 2 I/C new position: &quot;Bren group there&quot;).</td>
</tr>
<tr>
<td>17</td>
<td>Pl. ajt.</td>
<td>Right flank. — assemble there — 2 leading.</td>
</tr>
<tr>
<td>18</td>
<td>2 I/C 2 and 3 sections.</td>
<td>Section follow me (No. 2 sec. 2 I/C gives rifle group leading — No. 3 sec. 2 I/C gives Bren group leading).</td>
</tr>
</tbody>
</table>

<table>
<thead>
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<th>Word of command given by</th>
<th>Word of command</th>
<th>Action taken and by whom</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Pl. comd.</td>
<td>Orders — enemy 400 red flag, we will destroy them — right flank. 1 section fire section — there, 2 leading, mortar with me. Assembly area there. Signals — Questions? Move.</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Pl. comd.</td>
<td>2 section first bound there (points to 3 o'clock).</td>
<td>Section face front on &quot;prepare to move&quot; and double off round flank. Halt and automatically face direction of observation at bound. Remainder of platoon move up behind pi. comd. if order — Mortar group — 3 section — pl. ajt.</td>
</tr>
<tr>
<td>21</td>
<td>2 sec. comd.</td>
<td>No. 2 section first bound there — prepare to move — follow me.</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Pl. comd.</td>
<td>Enemy there — we assault from here. Mortar H.E. when we reach assault position — 3 section Bren there — remainder follow me.</td>
<td>Mortar group follow mortar N.C.O. out of line of march. He repeats orders. Group stand to attention — 3 sec. 2 I/C acts as in section drill. Pl. ajt. joins mortar group. 3 section rifle group follow pl. comd. to just be behind 2 section.</td>
</tr>
<tr>
<td>23</td>
<td>Pl. comd.</td>
<td>Enemy there — we assault from here. 2 section Bren there (points to 2 o'clock or 10 o'clock), remainder left or right turn.</td>
<td>2 sec. 2 I/C acts as in section drill and positions his group with appropriate orders. On the command &quot;Left turn,&quot; sec. comds. immediately move to centre of groups and all dress out in line to 5 yd. interval, sec. comds. checking. Mortar N.C.O. gives order &quot;Fire.&quot;</td>
</tr>
</tbody>
</table>
SECTION 31.—CONSOLIDATION

115. Consolidation of an objective is always difficult. Once a particular objective is captured, then it is the duty of the attacking troops to ensure that the objective is held and not allowed to be recaptured by enemy counter-attack.

Troops arriving on an objective may be exhausted, and will often be temporarily disorganized. They have probably had some hand-to-hand fighting with the enemy, and some may have been wounded or killed. Therefore, great dash and energy are required by the platoon commander, who must at once set about the task of reorganization and consolidation. Fig. vi gives in diagrammatic form the layout of a platoon having consolidated its particular objective which can be practised as a drill.

116. If there is to be no further advance, the platoon must immediately dig in and prepare an all-round defensive position. Normally troops will carry a pick or a shovel, in addition to the entrenching tool, in the attack. Tools must be immediately available for consolidation.

The importance of this "digging in" cannot be over-emphasized. The arrival of enemy mortar and shell fire will soon force the defenders below ground and it is as well to be prepared beforehand.
Weapon slits must therefore be dug as soon as possible. This rapid digging of weapon slits requires practice and may have to be done lying down or kneeling with the least possible exposure.

117. The evacuation of prisoners must not be forgotten during consolidation.

118. Thus, the platoon commander has much to do quickly, in order to make certain that the objective remains his. He must:

(a) Provide all-round defensive fire.
(b) Establish communication with other platoons and company H.Q.
(c) Report information, casualties, and ammunition requirements.
(d) See that all men can get below ground if necessary.
(e) Attend to any wounded men and deal with prisoners.

(For additional details on the subject of consolidation, see Infantry Training, Part III.)

SECTION 32.—THE IMPORTANCE OF OBTAINING AND SENDING BACK INFORMATION

119. Everybody must understand the importance of reporting his own position and the movements and actions of the enemy on his front. This passing of information should be done regularly, frequently, and promptly.

120. All commanders want to know the following:

(a) Where the enemy is.
(b) What he consists of.
(c) What he is doing.
(d) What the ground is like.
(e) Where our own troops are.
(f) What they intend to do.
(g) What troops are on the flanks and what they intend to do.
(h) What losses have been inflicted on the enemy—approximately.
(i) What losses have been suffered by our own troops—personnel and material—approximately.
(j) What prisoners have been captured.

121. The normal method of passing information back to company headquarters from the forward platoon is by runner. Should, however, a platoon be allotted a No. 38 set this will considerably speed up the passing of information back to the company commander.

As soon as contact is made with the enemy, it is the duty of every platoon commander to keep his immediate superior informed of the situation, particularly regarding his own positions and those of the enemy. If the platoon has a No. 38 set it will normally be the man carrying the set who will pass the information given to him, but the platoon commander or the platoon sergeant should also be able to pass first hand information from time to time.

SECTION 33.—THE USE OF SMOKE

122. Object.—The object of using smoke is to economize ammunition and to screen movement from aimed fire or observation. It may also be used to distract the enemy’s attention.

123. Platoon smoke producing weapons.—The smoke producing weapons available in the platoon are the 2-in. mortar and the 77 and possibly 79 grenades. The 2-in. mortar gives a good smoke screen for 15 minutes from a single bomb, whilst the smoke from grenades lasts for about 35 seconds. The 2-in. mortar smoke bomb has the disadvantage that the smoke given off is not instantaneous, but takes about half a minute to thicken up. The grenade emits smoke instantaneously, but in order to maintain a continuous screen, many grenades have to be used. The 2-in. mortar bomb can be fired from 100 to 500 yds. as desired, whilst the grenade can only be thrown a very short distance.

124. The uses of smoke.—The above forms of platoon smoke can be used:

(a) When the leading section first comes under fire it may find itself in a very exposed and unsatisfactory position. It can, therefore, use smoke to conceal the movement to a better position.
(b) When the platoon commander makes his plan for an attack, he may wish to confuse the enemy regarding his intentions. He can often do so by putting smoke down on both sides of the enemy post.
(c) Where natural cover exists, smoke can be used to act as artificial defilade to screen the advance.
(d) Smoke can be used by the section commander of the fire section to distract the enemy's attention from the flanking sections, or to assist him in moving any of his men who may have attracted heavy enemy counter fire.
On some occasions it may be advisable to put down smoke on the objective just before the assault goes in. This action has the disadvantage of blinding the assaulting troops as well as the enemy. Unless great care is taken, gaps may appear in the screen, with the result that the attacking troops will be silhouetted against their own smoke. In this connection, it should be noted that smoke tends to conform to the contours and will rise over hedges and woods.

125. Initiative and opportunism.—Wind is always variable and in many cases smoke will be put down either in the wrong place or at the wrong time. If you are alert, you may be able to turn such mistakes to your own advantage, e.g. the mortar detachment try to put down smoke to help a flanking movement but misjudge the wind; the bomb drops short and the smoke is carried across the objective in front of the fire section. The fire section seizes the opportunity of moving into a new surprise position.

In attacking over bare open country where smoke is of vital importance, the direction of the wind is a factor which should influence the platoon commander in making his original appreciation and plan.

SECTION 34.—PATROLS BY DAY AND NIGHT (see also Chapter III, Sec. 18)

126. General.—When forced to remain on the defensive, day and night patrols will be used by the forward troops to keep touch with the enemy in order to discover his strength and positions. Patrols have been given many names, e.g. listening, standing, protective, liaison. Once a patrol's task is defined, however, it will be found that all patrols can be classified under one of two types:

(a) Reconnaissance.
(b) Fighting.

127. Object.—The object of all patrols is to gain information of the enemy's movements or whereabouts. This information can sometimes be obtained by small patrols using reconnaissance and observation only and sometimes by larger patrols which are prepared to fight to achieve their object.

128. Instructions.—All patrol leaders must be given very clear instructions which must include the following:

(a) What is known of the enemy in the vicinity.
(b) The position of forward detachments of our own troops, and what other patrols, if any, will be out.

(c) The object of his patrol and what information he is to obtain. This will be in the form of straightforward questions, the answers to which the patrol is to bring back. For instance, "Is the enemy in occupation of FIRS FARM?"

(d) When the patrol is to set out, and when it is to return; patrols may be out for two or three days on end and may have to go as far as 15 or 16 miles, in which event they will lie up by day and move only by night.

(e) The route to be followed both going out and returning, and how the patrol is to be recognized by our own troops on its return; it may be necessary to leave the details of the route to the decision of the patrol leader.

(f) Whether bodies of our own troops in the vicinity have been told that the patrol is going out, its route and line of return.

If all the above information is not given to him in orders, it is the duty of the patrol leader to ask for it.

129. Preparations before setting out

(a) Reconnaissance.—The leader should study the ground and make a plan for carrying out his task. During his reconnaissance he should note likely observation points, covered routes, suitable bounds, landmarks, obstacles, and places at which he might be ambushed.

(b) Knowledge of orders.—If possible, the whole patrol, and in any event the second-in-command, should be with the leader during the reconnaissance so that the plan can be explained before the patrol sets out. Every man must know what information is required so that if the leader becomes a casualty the patrol will be able to carry on. If the patrol is to fight it is advisable for the commander and second-in-command to have had a reconnaissance patrol the previous night over the same ground that the patrol is to cover.

