

WASC 2395

The Armourer's
Handbook
Carbines
+
Pistols

MUSEUM OBJECT ENTRY FORM

MUSEUM NAME:		Form No: 112
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DESCRIPTION OF OBJECT/COLLECTION (note obvious damage, & any related information eg. when, where, or how was it found or used; names, dates & details of the people who made or previously owned it, etc. Continue on a new sheet if necessary)		
<p style="font-size: 1.2em; text-align: center;">THE ARMOURER'S HANDBOOK - PART II MACHINE CARBINES + PISTOLS (c. 1940)</p> <p style="font-size: 1.5em; text-align: center; margin-top: 20px;">ADDED TO WASC - 2395</p> <p style="text-align: right; margin-top: 10px;">Total no. of items: 1</p>		
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H.M.S. Fleet 1961

THE
ARMOURER'S
HANDBOOK

Part II
MACHINE CARBINES
AND PISTOLS

LABORE

GALE & POLDEN LIMITED

TO BE RETAINED BY THE G.I.
H.M.S. FLEETWOOD

Publisher's Announcement

THE ARMOURER'S HANDBOOK

Published in Three Parts

PART I.—THE RIFLE

- THE NO. 1 RIFLE (S.M.L.E.) MARK III.
- THE NO. 2 RIFLE (MINIATURE RANGE).
- THE NO. 3 RIFLE (P.'14) .303-INCH.
- THE NO. 4 RIFLE MARK I*.
- THE ROSS RIFLE MARK III.
- THE BROWNING AUTOMATIC RIFLE .300-INCH.

PART II.—MACHINE CARBINES AND PISTOLS

- THE STEN MACHINE CARBINE.
- THE THOMPSON MACHINE CARBINE.
- THE LANCHESTER MACHINE CARBINE.
- THE NO. 1 PISTOL (WEBLEY MARK VI .45).
- THE NO. 2 PISTOL (.38).

PART III.—LIGHT MACHINE GUNS

- THE BREN MARKS I AND II.
- THE VICKERS BERTHIER.
- THE LEWIS (ENGLISH AND AMERICAN).
- THE HOTCHKISS.

THE
**ARMOURER'S
HANDBOOK**

Part II
**MACHINE CARBINES AND
PISTOLS**

BY
LABORE

ALDERSHOT
GALE & POLDEN LIMITED

*Price Two Shillings net
(By post 2/2)*

FOREWORD

THIS book has been compiled on the same lines as the one dealing with rifles. The object is to assist armourers, assistant armourers, and qualified personnel in the stripping of the various weapons, and in addition to help inspecting officers and others by showing them what to look for.

Owing to the complexity of pistols, further information and hints have been included.

Only qualified personnel must attempt to strip these weapons, whether to repair damage or for instructional purposes. Should the thorough examination shown be carried out periodically by inspecting officers and non-commissioned officers the weapons will be maintained to a high degree of efficiency, and breakages, etc., will be the exception rather than the rule.

LABORE.

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THE STEN MACHINE CARBINE MARK II

THE STEN MACHINE CARBINE MARK II

EXAMINATION

Standing View

1. Pull back the cocking-handle and place it in the safety position.
2. Examine the chamber and ensure that there is no live round present.
3. Place a piece of white paper in the breech and look through the barrel from the muzzle end to ensure that there is no obstruction.
4. Check the foresight for distortion.
5. Test the magazine housing catch and spring by pulling out the catch and slightly rotating the housing.
6. Test the functioning of the magazine catch spring by pressing down with the thumb.
7. See that the magazine catch plate screw is tight.
8. Examine the aperture backsight for distortion and damage.

Turn the carbine on its LEFT side

9. Examine the ejection opening and cocking-handle slots for burrs.
10. See that the trigger housing screw is tight.
11. Test the functioning of the change lever.
12. See that the trigger axis pin is not broken.

Turn the carbine on its RIGHT side

13. See that the trigger housing screw is tight.
14. See that the trigger pin protrudes.

Turn the carbine UPSIDE DOWN

15. Test the trigger mechanism housing for distortion.

DIFFERENCES APPLICABLE TO THE STEN MACHINE CARBINE MARK III

1. See that the finger guard rivets are not loose.
2. Examine outer casing rivets to ensure that they are not loose.

STRIPPING

1. Hold the machine carbine in the right hand at the small of the butt and press the stud showing in the circular opening at the rear of the body.
2. Maintaining pressure, slide the butt vertically downwards until it is clear of the rear face of the body.
3. Press the cap on the rear of the body inwards and turn counter-clockwise, thus releasing it from its engagement.
4. Take out the cap and return spring.
5. Pull the cocking-handle to the rear and rotate half-way into the safety catch slot.
6. Withdraw the cocking-handle.
7. Slide out the breech block from the body.
8. Pull out the barrel catch.
9. Slightly rotate the magazine housing.
10. Unscrew the barrel. (As the barrel will sometimes stick, any type of tool that will engage in one of the holes in the barrel nut may have to be used to loosen it.)
11. Remove the split pin barrel protector, using pliers.
12. Take off the protector from the barrel.
13. Push out the cross pin and remove the extractor.
14. The ejector is welded in and no attempt must be made to remove it.
15. Press the magazine catch downwards and rearwards.
16. Remove the split pin barrel catch with pliers.
17. Take out the barrel catch pin and spring.
18. Remove the two trigger guard mechanism screws.
19. Unhook the trigger spring first from the tripping lever pawl and then from the hook on the trigger.
20. Remove the tripping lever pawl.
21. Pull out the trigger axis pin.
22. Remove the sear.
23. The tripping lever and trigger can now be pulled forwards and outwards through the front of the trigger guard.
24. Remove the split pin and withdraw the change lever from the right-hand side.

