

Notified in G.O's. dated 31st March, 1943.



Small Arms Training

Volume I, Pamphlet No. 15

SUB-MACHINE GUNS

(Austen — Owen — Thompson)

AUSTRALIA

1943

(This Pamphlet supersedes all previous editions)

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INTRODUCTORY

1. Sub-machine guns are short range weapons introduced for the purpose of engaging targets at ranges from 10 to about 100 yards. At greater distances, the speed of the bullet is so reduced that it has lost much of its ballistic efficiency.

These weapons are especially useful when on Patrol or for fighting in close country, such as jungle, woods, etc., and in towns and villages.

Under these conditions the enemy may appear at close ranges and from varying directions, and by firing from the waist such targets can be instantly and effectively engaged. When time permits, the weapons should be fired from the shoulder.

2. Sub-machine guns are automatic weapons operated usually by the recoil of the fired case acting on the face of the breech block or its equivalent. Bursts or single rounds can be fired and where the weapon is of 9 m.m. calibre, most makes of that ammunition, including German and Italian, can be used.

3. It must, however, be realised that the cartridge used is essentially a pistol cartridge, therefore the weapon cannot logically be regarded as a light machine gun or automatic rifle. Appreciation of this aspect will obviate the tendency to use the weapon on tasks for which it is neither suited or designed.

OBJECT OF WEAPON TRAINING

The sole object of weapon training is to teach all ranks the most efficient way of handling their weapons in order to kill the enemy.

Instructors will always bear this in mind and continually impress the fact upon those whom they instruct. The methods suggested in this and other Pamphlets concerned with weapon training have been evolved by experience and are considered the most suitable for general application.

SAFETY AND CARE

1. At the commencement of any lesson, the instructor will inspect the weapon and its associated equipment. Adherence to the above specific routine will engender the correct "safety aspect" in the minds of those under instruction.

2. When live ammunition is used for practice in magazine filling it must be carefully checked both before and after the lesson and **MUST NOT BE USED FOR ANY OTHER PURPOSE.**

3. The weapon, except when in actual contact with the enemy or engaging a target, will always be carried "safely," i.e., Breech block (bolt, etc.) forward, chamber empty.

4. In handling the weapon the moving parts must always be eased forward under control to avoid damage to the components.

5. Although magazines will accommodate the ammunition stated, it is undesirable to retain them filled to this capacity over a long period. When not in actual contact with the enemy, magazines should only be filled to three-quarter capacity, the ammunition required to complete the loading being kept readily accessible.

Whenever possible, magazines should be emptied and cleaned, thus permitting the spring to relax and ensuring the condition both of the ammunition contained and the interior of the magazine assembly.

GENERAL

1. Instructors must appreciate that while the lessons set out are designed to be taught in one period, repetition will be necessary in order to permit of sufficient practice to obtain efficiency.

2. The Sub-machine gun can be carried in any convenient position, but when expecting to meet an enemy it should be held at the waist. From this position it can be instantly aligned and fired, or, time permitting, it can be fired from the shoulder. Although the weapon can be fired whilst on the move, greater accuracy is assured by halting momentarily to do so.

3. Owing to the speed with which single rounds can be fired, the greater accuracy possible by this method and the need for economy of ammunition, **single round firing** will be employed whenever possible. Bursts should be reserved for extreme emergencies or suitable targets, and when used, should be of **2 to 3 rounds only**. Longer bursts will result in displacement of the weapon's line and elevation and, except at extremely short range and against a dense target, will produce little or no material effect, besides placing the firer at a definite disadvantage through wastage of vital ammunition, entailing loss of time in reloadings, etc.

4. For targets at about 25 yards the weapon should be fired from the waist by "sense of direction." For ranges between 30 and 100 yards, and if time permits, aim should be taken. Whichever method is used, an attempt should be made to observe the strike of the bullets, as this is the only sound method of making the necessary correction.

5. Having disposed of the enemy, the weapon can be made safe for movement by removing the magazine, easing the cocking handle forward and placing on a full magazine.

6. Although the weapon is fitted with a sling, care should be taken that it does not interfere with the free manipulation of the weapon or hinder the firer. The sling should be regarded normally as an assistance in carrying the weapon, the method adopted varying with the situation and probable use.

PART I.

9 m.m. AUSTEN SUB-MACHINE GUN, Mk. I.



LESSON 1.—INTRODUCTION: LOADING AND UNLOADING

Instructor's Notes.

All parts will be named as dealt with.

Stores.—Sub-machine gun, magazines, magazine filler, ball cartridges. (See "Safety and Care," para. 2, page 1.)

1. Introduction.—

Explain Introductory, paras. 1 to 3.

Name of weapon, calibre.

Weight — 8½ lbs. approx. (a lighter model is in course of production.)

Rate of fire — 500 r.p.m. approx.

Operation — Recoil — return action by spring.

2. Magazine Filling.—

i. Explain and demonstrate:—

Magazine will contain 28 rounds (see "Safety and Care, para. 5). Owing to powerful spring required, it is not possible to fill it quickly by hand, therefore a Filler is provided.

Place the filler on the magazine and press home until the catch engages in the recess on the magazine body.

Hold the magazine in one hand, groove in the magazine away from the body. Place the forefinger in the loop of the filler handle, thumb on the forward knuckle, second and third fingers in the recesses provided.

Press the rear of the lever downwards thus depressing the magazine platform and leaving an opening into which a round can be inserted.

Hold a convenient number of rounds in the other hand and insert one, base first, under the claw of the filler. Raise the lever smartly and press it down again. This action takes the round under the lips of the magazine and forces it down. A full motion of the lever must be made in both directions, otherwise faulty filling will result.

Continue the above actions until the magazine is filled. Ensure that the ammunition is kept clean and count the rounds.

Remove the filler by pressing the flat spring button and lift off.

ii. To empty a magazine.

Strip each round in turn from the magazine with the thumb and forefinger.

iii. Practise the squad in the above actions. Time may only permit each man to handle a few rounds: 10 should be regarded as sufficient at this stage.

3. Loading and Unloading.

i. To Load.

Explain and demonstrate (using empty magazine). Hold the sub-machine gun with the right hand at the rear grip, forefinger outside the trigger guard, butt under the arm, muzzle pointing downwards at an angle of 45 deg.

Hold the magazine in the left hand with the groove to the rear, and insert it into the magazine housing on the left side of the weapon. Ensure that it is fully home. Grasp the cocking handle between the thumb and forefinger of the left hand, draw it smartly to the rear and move it into the safety recess on the body. Grasp front grip with left hand.

When action is imminent, release the cocking handle from the safety slot.

NOTE.—If the working parts have been eased forward with a round in the chamber, a jerk or knock may cause the round to be fired. The weapon must NEVER be carried or allow to remain in this condition.

ii. To Unload.

Press down the magazine catch on the magazine housing with the thumb and remove the magazine with the fingers of the left hand.

Hold the cocking handle with the left hand, press the trigger and allow the moving parts to go forward under control. Cock the action and repeat the above routine.

iii. Practise squad on commands, "Load" — "Action imminent" — "Unload."

4. Sights.

Explain:—

The weapon is fitted with a simple fixed aperture sight, adjusted for use at 100 yards. Rules for aiming:—

Sights upright.

Eye close to aperture.

Look through aperture and align the tip of the foresight, in the centre of the aperture, on to the centre of the target.

Show, or draw, a simple diagram of a correct aim.

NOTE.—If considered necessary, remove the butt, position the gun securely on a suitable rest, e.g., filled sandbag, rolled greatcoat, turf, etc., and lay an aim at some distinct object at close range. Recruits view aim of weapon.

(The above should only be necessary when dealing with personnel with no previous experience of aperture-sighted weapons.)

LESSON 2.—HOLDING AND FIRING

Instructor's Notes.

Stores.—Sub-machine gun, magazines, Fig. 2 target. An empty magazine should be on the gun when teaching Holding.

Dress.—Battle order if available.

1. Holding.

i. Explain:—

Correct holding is of primary importance, especially if firing bursts. It can only be attained by actual experience in firing with ball ammunition.

ii. There are two positions for holding:—

(a) At the waist.

(b) At the shoulder.

2. i. Explain and demonstrate:—

(a) *Holding at the Waist.*

The left foot is advanced with the knee bent, the weight of the body being balanced on the left foot. The right hand grasps the rear grip, forefinger on the trigger, the left hand grasps the front grip, the butt is pressed firmly against the side by the right elbow. The left elbow should be in firm contact with the man's body, so that, no matter what direction the firer turns, the weapon is brought automatically in the same direction. The muzzle is directed towards the centre of the target. The attention of the firer must be concentrated on the target.

Example: See OWEN — waist position.

The squad must be impressed with the fact that the weapon is essentially an "offensive" one; the position adopted for firing must reflect this characteristic, i.e., determined, aggressive and confident attitude.

ii. Practise squad. Instructor to stand behind the man handling the weapon and check the alignment of the barrel on the target.

NOTE.—When using the weapon with the butt folded, the right forearm will be firm against the body and the weapon held with the rear end slightly in front of the waist at the right side.

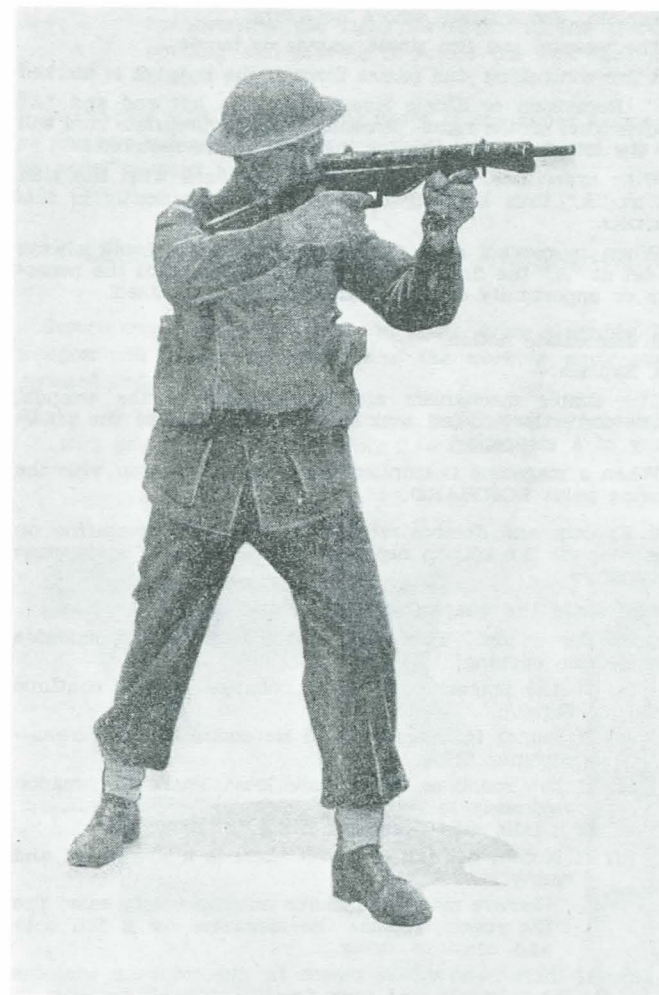
Example: See THOMPSON — butt removed.

3. i. Explain and demonstrate:—

(b) *Holding at the Shoulder.*

The position of the body and hands is the same as when holding at the waist. If a correct grip is assumed with the hands the elbows come naturally into a suitable and comfortable position. Attempts to simulate a position similar to that adopted for the rifle will result in lack of control. The butt must be pressed firmly into the shoulder.

ii. Practise squad.



Example: AUSTEN — holding at shoulder.

4. Firing.

Explain, demonstrate where necessary.

The weapon can fire single rounds or bursts.

A fire-controlling stud passes through the body; it is marked "R" (Repetition or Single Rounds) on the left end and "A" (Automatic) on the right. Pressing in the appropriate stud will set the trigger mechanism for the type of fire required.