(c) Daylight rehearsal.—The patrol commander must rehearse his patrol in daylight as follows:

(i) Formation to be adopted in open country and when following a hedge or road.
(ii) In what order the patrol will cross an obstacle.
(iii) Action to be taken on encountering the enemy.
(iv) Action to be taken on ambush.
(v) Action to be taken on assaulting the enemy position.
(vi) Signals for implementing the above actions.
(vii) Responsibility for watching flanks and rear while on the move and at the halt.
(d) **Equipment.**—The patrol should go out as lightly equipped as possible. Sometimes rifles only will be carried, with magazines charged and a few extra rounds in the pocket. On other occasions, a high percentage of automatic weapons may be required, together with mortars and grenades. If automatic weapons are to be taken they must be tested by firing a few bursts. Nothing bright should be worn or carried.

(e) **Silence.**—The patrol should move silently, especially at night. Equipment carried should be tested to see that it does not rattle, and men with colds and liable to cough or sneeze should be left behind.

(f) **Secrecy.**—No letters, papers, or marked maps should be taken, so that, if the patrol or any member of it is captured, the enemy will get the least possible information.

(g) Faces and hands should be blackened, and the leader should wear some distinctive sign, so that he can be easily recognized.

(h) Knowledge of a few words of the enemy language will be invaluable in the event of a surprise counter with an enemy patrol. The use of such words as “Achtung”, “Richt”, “Hande Hoch” put the enemy (if German) off his guard and give the patrol those few extra seconds so necessary in an emergency.

(i) **Enforced rest.**—In order that the patrol will be fresh when it sets out, men will be forced to rest beforehand.

130. **The route.**—This is normally decided by the officer who sends out the patrol. Even so, the patrol leader must study it carefully in order to make the best use of the available cover, and of the places along the route from which observation can be obtained. Another route should be used on the way back; it is always possible that the patrol may have been seen and an attempt made to cut it off on the way home.

No patrol should follow the same route, or exactly the same procedure twice running. Such action would soon be discovered by the enemy and would lead to disaster.

131. **The approach to the objective**

(a) The patrol leader must decide early how he is going to approach his objective. The golden rule is never to do what the enemy expects. For this reason it is generally better to approach the objective from the flank or rear rather than frontally, and if possible to avoid obvious places, such as isolated pieces of cover or prominent hills.

(b) The task of the patrol is to get information and return with it. If this is to be done without fighting, enemy posts and patrols must be avoided. Information can often be gained more effectively by getting to a suitable position and keeping the objective under close observation than by frequent movement.

(c) Unless the objective and the intervening ground can be seen during the whole course of the patrol, the advance should be by bounds. As each bound is reached, the patrol leader will select the next bound and the line of advance to it.

132. **Patrols using reconnaissance and observation methods**

(a) These will be as small as possible—probably only an officer or N.C.O. and two men. A complete section may be used, but if too many men are employed, the whole becomes unwieldy and difficult to control. Such a patrol moves slowly across country, along ditches and banks until it is in a position to observe and find out what is wanted.

(b) **Formations.**—If the N.C.O. and two men are used, the only formation is single file with one man in front and behind, and the N.C.O. in the centre. The leading man will work by bounds along the route indicated by the patrol leader. The rear man is the "get away man", watching the flanks in the rear, whose duty it is to get back should the patrol run into difficulties. If more men are used, then the formation should be diamond shaped as shown in Fig. vii.

This formation uses six men, is compact and handy and gives all-round protection.

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Fig. vii
(c) **Withdrawing the patrol.**—The withdrawal will be carried out by bounds. Before making a fresh bound, the patrol leader will select a suitable fire position in the rear. A portion of the patrol will be sent back to it by the most rapid route while the remainder are prepared to cover this movement by fire. On reaching the fire position, the first party will be prepared to cover the withdrawal of the rest of the patrol. The positions selected as bounds should give a good field of fire to the front and should, if possible, have a covered line of withdrawal. As the patrol approaches its own lines it will be covered by other troops. The line of withdrawal should be selected so as not to mask their fire.

(d) **Conduct of such a patrol by night**

(i) On very dark nights it will be better not to move by bounds but at a steady pace, in absolute silence, with frequent short halts to make certain of the route, to listen for enemy movement, and to ensure that the patrol is keeping closed up.

The pace will be slow in such movement. A suitable formation is file, with two riflemen and the patrol leader just far enough ahead to be visible to the remainder, and one man a short distance in rear.

(ii) Silence is essential.

(iii) If a surprise collision with the enemy takes place, go straight in with the bayonet before the enemy has time to collect his wits.

(iv) The route. The following simple rules are suitable for patrolling in darkness:

1. When moving on roads, keep to the sides where the ground is softer.
2. Keep to low ground as much as possible.

Patrol leaders must use common sense and modify their patrol formations to suit the degree of darkness.

133. **Patrols which are prepared to fight to achieve their objective.**

(a) These patrols must be prepared to act offensively. They will be commanded by an officer, will consist of about 20 men, and should be strong enough to deal with enemy patrols likely to be encountered, to capture prisoners, and to bring back wounded.
(f) The patrol will advance slowly and silently, halting frequently for listening, checking direction, and maintaining touch. Whenever the patrol halts, each man will automatically lie down and face outwards, i.e., away from the centre of the patrol, so that all-round observation is maintained throughout.

(g) The control of the patrol should be carried out by signals, e.g., bird calls, mouth whistles, clicking of fingers. Whispering should be cut down to an absolute minimum, being only used by the patrol leader himself.

(h) "Get-away men" should be detailed and should be part of the patrol H.Q. group, with instructions what they are to do in the event of the patrol meeting unexpected opposition.

134. Patrol reports.—At the conclusion of each patrol, the patrol leader should make out a report of his activities, after he has had sufficient time to calm down and collect his thoughts; a period of one or two hours should be sufficient. This is best done by the use of a special pro forma for the purpose. The headings of this pro forma will vary, according to the theatre of war and type of unit carrying out the patrol. The following specimen therefore is only a guide:

<table>
<thead>
<tr>
<th>PATROL REPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Object of patrol:</strong></td>
</tr>
<tr>
<td><strong>Name of patrol commander:</strong></td>
</tr>
<tr>
<td><strong>Strength of patrol:</strong></td>
</tr>
<tr>
<td><strong>Route (on the outward and inward journey):</strong></td>
</tr>
<tr>
<td><strong>Enemy met at:</strong></td>
</tr>
<tr>
<td><strong>Casualties, enemy:</strong></td>
</tr>
<tr>
<td><strong>own:</strong></td>
</tr>
<tr>
<td><strong>Report:</strong></td>
</tr>
<tr>
<td><strong>Time:</strong> .................................. <strong>Signed.</strong></td>
</tr>
<tr>
<td><strong>Date:</strong> .................................. <strong>Patrol Leader.</strong></td>
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</tbody>
</table>

Section 35.—ATTACKING ENEMY PILLBOXES AND FORTIFICATIONS

135. General.—Enemy static defences may consist of rows of pillboxes covered by deep belts of wire, minefields, and anti-tank ditches. Although these obstacles look formidable at first sight, they can be dealt with if careful preparation is made beforehand. Enemy pillboxes are often of concrete, very strong, with steel doors, surrounded by wire belts as much as 50 ft. deep. His minefields usually consist of anti-tank mines and anti-personnel mines mixed in the proportion of four to one.

136. Principles

(a) Strong static defences can only be successfully tackled by mixed groups of sappers or pioneers and infantrymen. If infantrymen alone are used, they will usually lack the requisite skill with explosives. Sappers or pioneers alone will not have the requisite armament for infantry fighting.

(b) If surprise is possible, the attack should be made silently at night. Failing surprise, intensive covering fire from all weapons (especially anti-tank weapons) directed at the loopholes of the pillboxes should be used. Fixed lines may be necessary if this fire is to continue accurately through smoke and darkness.

(c) Cover by smoke or darkness is essential to success.

(d) The fire on pillboxes must be directed at their loopholes as these are the most vulnerable points.

(e) A simultaneous attack on several neighbouring mutually supporting pillboxes will give the best chance of success. Each post will then be pre-occupied with its own troubles and will fail to give adequate enfilade fire in front of its neighbours. The enemy has a system by which, on the S.O.S. signal being given, anti-tank guns are rushed to cover any breach. If several breaches have been made this plan may go wrong.

(f) A drill, and very careful rehearsals (if possible using a model), will be necessary.

137. Attack on a strong point containing a pillbox.—An operation of this nature must of necessity be deliberate. This statement implies that time will usually be available for reconnaissance and to train and rehearse the assault teams. The following can therefore be no more than a guide to the type of tactics to be employed. The details will vary with every operation.

138. Organization

(a) One pillbox, one platoon.

(b) Divide the platoon as follows:

- No. 1 section and platoon H.Q.—fire section.
- No. 2 section—Bangalore and cut-off section (with P.I.A.T.).
- No. 3 section—Pillbox clearing section.

A minimum of four sappers or pioneers should be added to No. 2 section to operate the Bangalore torpedo and pole charges.
139. Drills. (See Fig. ix)

(a) The fire section opens heavy fire, the 2-in. mortar putting down smoke.

(b) No. 2 section with attached pioneers moves forward keeping to as wide an angle as possible from the fire section (90 degs. is ideal but this will rarely be possible). The men with the P.I.A.T. should be sent farther to a flank and the P.I.A.T. used against the pillbox. The pioneers carry up the Bangalore sections, place them in position, throwing smoke grenades to thicken up the smoke, and withdraw to cover. The pioneer N.C.O. lights the fuse and withdraws.

(c) On the bursting of the Bangalore, No. 2 Section rushes through the gap and takes up a position beyond the pillbox, killing any enemy it may find in trenches around the pillbox. The pioneers follow, placing their pole charges up against the loopholes and then join No. 2 Section. Note that in crossing the wire it is safe to assume that the Bangalore torpedo will have exploded most mines in the immediate vicinity and all mines in the actual furrow blown by the torpedo.

(d) On the bursting of the pole charges, No. 3 section enter the pillbox and clear it, using grenades. If the pillbox has a steel door this can be blown off its hinges by the use of sticky bombs.

(e) The platoon consolidates and the pioneers widen the gap in the wire and mark it with tapes.