THE STEN MACHINE CARBINE MARK II

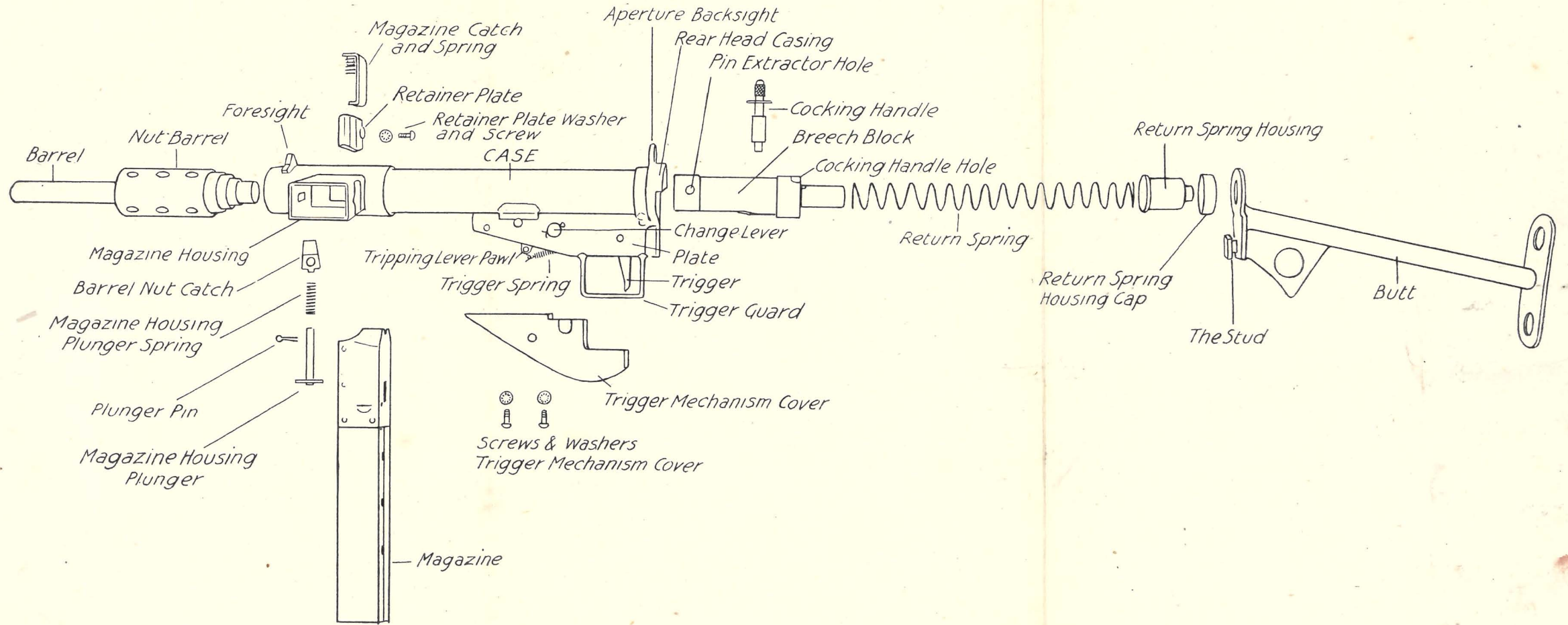


Plate from "The Armourer's Handbook, Part II, Machine Carbines and Pistols," published by Gale & Polden Ltd., Aldershot

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TESTS

(These tests are applicable to both the Sten Marks II and III)

1. Ensure that there is no magazine in position and that there is no live round in the chamber. Then pull back the cocking-handle and bang the butt on the ground. Should the cocking-handle fly forward, then either

(a) The trigger spring is weak.

(b) The sear is worn or broken.

(c) The bent of the breech block is badly worn.

2. Put in the magazine and attempt to withdraw. Should it come out, then the magazine catch is either broken or damaged.

3. Load the magazine with dummy cartridges. Should it be possible to lift out the top round, then the tension on the lips of the magazine is weak.

4. Not functioning when firing at single shots is caused by:

(a) Short recoil, due to friction, a shallow chamber, low-velocity ammunition, heavy spring or dirty chamber.

(b) The bent jumping the sear. This is due to either low protrusion of the sear into the body or defective mechanism.

High-velocity ammunition and a deep chamber will cause a violent recoil, which may result in the above happening. This may also be caused by a light return spring.

Note.—Do not bang the butt of the carbine on the ground when the cocking-handle is forward and it is loaded. There is a rebound action which will cause the round to be fired. A Mark IV cocking-handle is being fitted to prevent this. It acts as an additional safety device.