With experience, single rounds can be fired with the stud set at "A," thus enabling it to be kept permanently in this position.

When in contact with the enemy, the weapon will always be set at "A," the firer producing single shots until the necessity or opportunity for automatic fire presents itself.

5. Immediate Action.

i. Explain:—

The simple mechanism and construction of the weapon, when correctly handled and serviced, will obviate the possibility of a stoppage.

When a magazine is emptied the weapon will stop with the moving parts FORWARD.

ii. Explain and demonstrate (using an empty magazine on the weapon) the actions necessary in the event of a stoppage occurring:

iii. Should the weapon stop firing:—

Cock the action. Turn the weapon slightly and examine the ejection opening.

- If the magazine is empty, change it and continue firing.
- If rounds in magazine and no obstruction apparent—continue firing.
- If live round or empty case loose, shake the weapon vigorously to the right.
If it falls out — continue firing.
- If it does not fall out or if there is a live round and empty case—

Remove magazine; shake out the empty case; fire the round; replace the magazine (or a full one) and continue firing.

- If there is no visible reason for the stoppage, examine the bolt face and body for the probable presence of a loose cap* or other obstruction. If found, remove and continue firing. Should nothing be located, examine chamber and bore.

NOTE.—*This condition can be detected normally by inserting the right forefinger in the ejection opening and moving it across the bolt face and breech face.

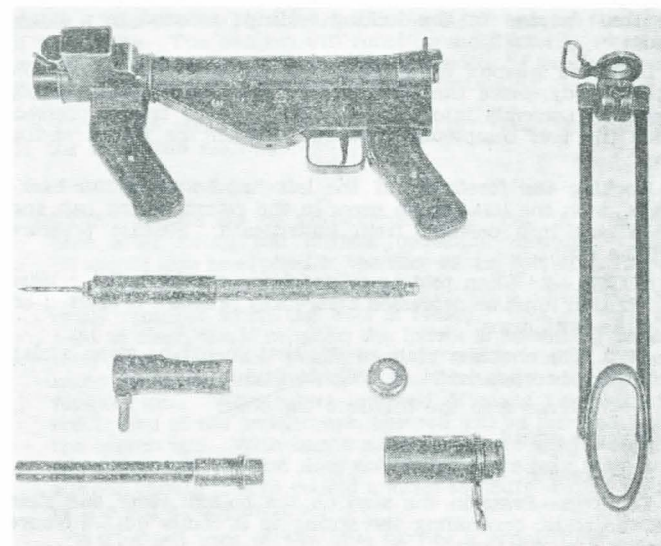
iv. Practise squad, varying the order of the above stoppages as progress is made. The working parts must, however, always be eased forward under control.

LESSON 3 —STRIPPING AND CLEANING

Instructor's Notes.

Before any part is stripped and again after assembly, the weapon will always be cocked and the working parts eased forward under control.

Stores.—Sub-machine gun, magazines, pullthrough, flannelette, wire gauge and oil. (See Note 2 — Cleaning.)



1. Stripping.

Mention names of main parts as they are stripped. Explain and demonstrate:—

Press in the stud on the recoil spring housing and slide the butt off downwards, ensuring that the return spring cap does not spring out.

Remove return spring cap. Hold the weapon in a horizontal position, draw back the cocking handle and remove the return spring casing assembly from the bolt. Remove the bolt.

Depress and hold depressed the barrel locking nut catch on magazine holder and unscrew the barrel locking nut. Remove the barrel.

NOTE.—The sub-machine gun will NOT be stripped further than this, except by unit armourer or qualified instructor.

2. Assembly.

Replace barrel, making certain that it has located in its keyway. Depress barrel locking nut catch and screw in barrel locking nut until all thread is taken up. Turn back slightly, then release the catch, which allows the teeth to engage with the pawl. Then with the teeth engaged tighten nut with firm hand pressure, the teeth of the nut "clicking" indicating engagement with pawl. (Avoid unnecessary use of the "click" so that damage to the locking teeth is reduced to a minimum.)

Hold the weapon in a horizontal position, insert the bolt in the body, place the front end of the return spring casing assembly correctly into the bolt. Keeping the trigger pressed, slide the bolt completely forward. Attach the return spring cap.

Hooking the forefinger of the left hand around the back-sight, with the left thumb press in the return spring cap and slide butt into position from underneath. Release pressure on the cap.

NOTES.—1. When folding or unfolding the butt, the release button must be depressed before any pressure is exerted on the butt arms.

2. The shoulder plate of the butt should be given a slap with the open hand in order to fold or open it.

3. Never drop the bolt into the body.

Practise squad.

3. Magazine.

To Strip.—Press in the stud on the bottom plate and slide off the plate, controlling the spring as it comes out. Remove spring and platform.

To Assemble.—Replace the platform and spring and slide on the bottom plate until the stud engages in the hole in the plate. A slight tap with the hand will assist this action.

4. Cleaning.

1. Explain and demonstrate:—

Strip the weapon as taught. Clean the bore, using pull-through and flannelette (size 4 x 3 inches). A wire gauze is provided but should only be used when absolutely necessary. When the bore is clean, oil it, using flannelette (4 x 2 inches).

ii. Clean and oil the chamber, using the weight of the pull-through (or a piece of stick) with flannelette wrapped round it.

iii. Clean and oil thoroughly the remaining parts of the weapon, paying particular attention to:—

Face of the bolt.

Inside the body.

The ejector.

Exterior of return spring casing.

iv. Before firing, it is preferable to dry all parts of the weapon with the exception of the interior of the return spring casing. This can be lightly oiled through the hole at the rear of the casing. The weapon will function satisfactorily whether dry or oily, but under dusty or muddy conditions the frictional parts should be dry to ensure correct functioning.

v. Clean the magazines with an oily rag. Test whether all fit the magazine housing.

vi. Practise squad.

NOTES.—1. The use of anti-corrosive oil (Oil "A") in the bore after firing will obviate continual cleaning. This oil should also be applied to the face of the bolt after firing.

2. The right arm of the butt carries a cleaning rod, easily removed when the butt is folded. This rod can be used to clean the bore when the barrel is assembled to the weapon or when the pullthrough is not available. When using the rod, ensure that the flannelette covers the forward end. With barrel removed, if using the cleaning rod in lieu of the pullthrough, the rod will be inserted from the breech end. With barrel assembled, care is to be taken to ensure that the rod does not damage the bolt face; the weapon should first be cocked and set to "Safe" before entry of the rod at the muzzle.

3. The left arm of the butt carries a screwdriver.

5. Action during and after gas attack.

i. During gas attack (if weapon is not in use).

Keep weapon well oiled and move working parts at frequent intervals.

ii. After gas attack.

If splashed with blister gas, the weapon must be decontaminated before cleaning, as follows:—

Rub ointment into the hands. Strip the weapon, remove gross contamination with swab or cotton waste. If petrol or paraffin is available, swab down the metal portions. Apply ointment if neither of the above are available, wiping it off after 15-20 minutes. Oil the weapon thoroughly and apply ointment to the hands.

Question squad.

PART II.

9 m.m. OWEN SUB-MACHINE GUN, Mk. I.



LESSON 1.—INTRODUCTION: LOADING AND UNLOADING

Instructor's Notes.

All parts will be named as dealt with.

Stores.—Sub-machine gun, magazines, ball cartridges. (See "Safety and Care," para. 2, page 2.)

1. Introduction.—

Explain Introductory, paras. 1 to 3.

Name of weapon, calibre.

Weight — 9½ lbs. approx. (a lighter model is in course of production).

Rate of fire — 600 r.p.m. approx.

Operation — Recoil — return action by spring.

2. Magazine Filling.—

i. Explain and demonstrate:—

Magazine will contain 33 rounds but is usually filled with 32 (see "Safety and Care," para. 5). Hold the magazine in the left hand and place a cartridge on the platform, bullet end at large opening. Press down until cartridge slips under the curved lip. Continue until magazine has been loaded with the required number of rounds. Ensure that the ammunition is kept clean and count the rounds.

ii. To empty a magazine.

Strip each round in turn from the magazine with the thumb and forefinger.

If there should be a tendency for the platform to stick or jam, unload it and examine, dismantling it if necessary and clean thoroughly. Ensure that the platform is replaced in its correct position.

iii. Practise squad in the above actions. Time may only permit each man to handle a few rounds. 10 should be regarded as sufficient at this stage.

3. Loading and Unloading.

i. To Load.

Explain and demonstrate (using empty magazines).

Ensure that the Change Lever is fully forward.

Hold the sub-machine gun with the right hand at the rear grip, forefinger outside the trigger guard, butt under the arm, muzzle pointing downwards at an angle of 45 deg.

Hold the magazine upright in the left hand, bullets pointing forward. Insert into magazine holder and press firmly down until engaged. The stop on the rear of the magazine should now be in contact with the top of the magazine holder and the magazine caught by the magazine catch.

Slide the open left hand along the body, fingers downwards and on the right, thumb raised clear, and cock the weapon by a quick rearward movement of the hand. (The first joint of the extended forefinger should contact the cocking handle.)

Adjust the Change Lever to "SAFE," i.e., to the rear recess "S."

When action is imminent, set the Change Lever to the fully forward position again.

NOTES.—1. If the working parts have been eased forward with a round in the chamber, a jerk or knock may cause the round to be fired. The weapon must NEVER be carried or allowed to remain in this condition.

2. The Change Lever has three positions:—

Forward recess — automatic fire.

Centre recess — single rounds.

Rear recess — safe.

The weapon cannot be cocked with the Change Lever at "SAFE."

ii. To Unload.

Set Change Lever to forward position.

Re-cock the action if not already cocked. (See Note.)

Grasp the magazine with the left hand, thumb on right, fingers around the magazine, and by a pressure of the lower palm release the magazine catch and remove the magazine and place it down in a clean place or in equipment, etc.

Placing the left hand against the cocking handle (as when loading) press the trigger and allow the moving parts to go forward under control. Cock the action and repeat the above routine.

NOTE.—With an empty magazine on the weapon, the cocking handle will be slightly forward of the cocked position, due to the magazine platform arresting the forward movement of the bolt. Should the magazine be removed, the bolt will move to its fully forward position.

iii. Practise squad on commands "Load" — "Action Imminent" — "Unload."

4. Sights.

Explain:—

The weapon is fitted with a simple fixed aperture sight, adjusted for use at 100 yards.

Rules for aiming:—

Sights upright.

Eye close to aperture.

Look through aperture and align the tip of the foresight, in the centre of the aperture, on to the centre of the target.

Show, or draw, a simple diagram of a correct aim.

NOTE.—If considered necessary, remove the butt, position the gun securely on a suitable rest, e.g., filled sandbag, rolled greatcoat, turf, etc., and lay an aim at some distinct object at close range. Recruits view aim of weapon.

(The above should only be necessary when dealing with personnel with no previous experience of aperture-sighted weapons.)

LESSON 2.—HOLDING AND FIRING

Instructor's Notes.

Stores.—Sub-machine gun, magazines, Fig. 2 target. An empty magazine should be on the gun when teaching Holding.

Dress.—Battle order if available.