140. Points to remember

(a) The Bangalore torpedo will clear a 20-ft. gap in wire and a narrower path through most minefields.

(b) Pole charges are ineffective against the walls of strong pillboxes. They must be on or near the loopholes so that they can kill the occupants by blast, and enlarge the loopholes.

(c) No. 74 and 75 grenades are useful for this work and three or more tied together make an excellent pole charge. (Note.—Only one should be primed.)

(d) Thin belts of wire can often be dealt with easily without the use of explosives.

(e) Covering fire with so much smoke about must be very carefully controlled. Hence the necessity for fixed lines.

(f) If flame throwers are used, they should go in immediately after the explosion of the Bangalore torpedoes.
SECTION 36.—HOUSE CLEARING

141. General.—Fieldcraft does not apply to the open country alone. It must also be used in villages and towns. Villages and towns will most probably be by-passed by the leading troops and will later be cleared by troops following up behind and specially detailed for the purpose. The clearance of buildings may be a costly undertaking and it will end in disaster unless every man knows what he is doing and how to do it. A drill is therefore essential.

142. Probable enemy defensive measures

(a) All main streets will probably be barricaded or will have road blocks, but the barricade or road block, once captured, may provide cover for the fire section.

(b) It is probable that the outer perimeter of the village or parts of it will be strongly held. It is the task of the covering groups referred to below to reply instantly to any fire that may come from houses of this kind, also to watch the roof tops which are a favourite hiding place for enemy snipers.

(c) It is a common German practice to defend the ground floor of a house strongly, retreating to the top story once an entry has been forced. A careful method of approach to the ground floor is therefore essential (see drill below).

(d) Wire netting is often put over windows to deflect grenades. This should be carefully looked for.

(e) Doors will probably be locked or barricaded. If so, the door must be knocked down or blown open; otherwise entry must be made through a window, or by blowing a hole in a wall.

(f) In a defended room the enemy may erect a corner barricade. This can easily be improvised with furniture, and it will be grenade proof. Do not therefore jump to the conclusion that because your grenade has burst in a room all the enemy in that room have been killed. Look out for these barricades and have another grenade ready to throw behind them.

(g) The enemy sites his machine-gun and rifles well back from windows or holes in walls. Therefore enter the room at top speed.

(h) In a defended village only certain selected houses will be defended. These will be the ones that occupy tactical positions (e.g., to cover crossroads). But every house on your line of advance must be searched from attic to cellar as you go along, for it is fatal to leave a house behind you occupied by the enemy. In conducting your search, when dealing with terraced houses look out for ‘mouse-holing,’ the system by which the enemy makes holes in walls from house to house so that he can move down a terrace unhindered. This mouseholing may be in the cellar or concealed behind cupboards.

(i) It is unlikely that you will encounter booby traps in a defended village. Modern booby traps are so ingenious and can be so cleverly concealed that the enemy would find them of great hindrance to his own men. Booby traps should be looked for in a village which has been abandoned by the enemy. It is possible, however, that even in a defended village, houses which are not themselves defended may have been booby trapped.

143. Principles

(a) Buildings will always, if possible, be cleared from the back gardens and yards, because these provide the best covered line of approach. Any enemy driven through the house out into the main street will thus be caught by the fire of the fire sections. When approaching the rear of buildings clear all outbuildings, sheds, and cover, before you get to the main building itself. Never leave any uncleared building or outbuilding behind you. Make sure that your rear is clear before you move on.

(b) On entering buildings the ideal is to enter from the top and work downwards. If, as generally happens, you have to enter from the ground floor, all efforts should be made to get to the top floor at once and to clear the house from the attic downwards. An enemy driven up higher and higher in a large building may become more offensive as he is driven into a tighter corner and to a better fire position. An enemy driven downwards towards cellars is getting continuously into a worse fire position. It is easier to throw a grenade downstairs than to throw upwards and it is very likely that an enemy driven downwards will feel tempted to escape into the main street. In a house which is very strongly defended it may not be possible to rush straight to the attic, though it should be attempted. If the attempt fails there is no alternative but to work slowly upwards by careful fire and movement.
144. Section drill for clearing a house

(a) Organization

(i) Clearing group:
- Section commander.
- Bomber.
- First entry man.
- Second entry man.
- Look-out man.

If the house is large, the clearing group may be increased by withdrawing individuals from the covering group, platoon H.Q., or another section.

(ii) Covering group:
- The Bren group with the remainder of the riflemen under the section second-in-command.

(b) Duties of covering group

(i) To cover all possible fire positions which command the approach of the clearing group.

(ii) As far as possible to cover the flank exits, in order to prevent enemy movement to or from the house.

(iii) To provide smoke and deception as required.

(c) Action by clearing group

(i) The section commander and bomber take up intermediate positions from which to direct and cover entry men towards the point of entry.

(ii) Entry men approach the point of entry at best speed according to cover available. Their means of entry will depend on the type of defences, and may be either through a door or window, or other aperture, or through a hole made by the use of suitable demolition equipment. At the moment before entering a room, it may be advisable to search it by fire (machine carbines, grenade, etc.) and follow up at top speed before any inmates have had time to recover.

On gaining an entrance entry men get quickly away from the point of entry and stand with their backs to the wall covering the rest of the room and any doors.

(iii) Section commander and bomber follow up entry men (as a result of observation or on signal from the latter).

(iv) All four move out of the room in the order: section commander, bomber, first entry man, second entry man.

(v) The look-out man remains at the entry, watches for signals, and acts as liaison with the covering group and with platoon headquarters. The remainder aim at getting to the top of the house as quickly as possible, leaving the second entry man near the entrance of the room to cover any stairs and passages. This is the ideal method, but it will not be possible if the staircase is strongly defended or heavily obstructed.

(vi) The covering group follow up and if so ordered by the section commander enter the house as soon as the entry group have completed their entry. They will assist the second entry man in covering points from which the enemy may approach and, under the section second-in-command, will be prepared to help search the house or to provide fire outside the house.

(vii) The house is searched downwards from the top, the first entry man opening the door of each room in turn, and providing protection against enemy approach to the landing or head of the stairs. The section commander enters each room first at speed and turns quickly with his back to the wall. The bomber throws grenades as ordered by the section commander, and generally acts as the section commander's assistant and escort. If it is not possible to search the house from the top downwards, the section will secure the ground floor as a firm base and will clear upwards floor by floor, using fire and movement.

(viii) The section commander shouts or signals that the house is clear.

145. Platoon drill for clearing occupied houses

(a) Plan (see Fig. x).
- No. 1 section gives covering fire.
- No. 2 section assaults houses on right.
- No. 3 section assaults houses on left.

Platoon headquarters and reserve move forward one or two houses in rear of one or other leading sections. Part of platoon headquarters may assist No. 1 section in giving covering fire.

Streets or back areas A and C are killing grounds and out of bounds to attackers.

B may be used by attackers for speed of movement under overhead covering fire.
### General notes

(a) The above drill is a guide only and may require variation and elaboration to suit circumstances. For example, in para. 145 (b) (iii) above, the covering group of No. 2 Section may be ordered to stay outside to cover either its own clearing group or No. 1 section on to the next house, or to fire on any enemy who may try to escape from the house during the entry of the clearing group. Such

### Sequence of Action

<table>
<thead>
<tr>
<th>1 Section</th>
<th>2 Section</th>
<th>3 Section</th>
<th>Pl. H.Q. and Reserve</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Siting of initial covering, and forming up assault sections.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) Covering fire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clearing group assault and clears House 1.</td>
<td>Covering fire.</td>
<td>Covering fire and general direction of attack.</td>
<td></td>
</tr>
<tr>
<td>(iii) do.</td>
<td>do.</td>
<td>do.</td>
<td></td>
</tr>
<tr>
<td>Covering group follow up clearing group as soon as latter have entered house successfully.</td>
<td>do.</td>
<td>do.</td>
<td></td>
</tr>
<tr>
<td>(iv) do.</td>
<td>do.</td>
<td>do.</td>
<td></td>
</tr>
<tr>
<td>Section commander posts section to fire across on to House 1, and signals to No. 3 section as soon as this covering fire is posted.</td>
<td>do.</td>
<td>do.</td>
<td></td>
</tr>
<tr>
<td>(v) do.</td>
<td>do.</td>
<td>do.</td>
<td></td>
</tr>
<tr>
<td>Covering fire.</td>
<td>Clearing group assault and clears House 2.</td>
<td>do.</td>
<td></td>
</tr>
<tr>
<td>(vi) do.</td>
<td>do.</td>
<td>do.</td>
<td></td>
</tr>
<tr>
<td>do.</td>
<td>Covering group follow up clearing group as soon as latter have entered successfully.</td>
<td>do.</td>
<td></td>
</tr>
<tr>
<td>(vii) do.</td>
<td>do.</td>
<td>do.</td>
<td></td>
</tr>
<tr>
<td>do.</td>
<td>Section cmd. posts section to fire across House 3, and signals to No. 2 section as soon as covering fire is posted.</td>
<td>do.</td>
<td></td>
</tr>
<tr>
<td>(viii) Section moves forward as required to cover further advance of 2 and 3 sections.</td>
<td>2 and 3 sections work alternately as above until moment when covering fire from 1 section is required further forward. 2 and 3 sections can either continue simultaneously with forward move of 1 section or cover its move until 1 section in position.</td>
<td>Follow in rear of either 2 or 3 sections when latter have reached (approx.) House 5 or 6.</td>
<td></td>
</tr>
</tbody>
</table>

### Diagram

- **Objective:**
- **Continuous Covering Fire (No. 1 Section):**
- **Initial Covering Fire (No. 2 Section):**
- **Movement:**

Fig. x
methods will either require decision in the initial orders, or will be left to the initiative of the covering group commander.