THE STEN MACHINE CARBINE MARK III

THE STEN MACHINE CARBINE MARK III

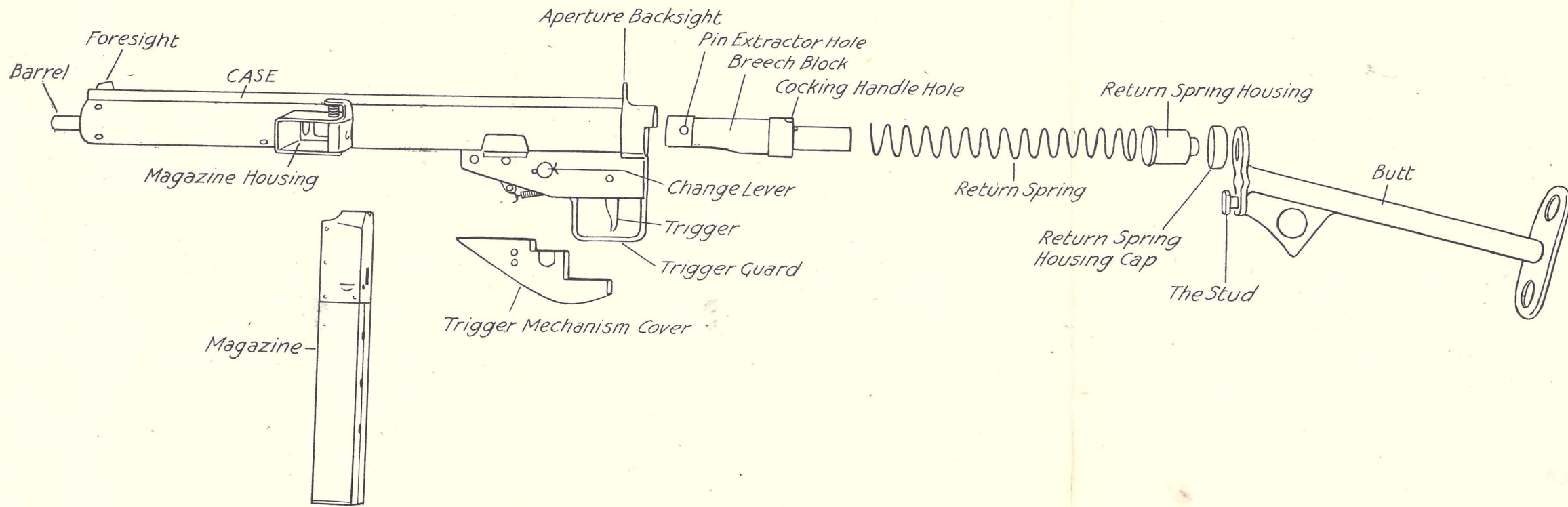


Plate from "The Armourer's Handbook,
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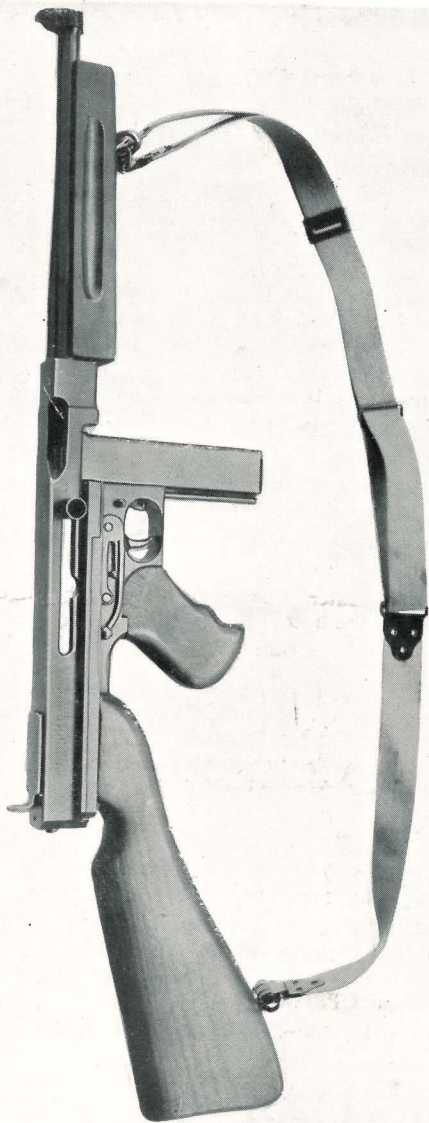
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**DIFFERENCES BETWEEN MARKS 1 AND 2 STEN
MACHINE CARBINES**

1. The Mark I is fitted with a flash eliminator.
2. The barrel is held in position by a collar.
3. A sling swivel is attached to the flash eliminator.
4. The sight radius is 18 inches, whereas on the Mark II it is $11\frac{1}{4}$ inches.
5. There are foresight protectors and the foresight is a piece turned up in the centre.
6. There is no barrel nut.
7. There is no magazine housing catch, spring or plunger. The magazine housing is riveted to the body.
8. The cocking-handle is a straight piece and protrudes farther.
9. The butt is tubular, made in two pieces and held in the centre by a strengthening piece.
10. It is fitted with a wooden grip and hand guard.