1. Holding.

i. Explain:—

Correct holding is of primary importance, especially if firing bursts. It can only be attained by actual experience in firing with ball ammunition.

ii. There are two positions for holding—

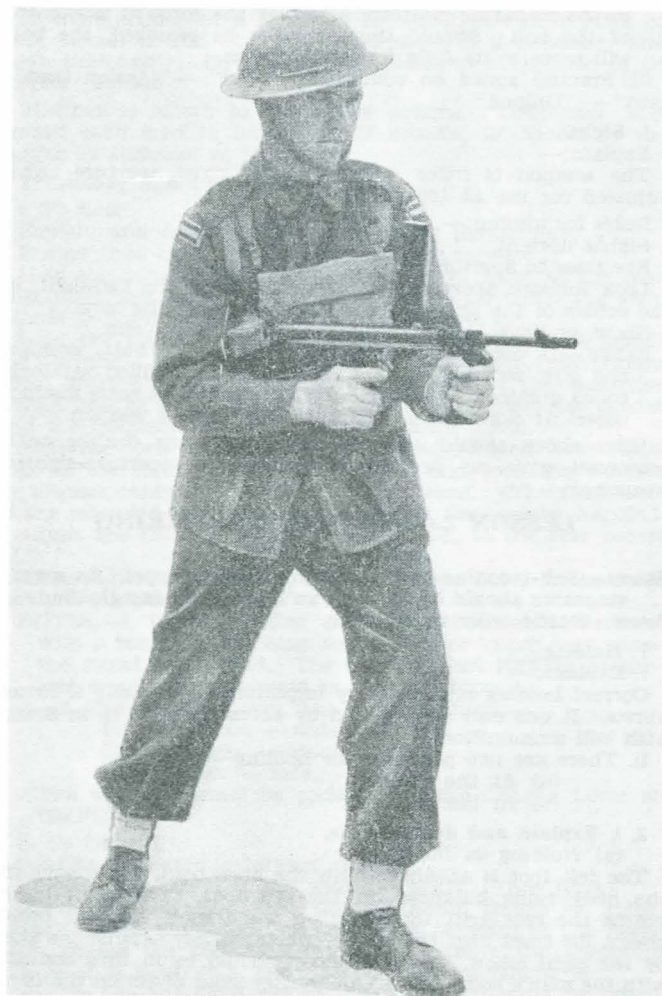
(a) At the waist.

(b) In the shoulder.

2. i. Explain and demonstrate.

(a) *Holding at the Waist.*

The left foot is advanced with the knee bent, the weight of the body being balanced on the left foot. The right hand grasps the rear grip, forefinger on the trigger, the left hand grasps the front grip, the butt is pressed firmly against the side by the right elbow. The left elbow should be in firm contact with the man's body, so that, no matter what direction the firer turns, the weapon is brought automatically in the same direction. The muzzle is directed towards the centre of the target. The attention of the firer must be concentrated on the target.



Example: OWEN — waist position.

The squad must be impressed with the fact that the weapon is essentially an "offensive" one: the position adopted for firing must reflect this characteristic, i.e., determined, aggressive and confident attitude.

ii. Practise squad. Instructor to stand behind the man handling the weapon and check the alignment of the barrel on the target.

NOTE.—When using the weapon with the butt removed, the right forearm will be firm against the body and the weapon held with the rear end slightly in front of the waist at the right side.

Example: See THOMPSON — butt removed.

3. i. Explain and demonstrate.

(b) *Holding at the shoulder.*

The position of the body and hands is the same as when holding at the waist. If a correct grip is assumed with the hands, the elbows come naturally into a suitable and comfortable position. Attempts to simulate a position similar to that adopted for the rifle, will result in lack of control. The butt must be pressed firmly into the shoulder.

Example: See AUSTEN — holding at shoulder.

ii. Practise squad.

4. Firing.

Explain. Demonstrate where necessary.

The weapon can fire single rounds or bursts, the Change Lever being the control medium.

With experience, single rounds can be fired with the Change Lever set at "Automatic" (fully forward), by pressing the trigger for a limited travel, thus enabling it to be left permanently in this position.

When in contact with the enemy the weapon will always be set in this manner, the firer producing single shots until the necessity or opportunity for Automatic fire presents itself, the trigger then being pressed to the limit of its travel.

5. Immediate Action.

i. Explain:—

The simple mechanism and construction of the weapon, when correctly handled and serviced, will obviate the possibility of a stoppage.

When the magazine is emptied, the weapon will stop with the moving parts slightly forward.

ii. Explain and demonstrate (using an empty magazine on the weapon) the actions necessary in the event of a stoppage occurring:—

iii. Should the weapon stop firing: Re-cock, examine magazine (see Note 1).

- (a) If the magazine is empty, change the magazine and continue firing.
- (b) If the magazine contains rounds, re-cock and continue firing (cocking handle will be forward).
- (c) If the weapon does not fire after the above action—Re-cock, remove magazine, press trigger (to fire possible round in breech), re-cock, re-load and continue.

iv. Practise squad, varying the order of the above stoppages as progress is made. The working parts must, however, always be eased forward under control.

NOTES.—1. When personnel have had reasonable experience with the weapon they will be able to deduce the "empty magazine" condition by the sound, etc., of the movement of the parts. In such circumstances the action will be instinctive. i.e., Re-cock, change magazine, fire.

2. Should weapon not fire after action as in (c) above, it will be necessary to remove the magazine and examine the bolt and breech faces, and remove any obstruction found, viz., loose cap. Inspection of the bore and chamber is also desirable in this case.

3. It will be found that normally the removal of the magazine allows any obstructing medium to fall clear.

LESSON 3.—STRIPPING AND CLEANING

Instructor's Notes.

Before any part is stripped, and again after assembly, the weapon will always be cocked and the working parts eased forward under control.

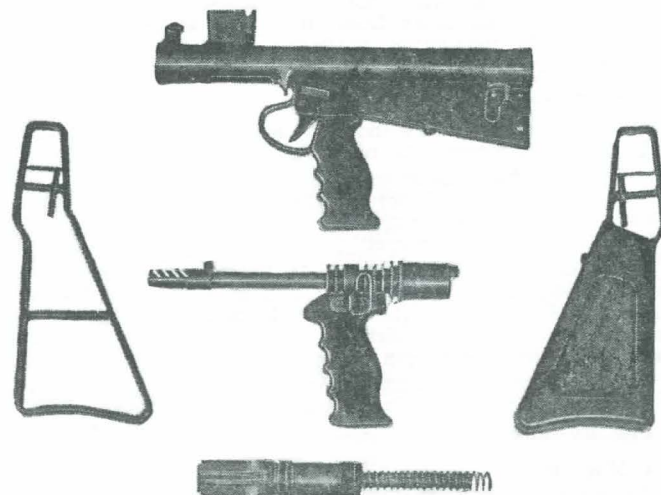
Stores.—Sub-machine gun, magazines, pullthrough, flannelette, wire gauze and oil.

1. Stripping.

Mention names of main parts as they are stripped. Explain and Demonstrate:—

Place the butt under the right armpit, hold the front grip with the left hand and, grasping the cocking handle catch with the thumb and forefinger of the right hand, withdraw it slightly and rotate it until it rests on the shelf of the cocking handle. (It is only necessary to rotate it sufficiently for the corner of the catch to rest on the shelf — if it is turned at right angles there is a possibility of the cocking handle falling into the body, causing delay.)

Grasp the barrel locking pin with right hand and pull it out as far as it will go. Push the barrel forward and the bolt



being pushed by the return spring, will follow. As the barrel leaves the body, release the barrel locking pin, which will prevent the bolt falling out of the body. Place barrel in convenient position. Raise barrel locking pin with right hand and catch bolt with left hand as it slides out of the body. Release barrel locking pin.

NOTES.—1. The sub-machine gun will NOT be stripped further than this, except by unit armourer or qualified instructor.

2. Should the barrel locking pin appear tight, it is probably due to the grasp on the front grip, jamming the locking pin. To overcome, move the front grip slightly from side to side whilst pulling up the locking pin.

2. Assembly.

Hold the weapon as before. Raise the barrel locking pin and with the left hand slide the bolt assembly into the body, ensuring that it is in correct position. Release the locking pin, which will prevent the bolt from falling out. Take up the barrel, hold up the locking pin whilst inserting the barrel. Ensure that the nose of the extractor registers with the extractor slot on the breech face and push the barrel home, twisting it slightly from side to side until the barrel locking pin snaps into position. When it does so, it should be in contact with the boss in which it slides.

Slide the cocking handle forward over the cocking bolt and release the cocking catch from the shelf. Move the cocking handle slightly backwards, until the cocking catch engages, i.e., drops down.

3. To Remove Barrel Only.

The following procedure should be adopted if, for any reason, it is desired to remove the barrel alone:—

- (a) Cock the action.
- (b) Change Lever to Safe.
- (c) Remove magazine.
- (d) Remove barrel.

To re-assemble, insert barrel as before but with muzzle pointing slightly upwards, using the back of the "lead-in" platform to push out the barrel locking pin. When the barrel is home, rotate it slightly from side to side by the front grip, until the locking pin snaps home.

NOTE.—Under no circumstances is the trigger to be pulled with the gun cocked while the barrel is removed.

Practise squad.

4. Magazine.

To Strip.—Press in the stud on the bottom plate and slide off the plate, controlling the spring as it comes out. Remove spring and platform.

To Assemble.—Replace the platform and spring and slide on the bottom plate until the stud engages in the hole in the plate. A slight tap with the hand will assist this action.

5. Cleaning.

- i. Explain and demonstrate:—

Strip the weapon as taught. Clean the bore, using pull-through and flannelette (size 4 x 3 inches). A wire gauze may be provided but should only be used when absolutely necessary. When the bore is clean, oil it, using flannelette (4 x 3 inches).

- ii. Clean and oil the chamber, using the weight of the pullthrough (or a piece of stick) with flannelette wrapped round it.

- iii. Clean and oil thoroughly the remaining parts of the weapon, paying particular attention to—

- Face of bolt.
- Inside the body.
- Magazine Holder.
- Surface of barrel "lead-in."

- iv. Before firing, ensure that the bore, body and bolt are free from oil. The weapon will operate more satisfactorily in this state, particularly under dusty conditions. Should the gun require to be kept continuously ready for action, the bore,

body and bolt may require occasional attention with an oily rag, then wiped dry, in order to prevent formation of rust.

- v. Clean the magazines with an oily rag, then use a dry rag on platform and interior. Test magazines in magazine holder for fit and security.

- vi. Practise squad.

NOTES.—1. When issued from store, the weapon will be found liberally covered with grease as a protection. The Trigger Gear is also packed with a special grease (Shell RB), but this should not be disturbed, as it acts as a permanent protection against damage from immersion or rain. It will only be removed by a qualified Armourer when attention to the trigger components are found necessary and will be again replaced on completion.

It is, however, imperative, for satisfactory operation, that the protective grease be removed from the barrel, bolt and body tube, the cocking handle cavity and, above all, from the interior of the magazines, before use. In the case of the latter item, petrol or kerosene may be found necessary to effectively remove all grease.

2. The use of anti-corrosive oil (Oil "A") in the bore after firing will obviate continual cleaning. This oil should also be applied to the face of the bolt after firing.

6. Action during and after gas attack.

- i. *During gas attack* (if weapon is not in use).

Keep weapon well oiled and move working parts at frequent intervals.

- ii. *After gas attack.*

If splashed with blister gas, the weapon must be decontaminated before cleaning, as follows:—

Rub ointment into the hands. Strip the weapon, remove gross contamination with swab or cotton waste. If petrol or paraffin is available, swab down the metal portions. Apply ointment if neither of the above are available, wiping it off after 15-20 minutes. Oil the weapon thoroughly and apply ointment to the hands.

Question squad.

PART III.

.450-inch THOMPSON SUB-MACHINE GUN



LESSON 1.—INTRODUCTION: LOADING AND UNLOADING

Instructor's Notes.

All parts to be named as dealt with.

*Stores.—Sub-machine gun, chest, magazines, ball cartridges.
(See "Safety and Care," para. 2, page 2.)*

1. Introduction.—

Explain Introductory, paras. 1 to 3.
Name of weapon, calibre.
Weight, 10 lb. approx.
Rate of fire, 700 r.p.m. approx.
Operation — Recoil — return action by spring.