(b) At stage (viii) the platoon commander may reverse the roles of 1 section and one of the leading sections.

(c) If one of the leading sections is held up, the other section must continue the forward movement until the objective is reached.

(d) A platoon reserve, however small, will be useful in order that the platoon commander can have a force under his immediate control. It may consist of platoon H.Q. personnel only or may be supplemented by one or two men withdrawn from rifle sections.

SECTION 37.—PLATOON CLEARING A VILLAGE

147. General.—Very small hamlets or large farms may be given to a single platoon to clear, when the drills given below will apply.

148. Drills (see Fig. xi)

(a) Provide an ambush party.—This should consist of either the platoon serjeant and possibly one or two men, or the Bren group from the fire section. They should go immediately to the rear of the village without being seen and should be in position before clearing commences. The platoon serjeant should be given orders to effect this before the “O” group assembles. Their “killing ground” must be on the enemy’s main line of retreat, well clear of the village. To trap the enemy like rats in the village will only make them more determined to fight.

(b) Detail a fire section.—This section covers the main street, with individual riflemen watching all windows and openings. The platoon may have to fight to get the fire section into position, and clearing must not start until the fire section is in its correct place. If the main street is curved or on a slope, the fire section will only be able to cover the first few houses and they will need to move forward as soon as these houses have been cleared. This movement can be arranged by making the clearing sections give a progressive signal to the fire section as each house is reported clear, e.g. a handkerchief hung on the end of a rifle stuck out of a window.

(c) Detail the clearing sections.—These sections are responsible for clearing the houses on either side of the main street.

(d) Signals.—A prearranged signal should be given by the platoon commander to indicate that the village is clear and that it is safe for his own men to come out into the main street.

(e) Platoon headquarters should be located in the area of the fire section, with the task of protecting the rear of the fire section and providing reinforcements.

(f) The platoon commander should establish himself in a good O.P. (as near the fire section as possible) from which he can read the battle and send reinforcements where they are most needed. He should co-ordinate the clearing and not remain permanently with one section.

149. The following general points should be noted in connection with the above drill:

(a) Civilians.—The question of dealing with any civilians who may be left in the village is a difficult one, particularly if the operations are taking place in a friendly country. Treatment of these civilians will vary in every theatre of war and experience will dictate the appropriate procedure for dealing with them.

(b) Grenades.—Although all the available grenades must be given to the clearing groups, men must not become too grenade-minded. If they throw grenades into every room they will soon exhaust their supply and will have none available when they are most needed. This is a matter of battle discipline.

(c) Shoot through all doors, ceilings, or wooden walls before entry, but search carefully as well. Do not assume that you have killed everyone by your fire. The enemy may lie down or may stand against a wall when you are shooting up through the ceiling. (Remember the Sten machine carbine will not penetrate a strong thick ceiling.)

(d) If the houses have front gardens, investigate these carefully from the upper windows before passing on to the next house. If these front gardens are very large, special arrangements will have to be made for the fire section to move up and clear them.

(e) The fire section must keep moving up as and when necessary. Clearing should not go on unless the main street is covered. The fire section should advance by fire and movement and should detail a clearing group when it is required to clear a house or front garden which cannot be tackled by one of the clearing sections. Some houses cannot be entered except from the main street. These can best be cleared by the fire section as it moves forward.
Do not forget to clear churches. The enemy is very fond of making churches into strong points, because they have good thick walls. Look out for an enemy O.P. or for enemy snipers in the church tower.

Smoke from the 2-in. mortar may help you in approaching some buildings. It should be used with care, however, as it may help the enemy to escape. 2-in. mortar H.E. can be fired direct at short range into any large open windows.

If a 3-in. mortar detachment is available this can be used with good effect, because its bombs will burst on the top stories of houses and its moral effect will be great.

The P.J.A.T. 74 and 75 grenades are useful additions to the platoon equipment, since they are all capable of penetrating a normal brick wall and produce considerable blast effect inside a room when penetrated.

If a platoon comes upon a large farm, it can clear this either by treating it as a village or by adopting the method shown in Sec. 38 of clearing enemy out of woods or isolated cover. It is for the platoon commander to decide which is the more appropriate method and to make this point clear in his orders. If the farm buildings are grouped round a central roadway resembling the main street of a village, then it will be better to use the village fighting system. If the farm buildings are indivisible then the farm must be treated as isolated cover.

SECTION 38.—CLEARING ISOLATED COVER AND SMALL WOODS

150. General.—Small bodies of enemy may conceal themselves in isolated cover, such as woods or farm buildings, during any stage of the attack or defence, for purposes of ambush and disrupting communications. Airborne and parachute troops are particularly likely to use this form of tactics.

Such an enemy will conceal himself carefully in order to avoid being discovered. Speed and thoroughness are therefore essential in searching close cover and when found the enemy must be attacked quickly before he can escape.

In order to illustrate the need for a drill in clearing isolated cover, a platoon should be ordered to clear a small wood using their own
methods. They will be certain to miss several of the enemy, who should show themselves after the platoon has finished.

This drill is not applicable to fighting in large woods or jungle, nor to the clearing of buildings, for which there is a separate drill.

151. Method of teaching.—After a short lecture on wood clearing the platoon should be practised in a field, using flags to represent the corner of a small wood. Instructors will act as enemy. As soon as the pattern of the drill is learnt, the platoon should carry out a similar operation in an actual wood in which a few men acting as enemy are concealed.

Later, the platoon should carry out the operation using live ammunition against targets, concealed in the ground, which can be operated by pulleys.

152. Principles

(a) Speed.—Circle the wood with fire immediately. Tie the enemy up in a bag so that escape is impossible. Bren groups are best for this job.

(b) Thoroughness.—If the wood is very thick, about 5 yds. per man is all that can be managed. This spacing will compel you to drive the wood down its length, not its breadth. If the wood is too wide for the platoon, surround it by fire and wait for the arrival of a larger force.

(c) Direction.—It is always as well to drive the enemy towards his likely goal or objective. Try to work out what he is doing in the wood and where he wants to go, and try to drive him in that direction.

(d) Killing ground.—Try to drive the enemy out into a good killing ground—a good clear open space where your automatic weapons will have an easy task.

(e) Mobile reserve.—A reserve must be kept to deal with enemy who escape from the net. The best position for this reserve is between the wood and the enemy objective.

Of the above principles, (b), (c), and (d) may easily be mutually conflicting. If the wood is a very long one, but narrow, and you have few men available, you can only beat it lengthwise, however undesirable this method may be. Again, the good killing ground may only exist at one end of the wood, whilst the known enemy objective may be at the other. All these factors must be appreciated and the best compromise solution selected.

153. Drills for the platoon commander

(a) Find the best O.P. and go to it. This can often be selected off the map.

(b) From this O.P. make an appreciation weighing up the above principles. Ask yourself: "Which way do I want to beat the wood?" Consider (i) likely enemy objective, (ii) shape of the wood, (iii) killing ground, (iv) wind, which may be important if smoke is to be used.

(c) Place the stops in position, using the three Bren groups. If there is dead ground and covered exits lead out of the wood, additional men may be necessary to cover them. Orders to the Bren groups should be: "Kill any enemy who shows himself outside the wood."

(d) Send for the "O" group consisting of the platoon serjeant, three section commanders, and the N.C.O. I.C. mortar.

(e) Detail the beaters:

(i) When clearing a fairly thick piece of cover, a platoon can usually find about ten beaters.

(ii) Give all the Sten machine carbines either to the beaters or the support groups.

NOTE.—The platoon commander should always command the beaters personally from the centre of the line.

(f) Detail the support groups:

(i) Each group should, if possible, be commanded by a N.C.O.

(ii) Give each group a number to avoid confusion when they are called for in the wood.

(g) Detail a mobile reserve and indicate its position:

(i) Site it on a road or track if you can.

(ii) Site it between the enemy and his objective.

(iii) It is usually best to include the platoonserjeant and some riflemen in this group.

(h) Give a rendezvous for the whole platoon.

(i) Detail the success signal (e.g., a white Verey light) to be given by you to indicate that the wood is clear. Once
the success signal goes up, all men in the wood make for
the R.V., using the best cover available. This precaution
is necessary because the possibility of enemy in British
uniforms should not be overlooked.

154. Drills for the platoon

(a) The stops

(i) The operation cannot start until these are in position.
(ii) You must find a fire position from which you can cover
every inch of the flank detailed to you, particularly
any covered lines of withdrawal from the wood.
(iii) You must get to that position unseen and you must
remain unseen.
(iv) You must kill any enemy who comes out of the wood
before the success signal is given.
Once the success signal goes up, cover the move
of the rest of the platoon to the R.V. and follow
them there as soon as they are in position.

(b) The beaters.

(i) Form up in an organized line parallel to the fringe of
the wood which has been selected as the point of
entry. Wait until the stops are in position. Set
sights at 200 yds.
(ii) Enter the wood in an organized line which stretches
from edge to edge.
(iii) Speed through the wood is not important, but a
thorough search of every inch is vital. The pace
through the wood must be that of the slowest man.
Do not hurry. Dodge from tree to tree and from
fire position to fire position.
(iv) Give progressive signals, such as a white handkerchief
on a bayonet exposed at the edge of a wood, to
indicate how far the clearing has reached.
(v) When any part of the line of beaters meets opposition,
all beaters take cover in line and fire in the direction
of the opposition, provided they know approximately
where the enemy is.
(vi) All beaters observe to their front and search the
ground in front of them carefully. Do not use
easy routes. Go straight through thickets; fire
into any likely hiding places.

(vii) Halt at the end of the wood and await the success
signal.
(viii) Try to keep quiet and listen for orders, and remember
that the platoon commander is in the middle of the
line, controlling it.
(ix) Each group of beaters must be under the command of
a N.C.O. or senior soldier.

(c) The support groups.