**DIFFERENCES BETWEEN MARKS 3 AND 2 STEN
MACHINE CARBINES**

1. The stud on the butt passes through a recess in the trigger guard.
2. The trigger mechanism cover is pushed on and springs into position. There are two depressions engaging in the holes originally put there for the screws.
3. The body casing is continued to within an inch of the end of the barrel. This cuts out the barrel nut, the plunger, spring, barrel nut catch and split pin.
4. The magazine housing is rigid—welded to the casing.
5. The ejector is part of the magazine retaining catch plate, which is shaped to form one.
6. The rear head casing is a press tool job and now consists of rear head casing with side plates all in one.
7. The hand stop is riveted on to the casing immediately in front of the ejection opening.
8. The foresight consists of a raised portion of the rib running the whole length of the casing.
9. The spring extractor is much lighter.



THE THOMPSON MACHINE CARBINE

THE THOMPSON MACHINE CARBINE

EXAMINATION

Standing View

1. Pull back the cocking-handle and look in the breech to see that there is no live round present.
2. Check the number which is on the left side of the body.
3. Ensure that the compensator retaining pin is tight.
4. See that the compensator is not damaged.
5. Check the foresight for damage.
6. Place a piece of white paper in the breech and look down the barrel from the muzzle end and check for obstruction.
7. Test the cocking-handle for distortion.
8. See that there are no burrs in the cocking-handle slot.
9. Ensure that the backsight leaf pin is tight.
10. Raise the backsight leaf to test the spring.
11. Move the slide up and down for correct functioning.
12. Test U and aperture sights for damage.
13. Test the butt catch spring by pressing plunger down and slightly removing the butt.
14. Ensure that the top butt plate screw is tight.

Turn the carbine on its LEFT side

15. Examine the change lever spring.
16. See that the protrusions of the change lever, safety lever and magazine lever catch are not damaged.

Turn the carbine on its RIGHT side

17. Test the magazine catch.
18. Ensure that the magazine catch stud is present.
19. Test the change lever and safety lever.
20. Examine the furniture for splits.

Turn the carbine UPSIDE DOWN

21. Ensure that the following screws are tight:
 - (a) The two front swivel bracket screws.
 - (b) The handguard screw.
 - (c) The pistol grip screw.

(d) The two slide butt screws.

(e) The two rear swivel screws.

22. Ensure that the screw on the bottom of the butt plate is tight.
23. Test the butt trap.

STRIPPING

1. Remove the magazine by raising the magazine catch lever and withdrawing the magazine downwards.
2. Press down the slide butt plunger and withdraw the butt to the rear.
3. Press down the trigger guard plunger and withdraw the trigger guard.
4. Press the return spring guide rod forward until it is clear of the body.
5. Lift out the rod and return spring.
6. Take off the return spring and fibre washer.
7. Pull the cocking-handle to the rear and remove the bolt and the carrier.
8. Remove the H piece.
9. Take out the cocking-handle and retaining slide.
10. Take out the lubricating slides by easing forward after compressing inwards, using two screwdrivers.
11. Drive out the compensator pin and remove the compensator.
12. Unscrew the handguard screw and remove the handguard.
13. Unscrew the two swivel screws and take off the swivel.
14. Drive out the backsight leaf axis pin.
15. Remove the backsight leaf and slide.
16. The slide can be slid off the leaf of the backsight.
17. Remove the two butt slide screws.
18. Take out the butt slide.
19. Remove the plunger and spring and butt slide catch.
20. Drive out the catch pin.
21. Remove the catch and spring.
22. Unscrew the two butt plate screws and remove the butt plate.
23. Unscrew the two rear swivel screws and remove the swivel.
24. Drive out the magazine catch pin.

The sights must not be stripped unless absolutely necessary.