2. Magazine Filling.—

i. Explain and demonstrate:—

Magazine filling — magazine of box type, holds 20 rounds.
(See "Safety and Care," para. 5.) Hold magazine in left hand, ribs away from the body. Pick up a convenient number of rounds in the right hand and place each round in by pressing downwards and backwards. Count the number of rounds and ensure ammunition is kept clean.

ii. To empty a magazine.

Strip each round in turn from magazine with the thumb and forefinger.

iii. Practise squad in above actions. Time may only permit each man to handle a few rounds: 10 should be regarded as sufficient at this stage.

iv. Magazine filling — drum type — holds 50 rounds. Remove the winding key by lifting the flat spring and sliding the key off. Remove the cover. Position the rotor with one claw opposite the mouth, and commence to fill anti-clockwise, the outer spirals first, bullets uppermost. Count number of rounds. Replace the cover with the small slot over the stud, slide on the winding key. Wind to the number of clicks indicated on the magazine nameplate.

v. To empty — with the thumb and forefinger push out rounds from the mouth one at a time. Care must be taken to keep the fingers clear of the winding key.

vi. Practise squad.

3. Loading and Unloading.

Explain and demonstrate (using empty magazine).

i. To Load.

Hold the sub-machine gun with the right hand on the pistol grip, forefinger outside the trigger guard, butt under the arm, muzzle pointing downwards at an angle of 45 degrees. Turn the gun to the right, grasp the magazine in the left hand and insert the rib in the corresponding recess in front of the trigger guard, force upwards and ensure that it is fully engaged.

NOTE.—The safety catch should never be used with this type of magazine, it being only necessary to cock the gun to be ready for firing.

The safety catch can only be applied and the Change Lever moved from automatic to single rounds when the gun is cocked.

When action is imminent, cock the gun by quickly drawing the cocking handle to the rear, with the left hand.

NOTE.—If the working parts have been eased forward with a round in the chamber, a jerk or knock may cause the round to be fired.

The weapon must NEVER be carried, or allowed to remain, in this condition.

ii. To Unload.

(a) Turn the gun to the right, press the magazine catch on the left side of the pistol grip upwards with the thumb of the left hand while holding the magazine with the fingers, and remove it.

(b) Cock the gun, if not already cocked, and, holding the cocking handle with the left hand, press the trigger with the right forefinger, allowing the action to go forward under control. Repeat this action.

iii. Practise squad on commands "Load" — "Action Imminent" — "Unload."

Drum type magazine.

iv. *To load.*—Adopt the same position as in para. 3 (i) above and cock the gun. Insert the two ribs near the mouth into the horizontal grooves in front of the body, winding key to the front. Force the magazine from left to right until engaged. Place safety catch to the rear.

When action is imminent, move the safety catch to a forward position.

v. *To unload.*—Cock the gun if not already cocked. Move the safety catch to the forward position. Press the magazine catch with the left thumb and remove the magazine with the fingers, by sliding it to the left.

Holding the cocking handle with the left hand, press the trigger with the right forefinger allowing the action to go forward under control.

Repeat this action.

vi. Practise squad on commands "Load" — "Action Imminent" — "Unload."

4. Sights.

Explain:—

The sights will only be used on occasions when it is desired to fire the gun by deliberate aim.

The backsight is of the aperture type with leaf graduated to 600 yards: Rules for aiming (as for Austen sub-machine gun).

A battle sight, accurate up to 50 yards, is formed by aligning the foresight in the cut-away portion of the cocking handle, on the target selected, in a similar manner to that adopted for the rifle.

NOTE.—The Windgauge must be set central.

5. Show method of packing sub-machine gun in chest.

LESSON 2.—HOLDING AND FIRING

Instructor's Notes.

A magazine should be on the gun when teaching holding.

Stores.—As for Lesson 1.

1. Holding.

i. Explain: Although there is no shock of recoil whatever the personal element of holding the gun is all-important, especially when firing in bursts, the natural tendency being for the gun to throw upward. Correct holding can only be gained by experience in firing ball ammunition.

ii. There are two positions for holding the gun—

- (a) From the waist.
- (b) In the shoulder.

2. i. Explain and demonstrate:—

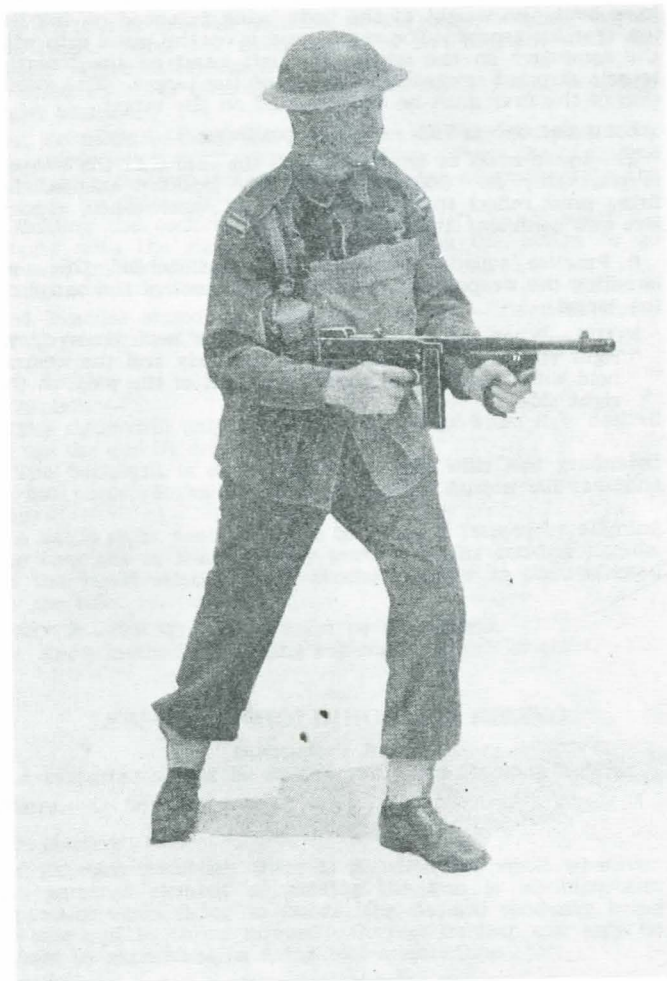
Holding from the waist. The left foot is advanced with the knee bent, the weight of the body being balanced on the left leg, rear leg braced. The right hand is on the pistol grip with the forefinger on the trigger, the left hand on the foregrip. Muzzle directed towards the centre of the target. The attention of the firer must be concentrated on the target.

Example: See OWEN — Waist position.

The squad must be impressed with the fact that the weapon is essentially an "Offensive" one: the position adopted for firing must reflect this characteristic, i.e., determined, aggressive and confident attitude.

ii. Practise squad. Instructor to stand behind the man handling the weapon and check the alignment of the barrel on the target.

NOTE.—When using the weapon with the butt removed, the right elbow will be firm against the body and the weapon held with the rear end slightly in front of the waist at the right side.



Example: THOMPSON — waist position with butt removed.

3. i. Explain and demonstrate:—

Holding in the shoulder. The position of the body and the hands is the same as holding from the waist.

The right shoulder is pushed well forward into the butt. The right elbow may be raised, but it will be found that when a correct grip is assumed with the hands the elbows come naturally into a suitable and comfortable position. Attempts to simulate a position similar to that adopted for the rifle will result in lack of control.

When using weapon which is not fitted with a front grip, the left hand will grasp the fore-end, the shoulder position being modified to agree.

ii. Practise squad.

Example: See AUSTEN — holding at shoulder.

4. Firing.

Explain: The gun can be fired single rounds by placing the Change Lever to the rear (this can only be done when the gun is cocked) or in bursts by placing it forward.

With experience, single rounds can be fired with the Change Lever forward, thus enabling it to be kept permanently in this position.

When in contact with the enemy the weapon will always be set to produce automatic fire, the firer producing single shots until the necessity or opportunity for automatic fire presents itself.

Practice in firing can only be carried out using ball ammunition.

5. Immediate Action.

i. Explain:—

With the box-type magazine, the weapon will stop with the working parts to the rear when it is empty. (With drum magazine, the working parts will stop in the forward position; a rattling sound indicating that the magazine is empty. The weapon must be cocked and the magazine changed.)

ii. Explain and demonstrate (using an empty box-type magazine on the weapon) the actions necessary in the event of a stoppage occurring:—

(a) Cocking handle to rear—

Change magazine and continue firing.

(b) Cocking handle forward—

Cock weapon and continue firing.

(c) If the weapon does not fire—

Cock the weapon, turn it to the right and shake vigorously, when a live round or an empty case should fall out; continue firing.

- (d) If nothing falls out when the weapon is shaken, remove the magazine, when the obstruction should drop out. Look into the chamber (if practicable), replace magazine (or full one); continue firing.

iii. Practise squad, varying the order of the above stoppages as progress is made. The working parts must, however, always be eased forward under control.

LESSON 3.—STRIPPING AND CLEANING

Instructor's Notes.

Before any part is stripped, and again after assembly, the weapon will always be cocked and the working parts eased forward under control.

Stores.—Sub-machine gun, magazines, cleaning rod, brushes, flannelette and oil.

1. **Stripping** (mention names of main parts as they are removed).

Explain and demonstrate:—

Cock the weapon — put Change Lever to "Automatic." Press trigger and ease working parts forward. Press down butt plunger and remove butt. Press down pistol grip plunger and, with trigger pressed, remove pistol grip.

NOTE.—Change Lever must be set to "A" to avoid damage to tripping lever.

Assemble in reverse order.

2. Practise squad.

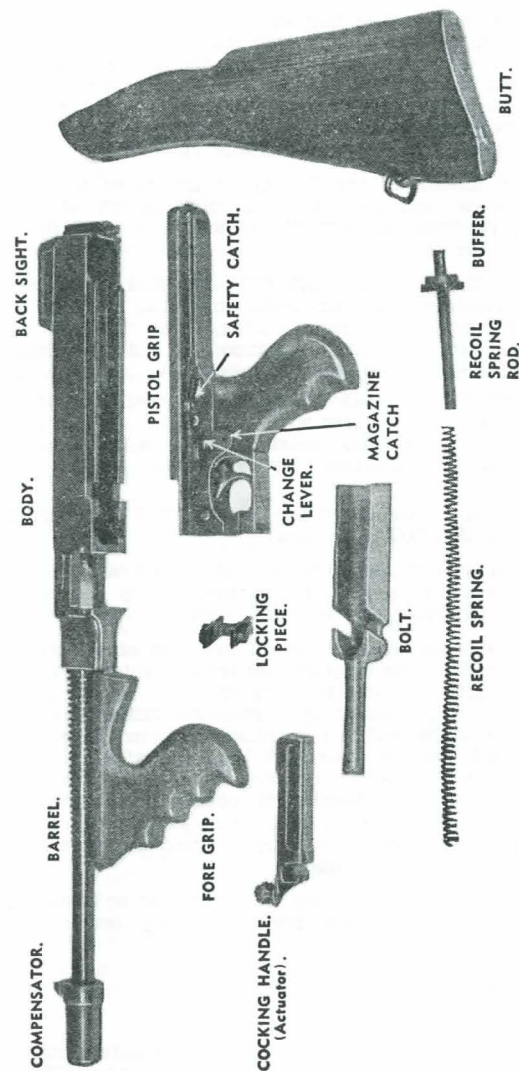
3. Explain and demonstrate complete stripping of body group.

Complete stripping.

Compress the buffer and spring towards the bolt. When the rear end of the buffer is clear of its seating, lift it out with the recoil spring under control. Move the working parts to the rear and lift out the bolt. Push the cocking handle forward until the "H" piece rises and lift the latter out. Draw the cocking handle to the rear and lift out, e.g., actuator.