(i) Keep close enough to be in contact with the beaters.
(ii) When called for by the beaters, attack through them
and kill the enemy. Try to execute a flanking
movement covered by the fire of beaters. It is the
beater's job to contact the enemy and kill him
by fire.
(iii) Observation. When moving through the wood your
task is to observe the trees above the heads of the
beaters. The enemy is fond of trees as hiding
places.
(iv) Do not pursue enemy who run away; get down and
shoot them.

(v) The words of command are:

"Beaters down" given by any member of
the beaters as soon as he is under effective fire.
"No. 1 support group forward. Enemy
there" ordered by nearest section commander
(indicates the position of the enemy).
"Clear" from the commander of the support
group.
"Clear on the right" and "Clear on the
left" shouted out by the N.C.Os. on the flanks.
"Beaters forward" from the platoon
commander.

(d) The mobile reserve.

(i) Find a good O.P. The platoon serjeant should occupy
it and "read the battle" continuously.
(ii) Remainder of the reserve can be close by.
(iii) Kill any enemy who may break out and try to escape.

(e) No one will leave the wood until the success signal has been
put up by the platoon commander.
155. Diagrams.—The following figures illustrate the above drills:—

CLEARING SMALL WOODS OR ISOLATED COVER

(Diagrammatic only)

Mobile Reserve despatched in direction of enemy's likely withdrawal

No 3 Sec Bren Up

Smoke from 2" Mortar

No 1 Sec Bren Up

Pl Comd

No 2 Sec Bren Up

BEATERS

No. 3 Sec

SUPPORT GROUPS

G 2" Mortar

Fig. xii

Beater locates the enemy; he fires, calls "2 Sp Gp" and "beaters down." All beaters take cover and FIRE, if they are able to locate the approximate direction of the enemy.

Fig. xiii

Beater indicates approximate location of the enemy to the sp gp. They go in with the bayonet, ready to fire from the hip. They either kill the enemy or report the ground clear.

Fig. xiv
The sp. gp. has reported clear and got down. Pl. cmd. now orders "Forward." All now move forward except No. 2 Gp. who wait until the line of beaters has passed them.

All have resumed original positions and the advance is continued.

**SECTION 39—RIVER CROSSINGS**

See also Military Training Pamphlet No. 74, Part III (to be issued shortly).

156. Forward troops will cross the rivers by any means that are available, including:

(a) Existing sources, e.g. fords, locks, intact or partly demolished bridges, boats, hauling across on ropes, improvised rafts.

(b) Wading or swimming.

(c) Assault boats.

The successful use of the boats will depend on:

(i) Watermanship.

(ii) Speed.

(iii) Surprise.

(iv) Careful preparation.

In mobile warfare, it will be normal to find that most bridges have been demolished, and every platoon must learn to treat river crossings as part of their everyday business and to use boats with silence and skill. To reach the necessary standard of training, careful drill is necessary, by which every man may know exactly what he has to do when he lands, without needing further orders.

157. For the purpose of crossing water obstacles, the battalion will usually be organized as follows:

(a) *Assault companies* (normally two), who are ordered to seize objectives on the far side of the obstacle, and, as a first task, to eliminate aimed small arms fire on to the crossing places. They will be responsible for assembling the boats, carrying them down to the river from the assembling point, and launching them.

(b) *Fire company*, whose task is to give intimate fire support to the assault companies. They must be in position before the boats leave the place where they are assembled. This company will normally be the next to cross after the assault companies.

(c) *Reserve company*, who will be responsible for carrying the boats from the off-loading point to the assembling point, and for the provision of ferry men, carrying parties and other fatigues.

158. **Boat orders and drill**

(a) *Parts of a boat.*—The names of these parts of a boat occur frequently and should be understood by all.

(i) *Bow.*—The pointed end. In boats pointed both ends, e.g., Mk. III assault boat, the end pointing to the objective.

(ii) *Stern.*—The blunt end or end away from the bow.

(iii) *Port side.*—The left-hand side when looking towards the bow.

(iv) *Starboard side.*—The right-hand side when looking towards the bow.
(v) **Breast line.**—Piece of rope fastened to the bows by which the boat can be moored.

(vi) **Ferry line.**—The long length of rope attached to the bow or stern which can be pulled from the bank to haul the boat backwards and forwards over a river, or a line fixed to anchorages on either bank which the occupants of a boat can use to pull themselves across.

(b) **Stroke.**—The man from whom the others take their time when rowing or paddling. In a boat that is rowed, the man nearest the stern on the port side. In paddle boats the man nearest the bow on port side.

(c) **Ferry men.**—If ferry lines are not used each Mk. III boat will need a crew of three ferry men, who will be required for the return journey. The Mk. II boat requires only two men.

(d) **How to paddle.**—On one knee facing the bows.

(e) **Orders.**—The following orders should be used by all boat commanders, and the men must know what action to take on them and why.

(i) **"File in"**—party to be ferried across file into the boat. The boat is held off shore by two ferrymen to make sure it does not ground as the men get in.

(ii) **"Shove off"**—ferrymen push the boat off and jump in.

(iii) **"Trim the boat"**—all numbers adjust their positions slowly until the boat is floating horizontally.

(iv) **"Stand by to give way"**—rowing or paddling numbers prepare to row or paddle. In a fast current, men should stand by to give way before they shove off and give way immediately the boat floats.

(v) **"Give way all"** (or port or starboard)—those named paddle at an even rate and all in time together. The time is normally taken from the front man on the port side.

(vi) **"Hold water all"** (or port or starboard)—those named hold their paddles in the water to slow or turn the boat.

(vii) **"Back water all"** (or port or starboard)—those named paddle in the reverse direction.

(viii) **"Oars all"** (or port or starboard)—those named complete their stroke and stop paddling.

(ix) **"Bows"**—ferrymen detailed land and held boat to the shore for off-loading. Remainder prepare to land as soon as possible.

(x) **"File out"**—all but the crew leave the boat in turn.

159 **Hints to commanders**

(a) Make up your mind how you mean to cross before you give the order "Shove off". You must know the direction of the wind and the current, and which is stronger.

(b) If possible tactically, do not paddle against the stream or wind. Concentrate on getting across. This may well mean starting up stream of the point opposite where you want to land.

(c) If you have to get straight across a swift stream, point yourself and paddle up stream of your objective. The stream will carry you down.

(d) If you do go too far down stream, paddle back against the current inshore in the shallows where the current is weakest.

(e) Slight turns can be made by one side paddling harder than the other. The man in the bows has the bigger turn effect. Turn so that the current helps you as far as possible.

(f) Your steering oar should be used to augment any turn.

(g) Sharper turns can be made by holding water (sharper still by backwatering) on one side and paddling normally on the other.

(h) See, before you start carrying to the river, that the emergency repair patches are in the boat and that your crew know how to fix them quickly.

(i) Watch out for the other boats.

(j) All men must kneel on one knee in the boat. Do not let them try to change positions when afloat.

(k) All keep strict silence except the crew commander. Hand signals may be necessary even for turns on some occasions.

(l) Do not charge the bank hard in a collapsible boat.

(m) Keep cool and do not lose your head. Do not mix port and starboard.

(n) Make sure that all your men can coil and throw a rope properly. Always have the coil laid so that it is ready for immediate use and is out of the way of people's feet.
160. Handling of assault boats

(a) There are two types of assault boat:

(i) The Mk. II boat, which is single-ended, about 12 ft. long, and carries nine men.

(ii) The Mk. III boat, which is double-ended, about 17 ft. long and carries about 18 men. It will eventually replace the Mk. II boat.

(b) Stores

(i) Each Mk. II boat has five paddles, four for paddling and one for steering. The mooring line and pin are attached to the bow.

(ii) Each Mk. III boat is provided with:

- Seven paddles.
- One steering oar.
- One maul.
- Two 5 ft. pickets.
- One box emergency repair fittings.
- Cordage.

(c) Opening — For a silent crossing boats must be opened out of earshot of the enemy. To open either type of boat, six men are required. The sides are lifted each by two men; the remaining two men fix the bow and stern pieces, and finally the struts are placed into position and bolted.

(d) Carrying — The Mk. II boat should be carried at arms length or on the shoulder by six men. On the Mk. III boat, five rope handles are provided on each side of the horizontal rib. The boat can be carried by six men, but if the carry is a long one, ten men would be a better party.

(e) Embarkation

(i) Mk. II boat — The assault party should enter the boat in file in the order in which they wish to disembark, the section commander leading and taking up a position in the bows facing forward. The ferrymen, or crew, will be in the front. All men will kneel on one knee after reaching their position in the boat. Rifles will not be slung. The last two to embark will push off the boat. Paddling should be done by the first and third files, and the steering paddle should be used by one of the rear files.

It is important to remember that assault boats draw about 1 ft. 6 ins. when loaded. There must therefore be at least that depth of water during embarkation. With shelving shores, this means that the boat must be kept out in the deeper water, and men must walk out to it through the shallows. Men cannot expect to embark or disembark dryshod.

(ii) Mk. III boat — The drill is similar to that in (i) above, except that, since it is a larger boat, the assault party should enter in threes. The paddle numbers will hand their rifles to the men in the centre.

(f) Crossing — The commander will always be in front of the boat facing the objective, and indicating to the steersman by hand signals or other means where he wants to land. The steersman gives the orders to the paddlemen.

(g) Disembarkation — On orders from the commander, the paddlers lay down their paddles and take their rifles. On arrival at the far bank, two ferrymen hold the boat to shore, while the assault party disembark. Men must be taught to disembark by stepping over the gunwale, as any other method tends to push the boat away from the bank.

When all have disembarked, the ferrymen paddle the boat back to the near bank.

161. The success of an assault crossing will depend largely on whether or not the enemy is surprised. For this reason every effort will be made to conceal all reconnaissance and preparations, and complete silence will be observed throughout the operation itself.