THE THOMPSON MACHINE CARBINE

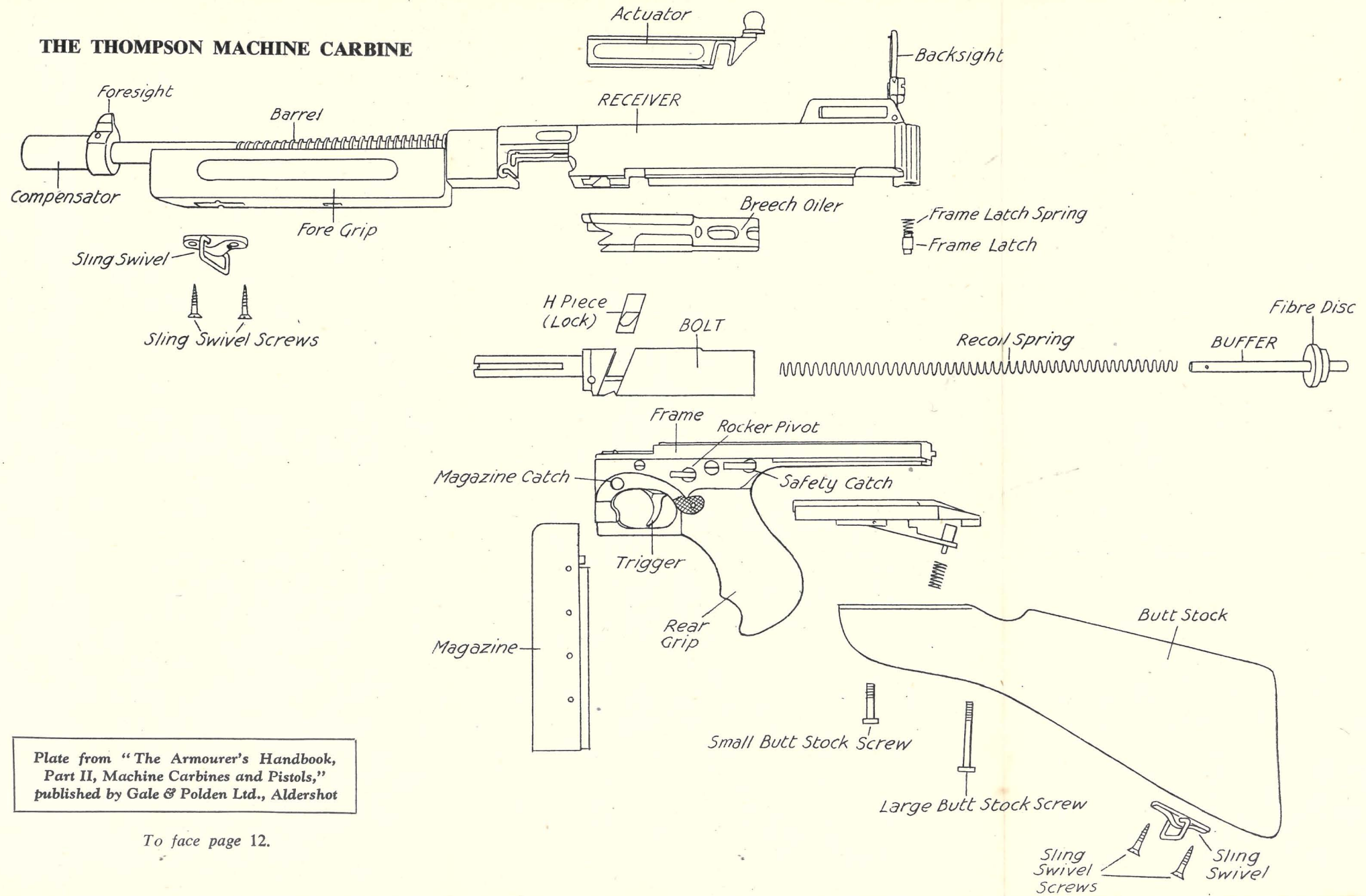


Plate from "The Armourer's Handbook,
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25. Remove the magazine catch.
26. Rotate the auxiliary sear pin and remove.
27. Remove the front change lever pin.
28. Remove the rear change lever pin.
29. Take out the trigger group.
30. Unscrew the trigger grip screw and remove the grip.
31. Take out the extractor by levering up.
32. Drive out the firing lever pin.
33. Remove the firing lever, striker and striker spring.

Note.—The barrel can only be removed by using a special tool.

TESTS

1. Should the butt be very loose, the butt stop catch may be damaged or broken.
2. Should it be possible to withdraw the frame, then the frame latch is broken or deficient.
3. Pull back the cocking-handle and bang the butt on the ground. Should the cocking-handle fly forward, then either
 - (a) The trigger spring is weak.
 - (b) The sear is worn or broken.
 - (c) The bent of the breech block is badly worn.
4. Put in the magazine and attempt to withdraw. Should it come out, then the magazine catch is either broken or damaged.
5. Load the magazine with dummy cartridges. Should it be possible to lift out the top round, then the tension on the lips of the magazine is weak.



THE LANCHESTER MACHINE CARBINE

THE LANCHESTER MACHINE CARBINE

EXAMINATION

Standing View

1. Open the bolt and place cocking-handle in the safe position.
2. Examine the breech and ensure that there is no live round present.
3. Check the number which is on the magazine housing.
4. Check the barrel retaining screw for tightness.
5. Examine the front end of the barrel for damage.
6. Check bayonet boss for damage.
7. See that the foresight is not loose or damaged.
8. Check the foresight protector wings for damage.
9. Ensure that the pin positioning foresight bracket is tight.
10. Make sure that the bayonet joint is not damaged or the bracket loose.
11. Place a piece of white paper in the breech and look down the barrel from the muzzle end and check for obstruction.
12. Test the magazine catch spring by pressing down with the thumb.
13. Ensure that the magazine catch screw is tight.
14. Test leaf backsight spring by raising and lowering the leaf.
15. Test the backsight slide.
16. Examine the U of the backsight for damage.
17. Ensure that the four backsight bed screws are tight.
18. Test the body catch by rotating clockwise 90° and breaking the gun.
19. Make sure that the three plate catch body screws are secure.

Turn the carbine on the LEFT side

20. Test the hinge stock screw for tightness.

Turn the carbine UPSIDE DOWN

21. Ensure that the stock screw is screwed firmly home.
22. Test the change lever by rotating it 90° anti-clockwise.
23. Examine the furniture for splits.
24. Test the butt plate screws for tightness.
25. Test the butt trap for functioning.