Assemble in reverse order, the recoil spring being replaced as follows:—

Place the end of the buffer in the pilot seating OUTSIDE the rear end of the body, with the flat side of the collar downwards. Place the recoil spring on the buffer and compress the spring with the fingers until 2 or 3 inches remain free. Insert a nail into the hole in the buffer, to retain the spring. Remove buffer and spring and insert the free end



of the spring into the rear of the actuator. Ensure that the flat on the buffer collar is downwards and guide the end of the buffer into the pilot seating. Using the cocking handle, draw back the bolt until it meets the nail. Withdraw the nail and allow the cocking handle to go forward under control. After complete assembly, cock the weapon and press the trigger, easing the cocking handle forward.

Certain models of the Thompson are fitted with large diameter spring and buffers. The replacement of such components presents no difficulties nor is a nail necessary to compress the spring.

NOTE.—Owing to the difficulty of stripping and assembling the recoil spring and buffer by hand without distortion or damage to the recoil spring, these components are not to be removed from the weapon by unit personnel, except where the weapon becomes inoperative in active operations.

Normally, the above components will only be stripped by A.A.O.C. armoured with the special tools provided with Armoury Workshop Instruction No. A.12 (G.R.O. 166/42). Qualified Instructors, however, may remove the above items.

No other portion of the weapon will be removed, except by the A.A.O.C. Armourer.

The following modification will be carried out to lengthen the life of recoil spring rendered inoperative by distortion caused by hand stripping of the recoil spring and buffer:—

Nine (9) coils will be cut off one end of the recoil spring and inserted in the unsupported section between the rear end of the actuator and the forward end of the buffer stem, two or three coils of the section to be over the buffer stem and two or three coils to lie within the actuator, when the actuator is in the forward position. Care will be exercised to ensure that the end coils of the section conform in diameter to the coils of the recoil spring. Failure to observe this precaution will result in the recoil spring binding in the actuator and causing stoppages. The section will be inserted by screwing into the recoil spring from one end.

This modification will only be carried out on distorted springs and not on springs that are functioning correctly. (G.R.O. 539/42.)

4. Cleaning.

Explain and demonstrate:—

i. *Daily cleaning.*—Cock the gun, apply safety catch. Screw adaptor on to cleaning rod and attach cleaner. Clean and oil the barrel from the muzzle end, using flannelette about 4

inches by 4 inches. Care must be taken to avoid damaging the bolt face. Ease working parts forward. Clean outside with oily rag.

ii. *Before firing.*—Cock the gun and clean barrel as for daily cleaning, leaving barrel dry. Clean and oil chamber, using brush and flannelette. Ease working parts forward. Remove butt and pistol grip and oil following parts:—

- (a) Trigger mechanism.
- (b) The lugs on the "H" piece, having drawn back bolt. (See Note.)
- (c) All sliding surfaces of bolt and body, including front of bolt.
- (d) The two felt pads.

Replace the pistol grip and butt.

With Change Lever at "A" press trigger and work cocking handle backwards and forwards, thus ensuring distribution of oil.

Inspect the extractor and ejector.

Clean magazine.

NOTE.—The chamber and working parts should be oiled as frequently as possible during firing. Graphited grease, when available, being applied to the "H" piece and its recesses in the bolt.

iii. *After firing.*—Cock the weapon and apply the safety catch. Clean the barrel with flannelette, bristle brush, oil and rod. Clean grooves in compensator. Where fouling is difficult to remove, use brass wire brush. Brushes must be well oiled when used. Clean and oil chamber and oil barrel. Turn safety catch forward. Ease working parts forward. Remove butt and pistol grip. Draw back working parts and clean face of bolt with brush and oily flannelette. Clean other accessible working parts with oily rag and leave well oiled. Ease working parts forward. Reassemble weapon.

Clean and oil magazines.

The weapon may also be cleaned by means of a pullthrough, should brushes not be available. The weight of the pullthrough is inserted through the breech opening; flannelette, 4 by 8 inches, should be folded twice until it measures 4 by 2 inches, and inserted in the loop.

A gauze should only be used when absolutely necessary. When used, it must be packed with 2 pieces of flannelette 4 by 2 inches, one each side of the loop holding the gauze.

When the bore is clean, oil it, using flannelette 4 by 6 inches folded in three.

iv. Practise and question squad.

NOTES.—1. It has been brought to notice that attempts have been made to clean the barrel without cocking the action. This results in the end of the brush stem being turned at right angles, and if used in that condition will cause damage to the rifling of the barrel.

On all occasions when it is necessary to use the cleaning brush and cleaning rod, the following precautions are to be observed:—

- (a) Breech block to be withdrawn to the cocked position.
- (b) Examine cleaning brush for distortion.
- (c) Brush and rod are not to be rotated in the bore, but forced through and withdrawn along the axis of the bore. (G.R.O. 15/42.)

2. The use of anti-corrosive oil (Oil "A") in the bore after firing will obviate continual cleaning. This oil should also be applied to the face of the bolt after firing. It is also preferable to other service oils, as a lubricant.

5. Action during and after gas attack.

i. *During a gas attack.*

Keep weapon oiled and move working parts backwards and forwards at frequent intervals.

ii. *After a gas attack.*

If splashed with blister gas, the weapon must be decontaminated before cleaning, as follows:—

Rub ointment into the hands.

Remove the sling.

Strip the gun completely, remove gross contamination with swab or cotton waste. If petrol or paraffin are available, use them to swab down the metal portions. Apply ointment to the wood-work, and to metal portions if no petrol available—wiping it off after 15-20 minutes. Oil the gun thoroughly and apply ointment to the hands.

If possible, the sling must be decontaminated separately.

6. Question and practise squad in complete lesson.

APPENDIX I.

AUSTEN SUB-MACHINE GUN, Mk. I.

Action of Mechanism.

The action of the "AUSTEN" so closely resembles that of the "OWEN" (Appendix II) as to obviate any separate detailed description. Fundamentally, both weapons operate on a similar principle, the essential differences being in the "fire control" design, movement of the round into the chamber and the shorter movement of the bolt.

Setting the fire control stud at "R," introduces the action of a tripping lever in the trigger mechanism. As the bolt passes over this lever (either in its backward or forward movement) it depresses it, thus resetting the sear in position again to contact the bent on the bolt.



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*Asterisk indicates "Welding for Replacement and necessitates repair by Field Workshops."



Cases, Magazine.



Platforms, Magazine.



Springs, Platform, Magazine.

Retainers, Plate, Base, Magazine.



Plates, Base, Magazine.

APPENDIX II.

OWEN SUB-MACHINE GUN, Mk. I.

Action of Mechanism.

The Owen sub-machine gun is operated by the simple blow-back principle. The sequence of events is as follows:—

When the weapon is cocked the bolt is retained in the rear position by the sear; the next round to be fired is carried in the magazine, the breech being empty. On pressing the trigger the bolt is pushed forward by the action of the main spring, then either the left or right upper feed piece of the bolt engages the base of the lowest cartridge in the magazine, forcing it forward through the opening at the front end of the latter. The nose of the bullet is guided by the barrel lead-in into the breech, by which time the base of the cartridge is free of the magazine cheeks and is able, as it is forced further into the breech, to align itself with the latter so that by the time it is almost home in the breech the alignment becomes accurate, permitting base of the cartridge to enter the bolt head recess and so gain access to the firing pin. When the cartridge is completely home in the breech the front end of the cartridge case stops against the square shoulder terminating the inner end of the breech and so prevents the cartridge moving as the bolt carries on forward, driving the firing pin against the cap and firing the cartridge. The final move of the bolt allows the extractor to slip into and grip in the groove in the cartridge base. As the rising pressure in the case drives the bullet forward in the usual way, it also reacts against the base of the cartridge and the bolt head, driving it back. Owing, however, to the relative weights of the bullet and the bolt, the movement of the latter is very small by the time the bullet leaves the muzzle, but sufficient energy has been imparted to the bolt to carry it back against the main spring for its full stroke.

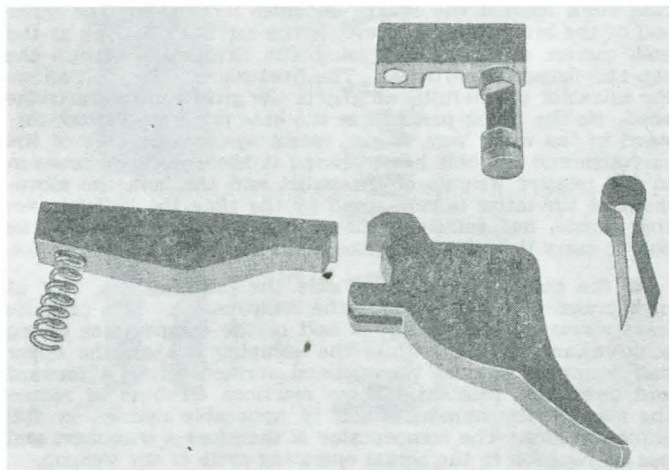
As the bullet leaves the muzzle the escaping gas, still at high pressure, travels through the compensator. This pressure wave reacts against the lower half of the compensator giving a downward reaction, while the escaping gas on the upper half impinges against the inclined surfaces gives a forward and downward reaction. These reactions combine to reduce the rise of the muzzle, which is noticeable mainly on full automatic fire. The compensator is therefore a stabilizer, and has no function in the actual operating cycle of the weapon.

During the backward travel of the bolt the spent cartridge remains on the bolt face, until the upper surface of the cartridge engages the ejector which is part of the rear wall of the

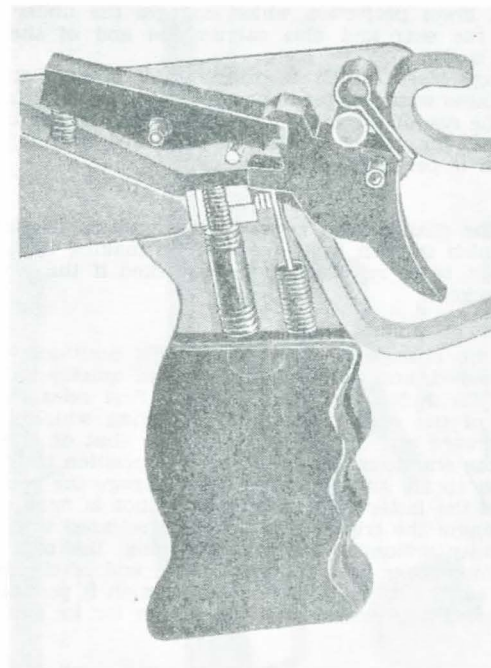
magazine. The empty shell is then spun out through the ejection opening in the lower part of the body tube under the combined action of the ejector and the extractor.

The bolt continues its travel back until the rear face of the bolt snubs out against the body plug. In order to save resulting shock to the bolt pin, the cocking handle and cocking bolt can still travel back further owing to the slotted hole provided for the bolt pin in the head of the cocking bolt. This further movement is, however, very quickly arrested by the main spring, which at this stage is exerting its maximum force.

Immediately following the finish of the rearward movement of the cocking bolt, the forward movement of same commences when in turn the front face of the head of this part engages the bottom of the cavity in the bolt and so commencing the forward movement of the latter and the initiation of a fresh cycle unless the bolt is arrested by the sear. If not arrested by the sear, automatic firing would continue until the magazine is empty when the forward movement of the bolt is arrested by the bolt head engaging the magazine platform.



SEAR AND SPRING, CHANGE LEVER, TRIGGER, CLOSURE SPRING.



SECTIONED TRIGGER BODY SHOWING MECHANISM.

Action of the Trigger Gear.

The mechanism of the trigger gear is very simple as it consists of three main parts with the necessary return springs, and axis pins. The sear is common in action to those of most weapons, except perhaps in that the bent provided on the front end of the trigger is accurately located from the axis hole. The trigger has three projections which can engage the sear:—

- (1) An upper projection which locks the sear from rising when the change lever is set at "Safe";

- (2) A central projection forming a bent which is accurately located from the trigger axis; and
- (3) A lower projection which engages the under face of the sear and also carries one end of the trigger spring.