An officer will be detailed to supervise the discipline at each crossing place and to control the flow of traffic. Officers accompanying assaulting troops and reserves will, on arrival at the crossing place, get in touch with these officers to help in the organization of the crossing.

At crossing places, boats will not be bunched together. The original spacing must be maintained throughout the operation. Ferrymen must bring their boats back to the place from which they started.

162. Improvised river crossings — Infantry will often have to improvise means of getting themselves, their weapons and ammunition across the obstacle. Some men will be able to swim across but there will be many who cannot and special methods will have to be thought out to get the non-swimmers and weapons across.

In making use of these improvisations it must be remembered that covering parties still have to be in position, and assaulting and bridging parties must be detailed.
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163. The following are some suggested methods; other methods requiring more complicated equipment and training are included in M.T.P. 74, Part III:

(a) **Double bundle.**—Weapons and kit are tied up in pairs, the men lay their rifles close together on one ground sheet and pile neatly on top their equipment, respirator, and all clothing. The Bren gun takes the place of the rifle with the No. 1 Bren gunner and the mortar with the mortar man. The second ground sheet goes over the top to form a parcel. The bundle is then laid on two gas capes of which the shoulders fit round the ends. The sleeves are tucked inside and rolled. The tapes of the capes are used to secure the bundle, and the cord, being first tied to the cape to avoid tearing, can be used for towing through the water.

For an odd number of men the plan is the same except that the third rifle lies beside the other two and the third ground sheet is wrapped round the other two at right angles to them.

There is sufficient buoyancy in the bundles to support one non-swimmer and for a Bren gun to be fired off them. The bundles can be pushed across by swimmers.

(b) **Single bundle.**—This is the same as above except that each man makes his own bundle with boots at the bottom. The bundle is constructed in a pear shape and the rifle, which can be left out, is slung.

If rifles are wanted they can be left out of the bundles altogether and if required for immediate use they can be placed on top of the bundles and kept in place by passing the sling firmly round and underneath.

(c) **Petrol tin raft.**—Rafts floated on petrol or oil tins are extremely buoyant. Even if one of the tins is hit by bullets, only the buoyancy of that tin is affected and the raft will still float. The tins should, if possible, be stopped up. It is suggested that, if these rafts are used, one for each section and one for platoon headquarters will suffice. All weapons and equipment are put on the raft, the men paddling and supporting themselves round the raft. This method of crossing is not of much use if it is intended to cross silently, on account of the noise that the tins make.

(d) **Logs.**—A raft made out of three stout logs about 4 ft. long, bound together to form a triangle, gives an excellent performance. A Bren gunner in the centre of the triangle and supporting his gun on the forward log can fire with ease, while three or four riflemen can swim or support themselves alongside. Essential equipment should be tied to the logs.

(e) **Gates.**—Gates or sections of fences make good support for non-perishable stores or tops for rafts which have been made of petrol tins or logs.

(f) A useful float for a non-swimmer can be made on the same lines as (a) and (b) above, but using straw or light brushwood in the cape.

**Section 40.—ACTION AGAINST PARACHUTE TROOPS**

164. **Attack on parachute troops whilst landing.**—If parachute troops try to land within range of the platoon’s weapons they should be shot while still in the air. As parachute troops will probably land some distance from their containers which hold their heavier weapons, they must be prevented from reaching these containers. If this is not possible, the parachute troops should make a good target while grouped round the containers getting out their weapons and this may be the best time to kill them.

165. **Dealing with parachute troops who have landed.**—The equipment of parachute troops has been much improved recently. They can get themselves free, collect their arms, assemble, and move off, in from 5–10 minutes. Their morale on landing is often low, but it improves rapidly after landing.

In view of these improvements, it is no longer safe to act on the assumption that parachute troops will linger near their dropping zone. If information is received of enemy parachute troops landing, the time and area of the landing must be ascertained, since it would be no good expecting them to lie up in the same area as they have landed. They will have moved off in any direction, either to carry out their task or to lie up and wait for darkness before completing their work.

166. **On receiving information that parachute troops have landed** the platoon commander should be told:

(a) Where and when they have landed.

(b) The presumed objective of the parachute troops.

(c) Where the parachute troops are expected to be at the moment.

(d) Whether he is to search for them only, or to search and destroy.

(e) Whether other troops are assisting in this work.
CHAPTER 5
DEFENCE.

SECTION 41.—THE PLATOON AND SECTION IN THE DEFENCE

167. General.—In defence the platoon will normally be responsible for the defence of part of a company locality. These localities of defence will be so sited as to be able to afford each other mutual support. They will, if possible, be surrounded by wire and anti-tank mines, and each will be able to bring down fire in all directions. Usually they will be sited on reverse slopes. Anti-tank mines will be so laid that enemy A.F.V.s. are drawn into areas where the defence can best deal with them. Therefore, there will be gaps between minefields, designed both for the use of the defending troops, and also to allow the enemy to advance into places where he will be at a disadvantage.

168. The platoon commander should receive instructions from his company commander on the following points:
(a) The area of the company defended locality.
(b) The part of the locality vital to the defence. This will probably be a road or road junction, or may be ground which it is essential to deny to the enemy.
(c) The position of other localities and their fire tasks.
(d) The task of his own platoon, i.e. where defensive fire is wanted.
(e) The general plan of anti-tank defence, and positions of our anti-tank guns in the area.
(f) Siting of the company protective wire and anti-tank mines.
(g) The fire tasks of any 3-in. mortars or artillery, so far as they affect his platoon.
(h) The immediate counter-attack role of his platoon.
(i) The order of priority of work.
(j) The positions of company and battalion H.Q.
(k) Position of covering troops, their time of withdrawal, and probable routes back through the position.

169. Having been given those orders, the platoon commander must then decide his most important task. He knows he is responsible for holding his post to the last man and the last round. What is the best way of doing it? Here is a suggested procedure:
(a) Remember your own local protection.

170. When considering the occupation of defensive positions, attention must be paid to the following:
(a) Concealment from ground observation coupled with a good field of fire.
(b) Concealment from the air; and finally
(c) Protection, which can be again subdivided into:
1. Digging the defensive position.
2. Wiring the defended locality.

According to the time available for preparations of the defence, the enemy may attack before (a) or (a) and (b) are completed. The platoon must be ready to meet an attack at any of these stages.

171. Alternative section and platoon posts must be provided, both to mislead the enemy regarding the detailed positions of the
defence and to enable the defences to vary their dispositions when the direction of the enemy attack is disclosed.
A long field of fire is unnecessary. 100 to 150 yds. should suffice for both rifles and L.M.Gs.

172. Each section commander must know the following:——
(a) The enemy.—Where he is; when the attack is expected and from what direction.
(b) Own troops.—The neighbouring posts and who occupies them; whether any troops are out in front to cover the occupation of the position; whether he is responsible for posting any sentries.
(c) What help is being given by other arms and by neighbouring platoons.—In particular the ground which is being covered by the fire of artillery, or infantry supporting weapons.
(d) The task of the platoon.—The positions of his own and the other sections, also the position of platoon headquarters, and the 2-in. mortar.
(e) The position of his own section.—This is selected by the platoon commander, who usually takes the section commander to the spot, or marks it for him on the ground.
(f) The task of his section.—The section will be given an arc to cover with its fire, but it may in addition be given a special fire task; for instance, to shoot down a particular approach or to fire across the front or flank of a neighbouring platoon. The section commander will be told whether his light machine gun is to fire on a fixed line. The fire of the guns that are laid on fixed lines will normally be co-ordinated by the company commander, but each section commander must ensure that the fixed line does not lie within 5 degs. of our own troops. The platoon commander should indicate special points from which, as the attack develops, the enemy may attempt to obtain observation of the position; these points must be kept under close observation.
(g) When fire is to be opened.—Fire will not usually be opened until the enemy is within 100 yds. of the post. The section commander should also be told the signal for defensive fire.
(h) What digging and wiring is to be done and the time by which the section is to be dug in and ready for action.—The platoon commander must lay down what tasks are to be undertaken first. As a rule these include:——
(i) Clearing of the field of fire.
(ii) Digging weapon pits.
(iii) Erecting wire.

173. The section commander’s responsibilities
(a) That the section weapons are so placed that they can actually fire on the ground allotted to them. The platoon commander, in selecting the section position, will have taken this point into consideration, but the section commander must select the site for each weapon; this selection must be made with the eye close to the ground.
(b) That the section is properly dug in.
(c) That the section is concealed from air and ground view.
(d) That a proper routine is observed when the post is established. Weapon slits may have to be occupied for hours on end.
(e) That all ranges to likely targets are recorded on a range-card (see S.A.T., Vol. I, Pamphlet No. 2).

174. Improvement of natural cover.—When making use of natural cover, prominent landmarks must be avoided. Advantage should always be taken of natural banks, ditches, and hedges, particularly those which give cover from the front to a section with an oblique or enfilade task.
Some of the types of cover that may be available are:——
(a) Sunken roads and railway cuttings. These may become shell traps. They can be improved by digging into the bank nearest the enemy to make fire positions and shelters.
(b) Walls and rocks which are good, but apt to splinter and usually easy to range on. Banks and walls do not give protection from shells bursting behind them, and many are not bullet-proof.
(c) Shell holes which form a ready made weapon pit, but when a section is occupying several shell holes, control by the section commander becomes difficult, unless they are connected up. Overcrowding in one shell hole must be avoided.
(d) Buildings are sometimes useful, but the roofs may collapse under shell fire. If they are to be held for any time, expert help is necessary to make them proof against heavy fire.
175. Concealment.—An outstanding lesson of the present war is that, if their positions are accurately located, defending troops at the point of attack will be neutralized by an overwhelming air, artillery, or mortar bombardment. If, however, their positions remain undetected, the bombardment will be ineffective provided that their weapon slits are designed to afford reasonable protection. A.F.V.s. are equally ineffective against infantry whom they cannot see.