STRIPPING

1. Release the breech casing catch by pushing it to the right.
2. Open up the carbine.
3. Remove the breech end cap and return spring. To do this turn the milled head of the cap to the left.
4. Remove the breech block with the firing pin. (*Note.*—The firing pin is a separate component.)
5. Unscrew the hinge pin which secures the stock to the carbine.
6. On some carbines the trigger mechanism is secured by eight screws. On others it is welded on and cannot be taken off.
7. Remove the sear stop screw on the left of the body.
8. Remove the sear pin. Push it out with a punch.
9. Remove the sear. Shake it out.
10. Punch out the trigger pin (right side of the body).
11. Remove the trigger.
12. Remove the plunger and trigger spring. (*Note.*—They are held in by the trigger so will fall out.)
13. Withdraw the trigger bar with the trigger bar spring.
14. The leaf backsight can be removed by driving out the axis pin.
15. The magazine catch is removed by unscrewing the screw. The screw and spring are on top.
16. Unscrew the ejector screw and remove the split washer.
17. Punch out the ejector.
18. Unscrew the barrel positioning screw, and then with the combination tool remove the barrel by unscrewing.

TESTS

1. Should the body of the carbine fail to seat in the stock, then the pin in the cap may be worn or broken and thus allow the cap to overturn.
2. Ensure that there is no magazine in position and that there is no live round in the chamber. Then pull back the cocking-handle and bang the butt on the ground. Should the cocking-handle fly forward, then either
 - (a) The trigger spring is weak.
 - (b) The sear is worn or broken.
 - (c) The bent of the breech block is badly worn.
3. Put in the magazine and attempt to withdraw. Should it come out, then the magazine catch is either broken or damaged.
4. Load the magazine with dummy cartridges. Should it be possible to lift out the top round, then the tension on the lips of the magazine is weak.
5. When firing, double taps are mostly caused by a heavy recoil spring.

THE LANCHESTER MACHINE CARBINE

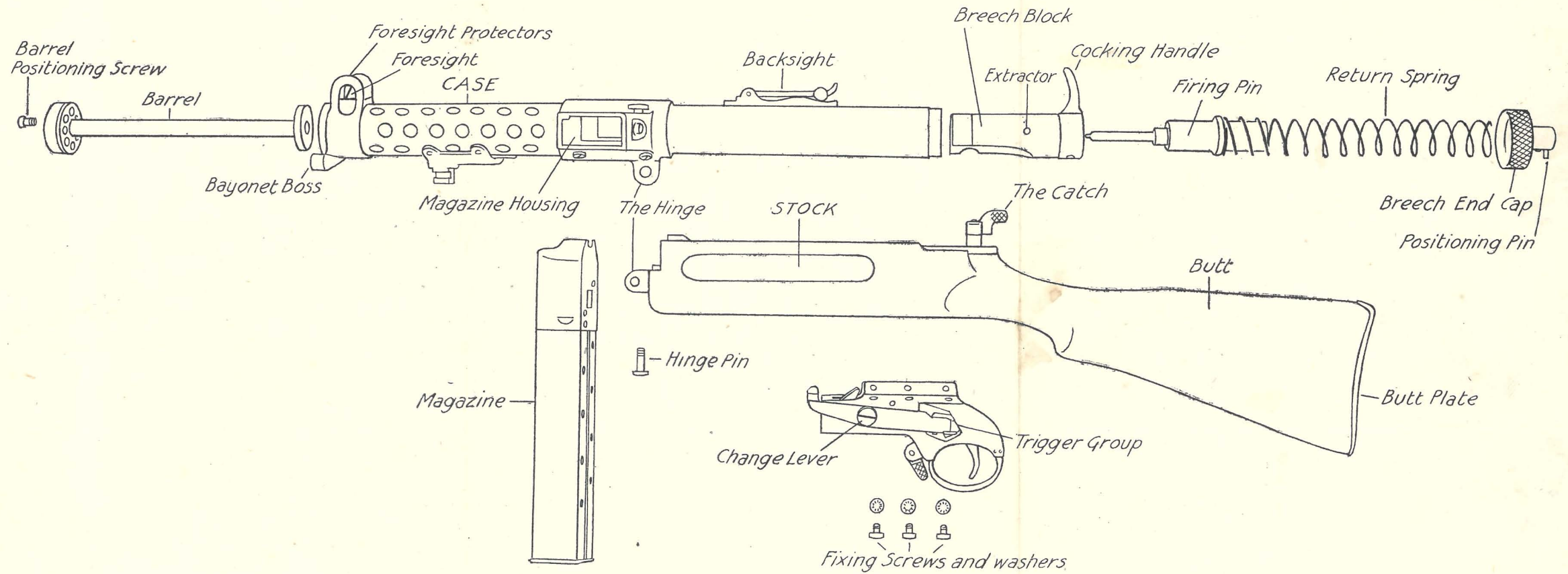


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COMPARISONS

<i>Detail.</i>	<i>The Sten Mk. II</i>	<i>The Thompson Mk. I</i>	<i>The Lanchester Mk. I</i>
1. Size of bore	L.8.81 mm. H.8.89 mm.	.45 in.	L.8.81 mm. H.8.89 m m.
2. Depth of chamber from breech block face to shoulder	L.670 H.680	—	L.670 H.680
3. Rifling	6 grooves	6 grooves	6 grooves
4. Rifling (twist)	1 turn in 250 mm.	1 turn in 16 in.	1 turn in 250 mm.
5. Protrusion of striker ...	L.045 H.05	L.044 H.05	—
6. Length of carbine ...	29½ in. + 1½ in. when fitted with butt No. 3 Mk. I	31 4-5 in.	32¾ in.
7. Weight	6¼ lb.	8½ lb.	9¾ lb.
8. Sight radius	11¾ in.	22 3-10 in.	14¾ in.