The change lever, which is primarily of circular form, has three surfaces which in turn engage the top of the trigger and so limit the rise of the latter. On "Safe" the trigger is locked, on "Singles" the rise of the trigger is limited, and on "Rapid" the trigger is permitted full movement.

"Safe."

When the change lever is set in this position the trigger is locked, which in turn locks the sear, so making it impossible for the bolt to be released, or to be cocked if the gun is not already cocked.

"Singles."

When the change lever is set in this position, with the weapon cocked, and the trigger is pressed quickly to the full extent of its limited travel, the bolt is first released by the rear end of the sear, immediately following which the bent on the forward end of the sear slips over that on the trigger allowing the sear to return to its previous position under action of the sear spring and so be free to re-engage the bent of the bolt when the latter returns after the shot is fired. To fire another single the trigger must first be released when it will return under action of the trigger spring, the bent on the trigger sliding over that on the forward end of the sear and so return to its original position. This action is possible owing to the slotted hole provided in the trigger for its axis pin.

"Rapid."

With the change lever set in this position with the weapon cocked, and the trigger be pressed as far as it will go, the sear first releases the bolt as described above for singles, but as the position of the change lever now permits further travel to the trigger, the third projection on the latter comes in contact with the underside of the front end of the sear and so again moves it to a position where it will not engage the bolt, the weapon continuing to fire automatically until the trigger is released. From the foregoing it will be seen that it is possible, with the change lever set for "rapid" fire, to fire single shots by simply squeezing the trigger for a limited travel instead of pressing it through for its full free movement.

The trigger closure spring has not a necessary function in the operation of the trigger gear but serves mainly by preventing the ingress of grit to the trigger mechanism and so to the operating portion of the body tube. It also gives a firm feeling to the trigger by masking the apparent looseness resulting from the slotted hole.



APPENDIX III.

THOMPSON SUB-MACHINE GUN

NOTE.—Certain of the terms used are those in common usage in the U.S.A. and can be modified to suit our service nomenclature, e.g., for "Receiver" read "Body."

Description of Gun and Components

The gun consists of two main groups:—

- (a) Receiver group, and
- (b) Frame group.

The receiver group consists of:—

Receiver (27); Barrel (2); Grip mount (18); Foregrip (44); Rear sight (60-71); Buffer (48-50); Ejector (9); Frame latch (16); Breech oiler (4); and

Recoiling parts, i.e.:—

Bolt (with components) (3); Actuator (47); Lock (21); and Recoil spring (49).

The frame group consists of:—

Frame (15); Magazine catch (22); Safety (31); Sear (32); Sear lever (34); Disconnecter (7); Trigger (36); Trip (38); Rocker (29); Pivot Plate (24); Rear-grip (25); and Butt-stock (72-86).

Receiver and Components

Receiver.

The receiver (27) forms the body of the gun, the front end is bored and screwed for the reception of the barrel (2), the grip mount (18) fits into slots machined in the front lower portion of the receiver and is retained in position by the barrel when screwed home. Immediately to the rear of the barrel the bolt way is formed and openings are provided for ejection of fired cases and the reception of magazines. Ribs are formed at the bottom of the magazine opening for securing a drum type magazine to the receiver. The ejector (9) is screwed into the side of the receiver and projects into the bolt way.

The rear part of the receiver is in the form of a rectangle machined out from the bottom for the reception of the recoiling parts and breech oiler (4), the locking slopes are formed at the front end and ribs provided on the bottom for reception of frame (15). The top of the receiver is slotted for the protrusion of the cocking (47) handle and the rear sight base is rivetted to the rear end. The frame latch and spring (16-17) are housed in an extension at the rear of the receiver.

Bolt.

The bolt (3) is rectangular at the rear and cylindrical at the front. The cylindrical portion operates in the bolt way of the receiver, the end is undercut for reception of the base of the cartridge and the centre bored for reception of the firing pin (11) and firing pin spring (12). The left side is slotted for clearance of the ejector (9) and the right side prepared for reception of the extractor (10). A gas escape hole is drilled through from the top of the front end to connect with the firing pin hole. The hammer (19) is pivoted near the lower front end of the rectangular portion which forms the bolt spot face and is in the form of a lever, one end of which bears against the head of the firing pin and the other protrudes through and beyond the stop face of the bolt, immediately to the rear of the hammer; the slopes for engaging the lock (21) are machined. The rear of the bolt is machined out for the reception of the actuator. Two full bents are provided on the bottom face which is also grooved for the operation of the rocker (29).

Lock.

The lock (21) is of metal and in the form of an "H" with lugs protruding from each side. The sides of the lock engage in the slopes of the bolt and the lugs in the locking slopes in the receiver. The cross bar of the "H" engages in a "U" formed on the actuator (47) and is the means of transmitting the movement from the recoil spring (49) through actuator to the bolt, also for connecting the actuator to the bolt for manual operation.

Actuator.

The actuator (47) is rectangular in shape with a knob formed (cocking handle) on top of the front end which protrudes through the slot on top of the receiver for manual operation of the mechanism. A "U" formed on the bottom at the front end engages with the crossbar of the lock which transmits movement to the bolt. The centre is bored out from the rear for the reception of the recoil spring (49) and buffer rod (48).

Buffer.

The buffer (48) is in the form of a spindle with a flange provided near the rear end. The portion at the rear of the flange protrudes through the pilot hole in the rear of the receiver, a fibre disc (50) fits over this portion of the buffer and abuts against the rear of the collar and the rear internal end of the receiver when the buffer is in position. The front portion of the buffer serves as a guide for the recoil spring (49). The top of the flange is cut away to clear the top of the receiver.

Recoil Spring.

The recoil spring (49) is a coil spring approximately 12-in. long. One end is housed in a hole in the actuator, and the other fits over the fore part of the buffer and bears against the buffer flange.

Frame Latch.

The frame latch (16) and spring (17) is a spring plunger protruding downward from its housing at the rear of the receiver. It retains the frame in position.

Rear Sight.

The rear sight (60/71) consists of a base (61) rivetted to the top and at the rear of the receiver. The base is provided with side walls to protect the sight, it has a central housing for the plunger (63) and plunger spring (64) and at the rear end the sight leaf (65) is pivoted. The lower portion of the sight leaf is "V" notched to engage the plunger in the vertical and horizontal positions. The leaf (65) is graduated up to 600 yards in 50 yard divisions. On the leaf is mounted the slide (66) which is held in position by a small catch (67) and screw (68) engaging in serrations on the side of the leaf, the front and top portion of the slide is notched to form the "battle sight." On the slide is fitted the aperture or eye piece (60) which can be adjusted laterally for wind and drift by the windage screw (69) which is held in place by the collar (70) and pin (71).

Grip Mount.

The grip mount (18) fits into slots at the front and on the bottom of the receiver. It is held in position by the barrel when screwed home in the receiver. Attached to the grip mount is the fore-grip (44) by the fore-grip screw (45).

Barrel.

The barrel (2) is screwed at the chamber end for attachment to the receiver. Radiating fins are turned on the outside of the barrel at the chamber end, they diminish in diameter to nothing at approximately four inches from the muzzle. To the muzzle a "Cutts Compensator" with the fore-sight attached, is fitted.

The Frame and Components

Frame.

The frame (15) houses the entire trigger mechanism. The top of the frame is machined to fit the slots on the receiver and the underside at the rear is grooved to accept the butt-stock slide (72). The trigger guard is formed at the front lower end and forms a seating for the rear grip (25) secured with the rear grip screw (26). The front of the frame is prepared for the reception of a box type magazine.

Magazine Catch.

The magazine catch (22) is attached to a pivot housed in the frame and kept in a forward position by the coil torsion magazine catch spring (23). The catch protrudes through the front of the frame and engages a hole in a box type magazine thus retaining it in position. A drum type magazine is retained by a projection on the left of the catch engaging a slot in the drum.

Trigger Mechanism.

Safety.

The safety (31) consists of a pin with a flat machined across the centre portion to clear the sear. It has a projection formed on the end to operate it from "fire" to "safety." When at "fire" the flat portion clears the rear of the sear; when at "safety" the round portion of the pin engages a radius formed at the rear of the sear.

Sear.

The sear (32) has the usual full bent on the rear top point, the rear is radiused to engage the safety and the under side is bored to house the sear spring (35). The sear is slotted for approx. two-thirds of its length from the front, as the housing for the sear lever (34). A projection is formed on the front left top corner on which the sear lever engages.

Sear Lever.

The sear lever (34) is housed in a slot in the sear. It has a projection which engages with the corresponding projection on the sear. It is bored on the underside to house the sear lever.

Disconnecter.

The disconnecter (7) is in the form of a cranked lever which is housed and pivoted in the trigger (36). One end of the lever engages the sear lever (34); it also has a projection against which the rocker (29) engages, the other end of the lever acts as a stop against the trigger. The trip (38), also bears against this end. The disconnecter spring (8), also housed in the trigger, keeps the disconnecter in the operating position.

Trigger.

The trigger (36) is bored to house the trigger spring (37). It is also prepared to house the disconnecter which carries out the normal functions of a trigger.

Trip.

The trip (38) is in the form of a stirrup which fits over the trigger and operates on the same axis. The front end of the trip protrudes through the front end of the frame and against which a projection on the box type magazine follower (52) engages when the magazine is empty; the other end of the trip bears on the disconnector which is disengaged from the sear lever when the last round is fired from a box type magazine.

Rocker.

The rocker (39) is a small pawl pivoted on the rocker pivot (of fire control lever) (30). The rocker pivots on a section of the rocker pivot which is eccentric with its axis. When the rocker pivot is turned from "Full Auto." to "Single" the rocker is raised into the slot on the bottom of the bolt in which it operates.

Pivot Plate.

The pivot plate (24) is a plate to which is attached two pivot pins. The plate is formed so as to provide two spring fingers which engage in grooves on the ends of safety (31) and the rocker pivot (or fire control lever) (30) and act as a retainer for the above items (31) and (30) and the pivot plate itself (24). The rear pivot pin on the plate is the axis for the sear and sear lever and the foremost pin is the axis for the trigger and trip.

Butt.

The butt is of walnut and is attached to the frame by means of the butt stock slide (72) engaging in grooves formed on the bottom of the frame (15). It is retained in position by the butt stock catch (73) operated by the butt plunger (74) and spring (76). The butt stock slide is secured to the fore upper end of the butt by two screws (77) and (78). The rear end of the butt is protected by a butt plate (80) secured to the butt by screws (85) and (86). The centre of the plate is fitted with a cap (81) kept in position by a pin (82) and spring (83). The cap covers a cavity in the butt which houses the oil can.

Magazines.

Two types of magazines are used with the Thompson Sub-machine Gun. They are:—

- (a) Box type, and
- (b) Drum type.

Box Type.

The box type magazine is in the form of a sheet metal rectangular box holding 20 cartridges. Two ribs are formed on the rear side of the magazine for engaging in grooves in the frame and a hole provided for engaging the magazine catch

(22). The magazine follower (or platform) (52) has a projection which protrudes through an opening at the top of the ribs on the rear side, the projection engaging the trip when the magazine is empty. The follower is kept up by the magazine spring (53) which is a spiral spring of rectangular form. The spring is supported on the bottom of the magazine by the floor plate (54) which is retained in position in two grooves formed on the bottom.

Drum Type.