Concealment must be obtained by the careful siting and design of individual posts. Defended localities will be chosen primarily for their facilities for concealment, rather than for their field of fire. Concealment must not be jeopardized in order to obtain the “perfect” fire plan. Concealment is required not only from the air, but also from the ground observer with field glasses.

176. Design and siting

(a) The standard fire trench will be the weapon (as opposed to “shelter”) pit, designed normally to hold two or three men and adapted to suit each particular site. Pits should be 2-ft. wide at the bottom with sides as near vertical as the soil will allow, i.e., as narrow as possible. The ideal, which is dependent on the command necessary to give adequate field of fire, is that there should be no parapet or parados, all spoil being removed and hidden, and elbow rests provided where needed by digging (see Figs. xvii, xviii, and xix). Silhouetting of the occupants’ heads should be avoided by siting against a suitable background. Omission of the parados makes all-round fire easier.

(b) The pits of an infantry section will be sited close enough to the section commander for his fire orders to be understood during battle. Section posts should be within voice control of the platoon commander.

(c) Drainage will be a major difficulty. Hollows must be avoided as far as possible. This statement does not mean that siting should be on the tops of ridges, which are conspicuous targets. Reverse slopes will be used.

(d) Concealment obtained by siting must not be nullified by bad track discipline. A track plan must be made before work on the position starts.

(e) The camouflage of the posts themselves will need even more maintenance than will the pits. Branches and foliage must be renewed from time to time.

177. Overhead cover.—Overhead cover will not normally be provided for L.M.Gs. or rifles, which must be kept free to engage attacking aircraft.
THREE-MAN CROSS SHAPED WEAPON SLIT

CROSS SECTIONS SAME AS FOR 2-MAN SLIT.
ALL SPOIL REMOVED.

Bottom graded down to 4'-9" at Sump.

ALL SPOIL REMOVED

About 6 in. command can be obtained by spreading spoil to form parapets 5 ft thick and returfing. In this case the depth must be 6 ins. less throughout.
178. **Hasty defences.**—When defences have to be dug in a hurry, concealment will have to be obtained by siting, and not by removing or covering the spoil.

The first stage, therefore, will be to dig the smallest hole in the ground that will give the occupants protection, and from which they can use their weapons. This should cater for men in the sitting position.

As circumstances permit, the first stage can be developed by deepening the hole until the occupants can fire their weapons from the kneeling position.

The final stage will be to make it deep enough for the standing position.

Keeping the dimensions of the standard weapon slits as the goal the various stages would be as follows (see Fig. xx.)

**Note.**—The length of the slit is 6 ft. 6 ins.

The concealment of slits depends on siting and camouflage. In open flat country, spoil must be removed from the area of the section post. Thus, the completed slits have no parapet or parados.

In broken country, it may be possible to camouflage the parapets and parados with turf or foliage so that the slits merge into the surface of the area in which they are dug.

Where the nature of the ground is such that siting by merging in broken country can be obtained, an alternative method of concealment is by covering the spoil of the parapet or parados by material (e.g., turf or peat) similar to the texture of the surrounding country. This is, however, liable to colour after a few days.

Communication trenches will seldom be developed beyond the crawl-trench stage, and the length of crawl trench dug will be kept to a minimum.

Shelters may be added to weapon slits and camouflaged, or constructed separately, according to the tactical situation.

179. **Protective wire.**—Protective, as opposed to tactical wire must be sited to conform with the existing ground pattern of hedge and ditch or track and road. Slavish use of the standard pattern of fence need not be made when an existing hedge or fence can be made use of and it is only necessary to add a few strands of wire to make it into an effective obstacle.

In the early stages of the occupation of a defensive position, it will not be possible to surround the post with thick belts of protective wire, because there will not be sufficient wire available. During this stage, therefore, only the more important areas should be wired and use should be made of trip wires in other parts of the post.

180. **Tactical wire and mines.**—Both tactical wire and mines are used to shepherd the attack on to the chosen counter-attack area, which may be well in rear of the outer localities. They are not the concern of this part of Infantry Training.
181. **Protective mines.**—These are used in the same way as protective wire for the close defence of posts and localities. All infantry should be trained in arming, laying, and lifting mines (see M.T.P. 40, Part II). For the platoon commander the siting of these mines will be laid down by the higher commander.

182. **General hints for section commanders when digging in**

(a) Each man's equipment and arms should be laid on the right-hand side of his task as he faces away from the enemy. They must be easy to get at, and arranged methodically, so that each man knows exactly where his equipment lies. This point is especially important at night, when equipment can easily be lost.

(b) If the section is finding sentries while it is digging in, these should be relieved after short spells of 30 minutes' duty.

(c) By night if a Verey light or parachute flare goes up while the section is digging, everyone must keep still.

(d) Digging will frequently take place at night. Although darkness screens the work from hostile air reconnaissance, it makes control of the working parties more difficult.

183. **Routine in the position.**—The object of organizing the routine in a section post is to make certain that:

(a) The post is never surprised.

(b) Proper discipline is maintained, so that the section is always ready for action, can defend its post efficiently, and so that the position of the post is not given away to hostile observers by exposure or by lax track discipline.

(c) The equipment, weapons, and ammunition are in good condition.

184. **Routine by day**

(a) When ordered, the section will provide a sentry or sentries to watch for:

(i) Signs of the enemy.

(ii) Enemy aircraft.

(iii) Gas.

The section commander must personally organize reliefs and each sentry must be posted by an N.C.O.

(b) Rifles and light machine guns should be concealed by day, but should be ready for instant action.

(c) A time must be fixed for the inspection of rifles, light machine guns, oil bottles, ammunition, anti-gas equipment, emergency rations, and first field dressings, both in the morning and evening.

(d) Careful observation must be maintained to ensure that no enemy movement, or new work, is unobserved. Everything noted must be reported to platoon headquarters.

(e) No man should leave the post without the section commander's permission.

(f) The weapon slits must be kept clean and tidy.

(g) Proper latrines must be dug and used.

185. **Routine by night or in foggy weather**

(a) Sentries should be posted in pairs and relieved alternately so as to ensure continuity of observation.

(b) Men in forward companies should sleep fully clothed and equipped, ready for instant action.

(c) No shining of torches, lighting of matches, or smoking, is permissible by night.

(d) Rifles should be in position; bayonets must be fixed. The light machine gun should be placed on its tripod, if one has been allotted, for firing on the fixed arc or line.

(e) All men must be warned that track discipline is equally important by night.

(f) The sentries must be warned about any patrols that are going out or returning near the post.

(g) The section must "stand to" an hour before daylight and before dusk and remain standing to until ordered to stand down by the platoon commander.

186. **Sentries**

(a) The security of a post depends on the care with which sentries are posted, and on their alertness and efficiency.

(b) Sentries must be posted so that they can warn the section silently, by day or night; they must remain in the post and avoid any unnecessary movement. During darkness, when double sentries are employed, they should be in touch with each other and able to communicate without movement. The position of reliefs should be so arranged that they can be wakened for their tour of duty without disturbing the rest of the section.

(c) Sentries must understand the following procedure for dealing with persons approaching the post:

(i) If anyone approaches, the sentry will immediately warn the post.

(ii) If the person or party approaches close to the post, the whole section should be ready to fire and the sentry will call out "Halt" just loud enough to be heard. If
the order to halt is obeyed, the section commander will order the person or commander of the party to advance and give an account of himself; the remainder of the section meanwhile covering the party with their weapons. If the order to halt is disobeyed, fire will be opened without hesitation. There is always a tendency at night to challenge and shoot early. Sentries will not "challenge" until they are certain that those approaching are so close that the section cannot possibly miss them with fire. On very black nights it is usually better to rely on the bayonet, in which event the sentry will not challenge until the last possible moment.

All sentries must know:

(i) The direction of the enemy;
(ii) The extent of the ground which they have to watch;
(iii) The position of the section posts on their right and left;
(iv) The names of any landmarks on their front;
(v) The procedure to be followed if they see anyone approaching the post;
(vi) Particulars of any friendly patrols due to return through their post;
(vii) The signal for defensive fire;
(viii) The password;
(ix) The direction of the wind.

SECTION 42.—OFFENSIVE ACTION AGAINST TANKS
BY DAY

187. Action of forward infantry against tanks in defence

(a) The main task of the forward infantry is to make quite sure that no enemy infantry following up the tanks are allowed to exploit any success the tanks may achieve. The tanks themselves will be dealt with by our own anti-tank weapons and tanks, which are held in reserve. Infantry must, if need be, lie concealed in their weapon slits. They must never allow themselves to be drawn off in pursuit.

(b) As soon as the tanks have passed over, the infantry task begins. They must bob up instantly and wipe out the following infantry.

(c) Tanks are likely to avoid the sort of site chosen by the defence, e.g., woods, hedges, villages, or close country, and they will then be unable to do more than by-pass the defences. They are often very chary of approaching close, for fear of anti-tank grenades, the P.I.A.T., and other anti-tank weapons.

(d) Infantry units that are in reserve or that have a mobile role may be given the task of ambushing small bodies of enemy tanks by day. Every company should therefore be prepared to carry out such roles.

188. Tank hunting parties.—All infantry should be trained in tank hunting. This requires special training and special equipment, of which there may only be sufficient for one platoon in the company. Men for tank hunting parties should be specially selected and, if possible, should be in one platoon, in order to ensure that at least one sub-unit is always ready to deal with tanks.

189. The tank ambush.—The place selected for the ambush must be carefully chosen. Do not make the elementary mistake of always siting a tank trap on an "S" bend or in a defile. Tanks have learned to avoid these places. Site your trap on an ordinary stretch of road with a slight curve where thin cover, e.g., houses, walls, banks, or a thin line of trees, make exit from the road for the tanks difficult but not impossible.