Note.—L=Low.
H=High.



THE No. 1 PISTOL (WEBLEY MARK VI .45)

No. 1 PISTOL (WEBLEY MARK VI .45)

EXAMINATION

Standing View

1. Prove the pistol and ensure that there are no rounds in the cylinder.
2. Check the numbers on the barrel, body and cylinder.
3. Rotate the cylinder for freeness.
4. Check the extractor spring by opening and closing the pistol and ensure that the positioning pin of the extractor is not broken.
5. Check the ratchet on the extractor for burrs and distortion.
6. Cock the hammer and examine the firing pin.
7. Examine the barrel for obstruction and foresight for damage.
8. Cock the pistol and examine the stop and ascertain that the feed pawl is not worn. There should be very little movement of the cylinder.
9. Examine the shield and firing pin hole for bad elongation.
10. Hold the pistol in the left hand pointing upwards. Cock the hammer and then squeeze the trigger. Keep pressure on the trigger and measure the protrusion and radius of the striker.
11. Close the pistol and apply slips between cylinder and shield.
12. Check all screws for tightness.
13. Press on thumb-piece and ensure that spring barrel catch is not broken.
14. See that the solid stop of the trigger does not foul the cylinder.
15. Break the pistol and try to remove the cylinder. This is a test to ensure that the cylinder cam lever is not broken.

STRIPPING

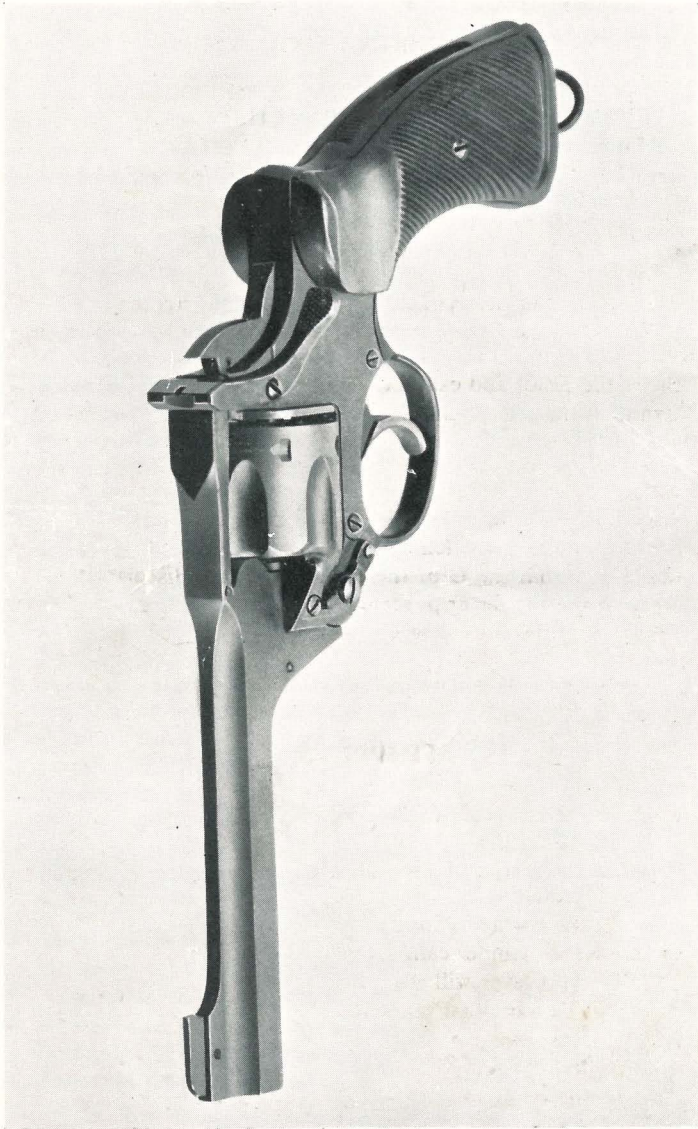
1. Remove cam cylinder fixing screw.
2. Take off the cylinder.
3. Unscrew the extractor nut, first compressing the extractor spring, using a punch.
4. Take off extractor spring.
5. Unscrew the cam cylinder lever screw.
6. Cam cylinder lever will slip off.
7. Unscrew the joint axis pin screw.
8. Pull out joint axis pin.
9. Remove the barrel.
10. Slip out the extractor lever.
11. Undo the two cam cylinder screws, one on either side.
12. Remove cylinder cam.
13. Take out foresight blade screw. { This must not be done
14. Remove foresight blade. { except to carry out a repair.