The drum type magazine is in the form of a shallow drum fitted with a cover and holding 50 cartridges. At the top an opening for feeding cartridges from the magazine to the chamber is provided, immediately below the opening rib plates are secured on the body (55) and cover (56). The ribs engage in slots arranged on the receiver. The rear rib plate has a projection with a slot for engaging the magazine catch. Fitted to the internal faces of body (55) and cover (56) are spiral guide strips for retaining cartridges in position for feeding to the magazine opening. Feed is provided by a rotor (57) operated with a clock spring, spring case, ratchet, winding key (58) and hub. The rotor is mounted on the hub and is provided with six fingers and spring case, the inner end of the clock spring being secured to the hub and the outer end to the spring case. The ratchet is fixed to the hub and has four projections which engage on ratchet stops formed on the inner face of the body. The hub pivots in the centre of the body and cover and is retained in position by the winding key (58) on the cover (56) side and the body clip (59) on the body (55) side.

With the rotor assembled to the body the cartridges are placed in the spiral track (bullet up) between the fingers of the rotor; when one section is full the rotor is rotated until the leading cartridge strikes the stop fitted to the left of the magazine opening and is in a position ready for loading into the chamber. The remaining spaces between the fingers are then filled, the cover replaced, and winding key fitted over the flats on the hub.

When the winding key and hub is turned the inner end of the clock spring, being attached to the hub, is wound up, the outer end attached to the spring case on the rotor is held stationary due to a cartridge bearing against the stop. The ratchet projections engaging under the ratchet stop on the body retains the clock spring tension which is thus transmitted to the rotor. As the cartridges are fed into the gun the spring tension on the rotor places another cartridge in position. Approximately ten quarter turns (ten clicks on ratchet) tension is placed on the clock spring for a full magazine.

Breech Oiler.

The breech oiler (4) is in the form of a "U" manufactured from sheet spring steel. It is shaped to fit in the rear of the receiver with the bottom of the "U" behind the buffer pilot stem and an arm along each side of the receiver. Felt pads are fitted to each arm; those are saturated with oil to lubricate the locking lugs of the lock at each rearward movement of the bolt.

Action of Mechanism

To Cock the Weapon.

Set the safety lever to "Fire" (i.e., forward) and draw the cocking handle to the rear until the sear engages the second bent on the bolt. This action compresses the recoil spring.

Attach a filled magazine.

Forward Action.

On pressing the trigger the sear is disengaged from the full bent on the bolt and the recoiling parts are driven forward by the compressed recoil spring acting on the actuator which transmits the movement through the lock to the bolt.

The bottom face of the bolt strikes the base of a cartridge in the magazine driving it forward into the chamber, the claw of the extractor engaging in the cartridge groove on completion of the forward movement.

As the bolt nears the end of the forward movement the lugs on the sides of the lock strike the inclined faces of the locking grooves on the receiver forcing the lock down the inclined grooves on the bolt to the lock position.

On the completion of the forward movement the hammer, protruding beyond the stop face on the bolt, strikes the stop on the receiver thus rotating the hammer and driving the firing pin forward to strike the cap of the cartridge.

Rearward Action.

On discharge of the cartridge and *after* the high pressure in the chamber has subsided, the action is unlocked and the recoiling parts are driven to the rear.

On the first movement the hammer is withdrawn from the stop allowing the firing pin to be withdrawn from the face of the bolt by the firing pin spring.

The extractor withdraws the fired cartridge case until the base strikes the ejector protruding through the receiver into the bolt way and throws it clear through the ejector opening.

As the bolt moves to the rear the lock is forced up the inclined grooves in the bolt, clear of the locking grooves in the receiver and transmits the movement rearward to the actuator which compresses the recoil spring.

The rearward movement is arrested by the actuator striking the buffer flange.

The gun will continue the above cycle of operations until the trigger is released or the magazine empty.

Locking Action.

On firing, the backward thrust of the cartridge case drives the bolt (3) with the lock (21) to the rear. Resistance to the bolt's backward movement is encountered as the lugs on the lock engage in the 45° slopes of the receiver (27) and so must lift the lock. Resistance to the lifting of the lock occurs as the sides of the lock in rising meet the rear face of the 70° slopes in the blot, also as the crossbar of lock in rising enters the "U" slot on the actuator (47) which is set at 10° to the vertical.

It will be seen from the above that the backward movement of the bolt is retarded by the fact that the force of recoil is split up into several components acting in different directions, i.e.:—

- The 70° slopes in the bolt tends to force the lock downward and backward.
- The 45° slopes in the receiver tends to force the lock upward and forward.
- The 10° "U" slot in the actuator tends to force the lock downward and forward.

The direction of the resultant of all these components is upward and backward (i.e., the direction of the resultant movement of the lock), but its value is small compared with the force of recoil in the original horizontal direction, and further, it has to overcome the friction between the inclined surfaces engaged.

Owing to the rapidity with which the pressure in the bore rises to a maximum on firing, the bolt is supported by the adhesion of the inclined surfaces, until the pressure has fallen to a much lower point, reached when the bullet leaves the barrel, and not until then does the breech commence to open.

Action of Trigger Mechanism.

When the trigger is pressed with the "fire control lever" to "full-auto." the disconnecter is forced against the sear lever which in turn revolves the sear, disengaging it from the full bent on the bolt.

The gun will continue to fire while the trigger is pressed or until the magazine is empty. If the magazine is the box type,

and the last round has been loaded into the chamber, the projection on the magazine follower will engage the trip which bears down on the disconnecter, disengaging it from the sear lever, thus allowing the sear to return to the engage position by the action of the sear spring. The bolt is automatically retained to the rear by the sear while an empty box type magazine is in position. When a drum type of magazine is in use the trip does not function, therefore the bolt goes forward when the last cartridge is loaded.

When the "fire control lever" is set to "single" the rocker is turned up into the slot on the underside of the bolt. As the bolt moves forward the end of the slot engages the rocker, revolving it about its axis, the front part bearing against the projection on the disconnecter disengages it from the sear lever, thus allowing the sear to return to the engage position by the action of the sear spring and retain the bolt in the cocked position. To fire the gun again the trigger has to be released so as to re-engage the disconnecter with the sear lever and the trigger repressed to release the sear.

Action of the Cutts Compensator.

The cutts compensator, screwed to the muzzle and secured by a pin, is so constructed that the gases are concentrated about a cone in the front part of the compensator and thrown up through the orifices at the top, thus tending to throw the muzzle down and stabilise the gun in rapid firing.

Note.—The tendency is for the muzzle of all automatic weapons to throw up.

Directions for Detail Stripping and Assembling

Caution.—Gun is NOT to be stripped beyond that laid down in Lesson 3 unless for replacement of broken part.

To Strip.

In order to avoid trouble all precautions must be strictly adhered to.

1. Remove Magazine.

Remove magazine by pressing upward with right thumb on magazine catch.

2. Remove Frame from Receiver.

Precaution.—The bolt must be in the forward closed position and rocker pivot set at "full-auto." before attempting to dismount frame from receiver. Rocker pivot must always be set at "full-auto." and safety at "fire" when assembling frame to receiver. If this precaution is not taken serious difficulties may be entailed.

Turn safety to "fire" position and rocker pivot to "full-auto." position. Pull the trigger and allow bolt to go forward gradually by retarding cocking handle with left hand.

Place the gun upside down, the barrel extending rearward, and steady against movement with the cocking handle. With thumb of left hand depress frame latch at rear end of the frame and with right hand tap frame sliding it rearward a short distance. Grasping rear grip in right hand, and receiver with left hand, pull trigger and slide frame off to the rear.

3. Remove Recoil Spring.

Support muzzle of barrel, with open side of receiver facing operator. Grasp receiver with left hand, with thumb in position to engage the buffer. With thumb of right hand press down on buffer which projects beyond end of the receiver, and with thumb of left hand engage the flange of buffer. If the breech oiler follows, push it back with the fingers of right hand. Holding the buffer down with thumb of left hand grasp the end of buffer with thumb of forefinger of right hand and withdraw this entire unit from the receiver.

Care should be taken to obtain a firm hold on the spring and buffer to prevent the recoil spring from springing out of the operator's hand.

4. Remove Bolt, Lock and Actuator from Receiver.

Grasp receiver bottom up with left hand. Slide the bolt into rearmost position and remove.

Slide actuator with lock to foremost position and remove lock through incline locking grooves in receiver.

Then again slide actuator to rearmost position and remove.

5. Remove Ejector and Breech Oiler from Receiver.

Precaution.—When assembling or removing ejector from receiver, make sure that bolt is not in closed position, as the ejector head engages with the ejector slot in front end of bolt. Do not lift ejector leaf higher than necessary for disengaging stud with depression in receiver, to avoid setting or breaking.

The ejector can be removed by lifting the leaf sufficiently to disengage the detent and unscrewing it from receiver. The breech oiler can be removed by pressing its fingers together to clear undercut of the receiver.

6. Remove Safety, Rocker Pivot and Rocker from Frame.

Precautions.—

- (a) Do not remove pivot plate until frame has first been removed from receiver. If this precaution is disregarded serious difficulties may be entailed.

- (b) When assembling or removing safety and rocker pivots, do not depress fingers on pivot plate more than necessary, to prevent setting or breaking.

7. Remove Pivot Plate and Firing Mechanism from Frame.

Hold frame upright with the grip in right hand. Press simultaneously with both thumbs on the two pins of pivot plate. These pins project sufficiently far so that by a quick pressure thereon the body portion of the pivot plate will extend on the other side far enough to enable grasping same with fingers for withdrawal.

While withdrawing pivot plate with right hand, press down on the trigger and sear with left thumb to release pressure of springs on pivot pins to facilitate withdrawal.

The remaining components of the firing mechanism are then free to be removed. The disconnecter can be removed from the trigger by withdrawing.

8. Remove Magazine Catch from Frame.

Precaution.—The magazine catch can be assembled or removed only with the pivot plate partially withdrawn.

The magazine catch can be withdrawn from frame by rotating same counter-clockwise to its limit. Except for good reasons the magazine catch should not be removed, to avoid unnecessary straining of the magazine catch spring.

9. Remove Firing Pin.

Drive hammer pin out of bolt from left side; the hammer, firing pin and firing pin spring will then tend to spring out under impulse of the firing pin spring. Caution should be exercised to prevent these parts from springing away and becoming lost.

10. Remove Extractor from Bolt.

Precaution.—When assembling or removing extractor to or from bolt, do not lift extractor higher than necessary for lug to clear anchorage hole, to prevent setting or breaking.

To Assemble

1. Assemble Trigger Mechanism.

First see that magazine catch is in assembled position.

Assemble disconnecter to trigger by depressing disconnecter spring and sliding disconnecter into place.

Place trigger, trip, sear and sear lever into their respective positions in frame, making sure that forward end of sear lever rests on top of the disconnecter. To align these parts press

downward with end of left thumb on trigger and with base of thumb on sear. Insert the pivot plate and to avoid binding apply gentle pressure with ball of right hand over entire pivot plate.

2. Assemble Safety, Rocker and Rocker Pivot.

Insert safety from left side of the frame. With the actuator in the right hand, steadying it carefully to avoid excessive movement, depress the long finger of pivot plate and push safety home. Turn safety to "fire" position.

Place the rocker in position in frame with flat side against sear lever. Insert rocker pivot from the left side of frame. With actuator depress the short finger of pivot plate and push rocker pivot home. Turn rocker pivot to "full-auto." position.

3. Assemble Ejector to Receiver.

Screw ejector into receiver until stud on leaf engages and seats in depression. Do not screw or unscrew ejector while bolt is in closed position.

4. Assemble Extractor to Bolt.

Slide extractor into place, lifting head to clear stud.

5. Assemble Firing Pin.

Place firing pin into firing pin spring and slide same into front end of bolt. Place the hammer in position, with rounded edge upward, and drive hammer pin into place.

6. Assemble Actuator, Lock and Bolt to Receiver.

Grasp receiver, bottom up, with left hand and insert actuator with cocking handle to the front. Slide actuator to its foremost position. Insert lock by engaging the lugs thereon in the locking grooves of the receiver, taking care that the arrow on the cross-bar of the lock is pointing toward muzzle of the gun with word "up" reading correctly from rear.

Again slide the actuator with lock to the rear and place the bolt into position.