190. The procedure should be as follows:

(a) Establish an O.P. The ambush will take some little time to prepare and after preparation you cannot keep all your men standing to indefinitely. Allow them to rest near their positions and arrange for a signal (e.g., whistle blasts) to warn them of the approach of tanks. The crew of the tanks will not hear.

(b) Select three checking points. A platoon can normally tackle three tanks. The German tank troops consist of five tanks. The first three should normally be selected as the victims. The checking points are the places where you intend that the tanks shall stop to be destroyed. They can be worked out as follows:

(i) The first checking point.—Make necklaces of anti-tank mines or 75 grenades joined together with cord or signal cable. Conceal them in holes dug into the bank at the side of the road. Arrange for these necklaces to be pulled across the road immediately in front of the leading tank. These will blow the track off the leading tank and you have the first checking point.

(ii) Centre and third checking points.—These are the places where tanks Nos. 2 and 3 will be in a temporary state of indecision when they see what
has happened to tank No. 1. If the tank crews are well trained this pause will only last for a few seconds but this will be enough for you. In estimating the position of checking points 2 and 3, remember the following points:

_Tactical driving._—Tanks moving into danger areas always arrange for tank No. 2 to cover tank No. 1 by fire and tank No. 3 to cover tank No. 2. With practise this arrangement will give you a very accurate guide where checking points 2 and 3 are bound to be, e.g. if checking point No. 1 is sited 50 yds. round a bend, tank No. 2 will have to be on the bend to cover tank No. 1. If tank No. 2 has to halt at the bottom of a slight hill, tank No. 3 will have to be over the crest of the hill to cover tank No. 2 by fire. If tactical driving is practised with carriers, it will be found that skill both in siting the block and estimating the checking points can be rapidly acquired.

_Tank drills._—Tanks will get off the road as quickly as they can, so make sure that the checking points are at places where movement off the road will cause them some little difficulty. Anti-tank mines can be used to make this movement more difficult if they try it.

(c) Select a position for the seal.—This is another series of necklaces of anti-tank mines to be pulled over behind the third tank to prevent its escape and to stop tanks Nos. 4 and 5 if they attempt to interfere.

(d) Allot positions to your garrison and to platoon H.Q. Points to remember here are:

(i) One section—one tank. (See suggested arrangement in Fig. xxi.)

(ii) Perfect concealment from view and, if time permits, cover from fire—in weapon slits. Have your men off the road. Tanks are likely to shoot up ditches and the edge of the road as soon as they are attacked. Remember the tank commander is 6 to 8 ft. above the level of the road—he can see well down the verges.

(iii) There will be considerable confusion when the attack starts, and much smoke. In order to avoid killing your own men, they should all be located on the same side of the road; this arrangement will also help a quick getaway.

(e) Issue definite orders on your policy towards enemy reconnaissance vehicles other than tanks. This will depend largely on the orders you have received, but, if you have been sent out to destroy tanks, you must ignore enemy armoured cars and motor cycles. You must then rely on concealment if they appear; let them pass through your ambush, but site your weapons to deal with them if they return and try to interfere when the attack is in progress. (See Fig. xxi.)

(f) Select a R.V. This will usually be the place at which your transport is waiting. Every man in the platoon must hurry to it immediately the attack is over. The R.V. should be down wind if possible, so that your smoke cloud will cover you as it drifts away. Do not linger to watch the effects of your work.

(g) Arrange for an alarm signal, on which every man goes to the rendezvous at once.

191. Points to note.—Anti-tank necklaces.—There should be 1 it. 6 ins. from the centre of one mine to centre of the next mine. Coil up the mines "birds nest" fashion in their concealed hole and anchor the far side securely so that they are not pulled too far when the operations start. Hide your cord or cable carefully in the road so that it does not excite suspicion. No. 75 grenades will usually be used for this purpose.

192. The attack

(a) This is all a matter of team work, and should take place under the cover of smoke. Smoke grenades thrown on to the air inlets of the tanks will blind the crew, cause them great discomfort, and may make them sick. As soon as the smoke has thickened up, the assault parties go in and place their sticky bombs on to the engine covers of the tanks, if time permits on the top turret, or on the rim where turret meets hull, or on the gun mountings. After penetration of the engine covering with sticky bombs, you can, by application of fire producing agencies (such as A/W and Molotof bombs) probably set the tank alight.

(b) The man with the P.I.A.T. will probably have time for one shot only. The remainder of the garrison are sited to deal with any infantry who may interfere and to cover the tanks with fire to keep them closed down.

(c) The 2-in. mortar provides smoke on the up wind flank to help to make the movement of the tanks off the roadside more difficult.
This particular operation can best be likened to an attack made by a bomber pilot on a heavily escorted enemy warship. He darts in, drops his bombs, and is away. He does not linger to watch the effect of his bombs, or he may be caught at a disadvantage. The whole action with a well-trained team should be over in two or three minutes and the platoon should be well away before the tank crews have had time to collect their wits.

Section 43.—DESTRUCTION OF ENEMY TANKS BY NIGHT OR IN NIGHT HARBOUR

193. General.—At night, tanks usually go into harbour for maintenance. Here they are very vulnerable to infantry who have acquired skill in fieldcraft and night patrolling, and they will suffer heavily if vigorous action is taken. Except for small detachments, enemy tanks are usually protected in harbour by dismounted troops. In such instances, a careful reconnaissance to locate the exact positions of the tanks and of the protecting infantry is necessary before any detailed plan of attack can be made.

There will often be noise in a tank park at night, and this should make location of it fairly easy. Tanks usually carry out maintenance by night, distribute food, petrol and ammunition, issue orders for the following day and carry out many other duties which must entail noise. In closed country the tanks are likely to lie up in cover such as scrub or woods. In open country, however, they form a “laager.” The scene to be expected in a laager is:

(a) A square or rectangle of tanks drawn up with the guns facing outwards.
(b) Some of these tanks, known as “guard tanks,” will be manned by their crews.
(c) The crews of the remainder of the tanks will usually be sleeping outside their tanks under waterproof bivouac sheets.
(d) There will be a prowler guard making a regular circuit of the perimeter on foot.
(e) In the middle of the rectangle the echelon “B” vehicles will be parked, and maintenance work, distribution of food, etc., may be in progress.
(f) When an alarm is given all tank crews will run to their tanks. They will spray the ground all round the tanks with fire, using their headlights to give illumination and they will get on the move as quickly as they can.
(g) There will always be at least one road leading into and out of the tank harbour.
194. Problems facing the attacking platoon
(a) The prowler guard and any sentries must be avoided or silently eliminated.
(b) The tanks and their crews must both be destroyed if possible.

195. Method
(a) The platoon as a whole moving in night patrol formation should creep as near the tank park as is considered safe.
(b) An "O" group will assemble at a prearranged R.V.
(c) From this R.V. a reconnaissance patrol consisting of two men expert in fieldcraft should be sent forward to discover a route into the middle of the park.
(d) Based on the information given by these two men, the platoon commander makes his plan and gives out his orders. A final R.V. is essential in case anything goes wrong.
(e) The platoon commander's plan will vary according to circumstances, but, generally speaking, it is best to use the smallest possible force to filter through the gap discovered. This force will go right into the middle of the harbour and will begin to attack moving outwards. This attack will take the tanks by surprise and will avoid casualties from their machine gun fire. Tanks will be afraid to fire into the middle of the harbour lest they should kill their own men. Any parts of the patrol left outside the park can add to the confusion by creating a diversion.
(f) If anti-tank mines or No. 75 grenades are available, these can be placed at suitable points leading to the road where they will catch the tanks as they move off.
(g) It is important to try to destroy the tanks and not merely to disable them. Destruction can best be achieved either:
   (i) by fire,
   (ii) by putting an anti-tank mine inside the tank, fitted as follows: remove the fuze from the centre of the mine and replace it with a circular piece of guncotton into which a detonator, safety fuze, and igniter have been inserted. The percussion from the guncotton will set off the mine.
(h) Speed is essential. As soon as the operation is over the platoon should R.V. and move into a concealed position of observation well away from the area.

196. General.—A force retiring covers itself against enemy pursuit by a rear guard, whose duty is to allow the main body to withdraw in safety. A rear guard usually withdraws from one position to another or through a position held by other troops.

197. Rear guard position.—Rear guard and defensive positions are very alike, and the section commander will have almost the same tasks in both.
The main differences are that in a rear guard position depth is sacrificed and positions are selected so as to obtain the maximum field of fire from the outset, and a covered line of withdrawal. A large proportion of light machine guns will therefore be given arcs of fire straight to the front.

198. Withdrawal from a rear guard position will usually be carried out at night. By day it is a very difficult operation.
Before withdrawal, the platoon commander of a forward platoon will require to know:
(a) The time up to which the forward defended localities are to be denied to the enemy.
(b) Who is holding any position that may have been organized in rear, where it is, and what time his section is to pass through this position.
(c) Route back to company rendezvous.
   This route must be chosen so as not to mask the fire of any troops holding a position in rear.
(d) Who will give the order to begin withdrawal (if he has not got a watch).
(e) What covering fire is available.
(f) What spare equipment can be loaded on the company trucks before the actual hour of leaving the position.
(g) Locations of company headquarters.
On receipt of this information the platoon commander will prepare his plan for the withdrawal of his platoon. He will reconnoitre his route back and decide whether "thinning out" will be by individuals or whether whole sections can get away together. In the former method he must select a platoon rendezvous, in a covered position, which becomes the platoon check point. From this point sections will withdraw to the company rendezvous making full use of all available cover.
199. Delaying tactics

The rear guard's chief duty of gaining time by delaying the enemy can often be assisted by the employment of simple and hastily constructed dummies. A "minefield" of dust-covered plates, and a screen of blankets across a road, are obstacles which the enemy must pause to investigate.

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