7. Assemble Recoil Spring and Buffer.

Compress as much as possible of the recoil spring on the buffer rod and insert the point of a pin punch through the under side of the hole in the end of the buffer rod to retain compression. Slide bolt forward and rest muzzle of barrel, grasp receiver with left hand and push end of recoil spring down into actuator and let buffer find its seat in receiver and snap into place. Draw the bolt to the rear until the actuator bears against the pin punch, hold the bolt firmly in this position and withdraw the punch.

8. Mount Receiver on Frame.

Grasp the frame with right hand in normal position, making sure that the safety is set at "fire" and the rocker pivot at "full-auto." Slide frame on to receiver and at same time pull the trigger. The frame latch will lock the frame in position and the gun is now ready for action.

9. Attaching the Magazine.

The box magazine is attached by engaging the dovetail thereon with the dovetail groove in the forward end of the frame and moving magazine upward until caught by the magazine catch.

Drum magazines are attached and removed from left side of the gun. They are held in place by the magazine catch. When removing or attaching a drum magazine be sure that the bolt is retracted.

The following Plates illustrate a number of the component parts of the Thompson Sub-machine Gun.

Certain issues of this weapon have been made with a wooden fore-end in lieu of the fore-grip.

This difference does not affect the handling, etc., of the weapon.

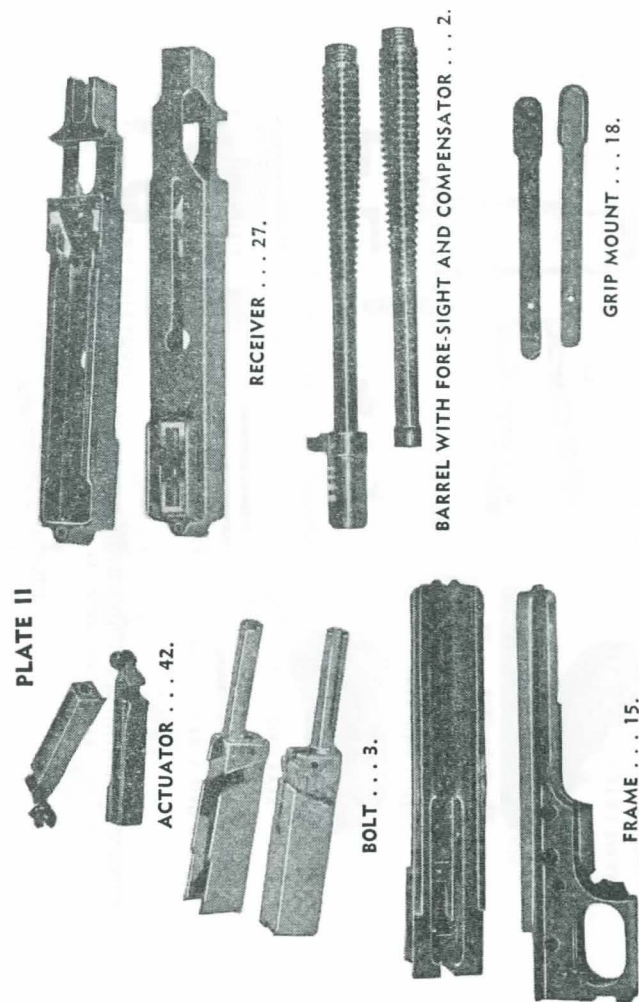
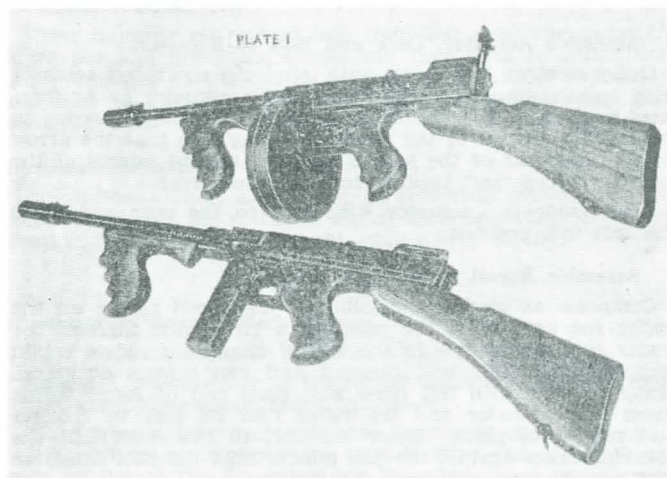
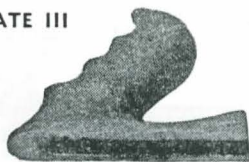


PLATE III

GUN COMPONENTS



FORE GRIP . . . 44.



FORE GRIP SCREW . . . 45



REAR GRIP . . . 25.



REAR GRIP SCREW . . . 26.



RECOIL SPRING . . . 49.



BUFFER . . . 48.



BREECH OILER (INCLUDING FELT PADS) . . . 4.



EJECTOR . . . 9.



DISCONNECTOR . . . 7.

DISCONNECTOR, SPRING . . . 8



EXTRACTOR . . . 10



FIRING PIN . . . 11.

FIRING PIN SPRING . . . 12.



BUFFER FIBRE DISC . . . 50.

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PLATE IV

GUN COMPONENTS



PIVOT PLATE . . . 24.



SEAR . . . 32.

SEAR SPRINGS . . . 33.



MAGAZINE CATCH . . . 22.

MAGAZINE CATCH SPRING . . . 23.



TRIP . . . 38.



LOCK . . . 21.



TRIGGER . . . 36.

TRIGGER SPRING . . . 37.



ROCKER . . . 29.



SAFETY . . . 31.



SEAR LEVER . . . 34.

SEAR LEVER SPRING . . . 35.



FRAME LATCH . . . 16.

FRAME LATCH SPRING . . . 17.



ROCKER PIVOT . . . 30.



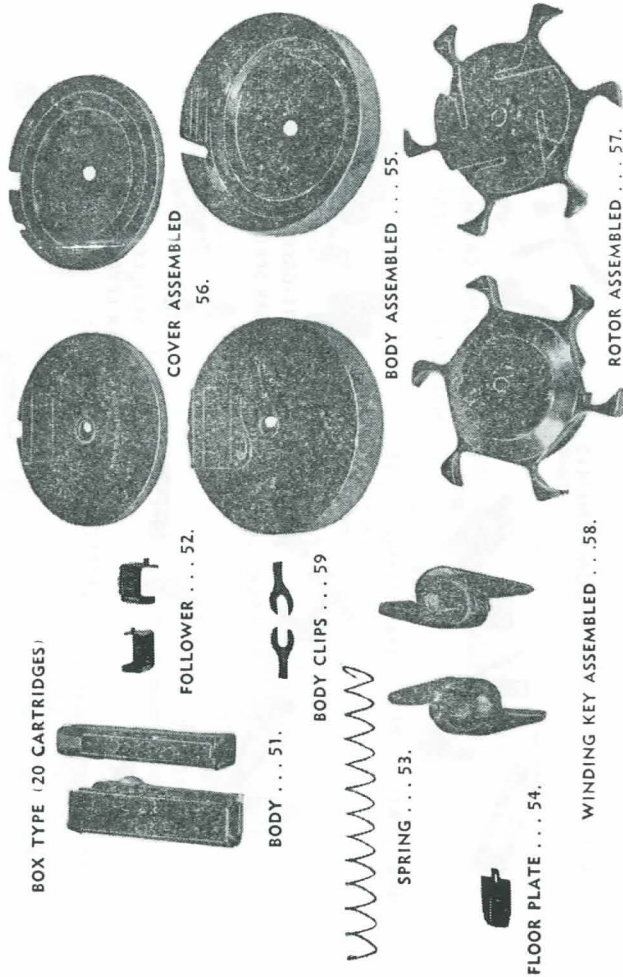
HAMMER . . . 19.
HAMMER PIN . . . 20.

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PLATE V MAGAZINE COMPONENT

DRUM TYPE (50 CARTRIDGES)

BOX TYPE (20 CARTRIDGES)



Army Tk. Transportn.	8	School of Arty. (Fd. Med. Svy.)	50
Arm'd. Bde. Coy.	12	School of A.A.	25
Mot. Bde. Coy.	12	School of A.Tk.	50
Tpt. Pl. A.A.S.C.	4	A.F.V. School	100
Tk. Bde. Coy.	8	School of M.E. (Frt.)	25
Water Carrying Coy.	5	School of M.E. (Fd.)	50
C.T. Amn. Coy.	9	Bomb Disposal School	5
C.T. Pet. Coy.	7	School of Sigs	50
C.T. Sup. Coln.	14	O.C.T.U.	200
Pk. Tpt. Coy.	5	Gas School	5
Sup. Per. Coy.	22	School of P. and R.T.	5
H.T. Depot	11	A.A.S.C. School	20
Torres Str. A.A.S.C. Det.	2	A.A.O.C. School	20
ORD.—		Provost School	50
Aust. Ord. Store Coy.	17	Joint O/Seas Ops.	50
Wkshop A.E.M.E.	7	Tactical School	50
Adv. Wkshop A.E.M.E.	8	Inf. Trg. Centre	100
Ord. Amn. Coy.	3	Indep. Trg. Coy.	100
H.Q. Adv. Ord. Depot	20	Army School	300
Arm'd. Div. Sec. Arm'd. Corps		V.D.C. Per Officer	1
Wkshop	20	Corps School	200
Indep. Bde. Gp. Ord. Coy.	7	Force School	100
Arm'd. Div. Sec. Arm'd. Coy.		L. of C. Junior Leaders	25
Fd. Pk.	4	H.Q. Trg. Depots	10
Mot. Bde. Gp. Ord. Coy.	3	Arm'd. Corps Trg. Bde.	10
Army Tk. Bde. Ord. Fd. Pk.	3	Arm'd. Corps Trg. Regt.	75
Army Tk. Bde. Ord. Wkshop	3	Army Tk. Trg. Bn.	50
Army Ord. Wkshop	11	Mot. Trg. Regt.	60
Army Ord. Fd. Pk.	6	Cav. Trg. Sqn.	30
Aust. Ord. Wkshop	21	Arty. Trg. Regt.	50
Aust. Ord. Fd. Pk.	6	Arty Trg. Bty.	50
Ord. Wkshop Coy. (Tk.)	12	H.Q. Trg. Bty.	50
Aust. Indep. Bde. Gp. Ord.		Engr. Trg. Centre	20
Wkshop	3	Engr. Trg. Bn.	75
Aust. Indep. Bde. Gp. Ord.		Sig. Trg. Depot	70
Fd. Pk.	1	Sig. Trg. Bn.	50
Torres Str. Ord. Wkshop	1	Recruit Trg. Unit	60
L.A.Ds.	1	Sig. Trg. Unit	25
L.H.Q. Prov. Unit	3	Aust. Inf. Trg. Bde.	20
Army Prov. Coy.	3	Aust. Inf. Spec. Gp.	20
Corps Prov. Coy.	3	Inf. Trg. Bn.	100
Div. Prov. Coy.	3	M.G. Trg. Pl. and Coy.	50
Force Prov. Coy.	3	M.G. Trg. Bn.	70
Army Tk. Bde. Prov. Pl.	1	Trg. Depot A.A.S.C. L. of C.	70
Indep. Bde. Gp. Prov. Pl.	1	Trg. Depot A.A.O.C. L. of C.	50
Indep. Coys.	50	Prov. Trg. Coy.	30
SCHOOLS, etc.		M.T. Trg. Depot	50
R.M.C. and S.S.	150	A.T.T.D.	25
S.A.S.	200	M.V.T.T.C.	25
School of M.I.	50	H.Q. A.A. Regt.	5
School of Radiophysics	5	A.A. Bty.	4
		Lt. A.A. Regt.	5
		Lt. A.A. Bty.	6