Body Group

15. Unscrew the stock screw. One screw holds both.
16. To remove the stocks, replace the screw without screwing up and tap the head sharply with the wooden end of the screwdriver.
17. Unscrew the two trigger guard screws.
18. Remove the trigger guard.
19. Take out the main spring by compressing with a pair of pliers and easing out with a screwdriver.
20. Remove auxiliary lever spring by pulling up.
21. Unscrew the trigger screw.
22. Remove the trigger.
23. Pull out the pawl.
24. Unscrew the trigger stop spring screw.
25. Take out trigger stop spring.
26. Unscrew the hammer screw.
27. Take out the hammer.
28. Unscrew the hammer catch screw.
29. Take off the hammer catch.
30. Remove the hammer catch spring.
31. Unscrew the hammer swivel screw.
32. Take out hammer swivel.

33. Unscrew the barrel catch screw.
34. Remove the barrel catch.
35. The barrel catch spring can be prised off.
36. Unscrew the shield screw.
37. Take off the shield.
38. Tap out the stock pins and butt swivel.
39. Remove the butt swivel.

Note.—In assembling the above the trigger stop should be raised up, *i.e.*, the spring to be on the top step.



THE No. 2 PISTOL (.38)

No. 2 PISTOL (.38)

EXAMINATION

1. Break the pistol and ensure that it is not loaded.
2. See that the foresight blade retaining pin is secure.
3. Examine the foresight for damage and burrs.
4. Look at the ratchet on the cylinder and see that it is not damaged or burred.
5. Ensure that the cylinder rotates freely.
6. Close and break the pistol to test the functioning of the extractor.
7. Make sure that the extractor guide pin is not broken.
8. Ensure that the barrel catch engages properly by closing the pistol.
9. Break the pistol and examine the shield and firing pin hole.
10. Examine the firing pin for breakage and ensure that the pin is tight.
11. Fire the pistol and make sure that the cylinder stop works correctly.
12. Ascertain that the three side plate screws are tight.
13. See that the barrel catch spring is not broken.
14. Make sure that the U of the backsight is not distorted.
15. See that the trigger grips screw and nut are secure.
16. Ensure that the following screws are tight:
 - (a) Barrel catch screw.
 - (b) Lever cam screw.
 - (c) Barrel axis screw.

STRIPPING

Barrel Group

1. Remove the cam cylinder fixing screw.
2. Take off the cylinder.
3. Unscrew the extractor nut by first compressing the spring and then using a punch.
4. Take off the extractor spring.
5. Unscrew the cylinder cam lever screw.
6. Cylinder cam lever will slip off.
7. Unscrew the axis joint pin screw.
8. Pull out axis joint pin.
9. Remove the barrel.
10. Slip out the extractor lever.

11. Undo the two cylinder cam screws, one on either side.
12. Remove cylinder cam.
13. Take out the foresight blade screw.
14. Remove the foresight blade.

Body Group

15. Unscrew the stock screws. One screw holds both.
16. To remove the stocks, replace the screw without screwing up and tap the head sharply with the wooden end of the screwdriver.
17. Unscrew the barrel catch screw.
18. Remove the barrel catch.
19. Unscrew the four plate screws.
20. Remove the plate by tapping the body near the trigger guard and butt.
21. Take out the main spring by hand.
22. Pull out the pawl.
23. Remove the main spring lever by pulling up, after punching out the pin.
24. Remove the trigger.
25. Take out the cylinder stop.
26. The spring will come out with the stop and can be removed.
27. Take out the hammer.
28. Take off the hammer catch by punching out the pin.
29. Remove the hammer catch spring.
30. Remove the swivel pin by punching out.
31. Take out the swivel hammer.
32. The barrel catch spring can be prised off.
33. Unscrew the shield screw.
34. Take off the shield.
35. Tap out the stock pins and butt swivel.
36. Remove the butt swivel.

Trigger Group.

Hammer Group.

Note.

MARK I.—The hammer has comb and bent, thus allowing single action. The pistol grip side-pieces are plain.

MARK I*.—The comb and bent have been removed from the hammer, thus allowing double action only.

The top of each side-piece is grooved to form a seating for the thumb. The right side-piece has a recess for a marking disc.

The marking disc replaces the stock screw nut, and the stock screw is 1/10th inch longer than on the Mark I.

MARK I**.—The safety stop has been omitted.

THE Nos. 1 AND 2 PISTOLS

SPECIAL POINTS TO NOTE

1. Worn pawl means that cylinder is not in alignment and would give a spattering of lead to the left. The cylinder *must* be locked in the fired position.

In the cocked position there should be a slight movement of the cylinder. If there was no movement in the cocked position there would probably be a long pawl.

When it is not rigid in the fired position the pawl is short or worn.

2. When the extractor lever remains up there may be:

- (a) A burr on the extractor lever or body.
- (b) The extractor spring may be missing.
- (c) The underside of the extractor lever worn.

3. When the extractor does *not* rise.

- (a) Probably due to the auxiliary spring missing.
- (b) The bent of the extractor lever worn.
- (c) The nut extractor unscrewing.

4. Inability to open the pistol may be due to the extractor nut *not* being fully home.

5. When the pawl is broken the cylinder stop springs back into position, and the cylinder does not revolve, so you cannot pull through.

6. (a) The long pawl prevents pulling through.

- (b) May prevent trigger engaging with bent of hammer.
- (c) Trigger and hammer are engaged as the cylinder is rotated against the cylinder stop.
- (d) May cause a very heavy pull-off from the cocked position.

7. **Mechanical Safety.**—The pistols are not safe when:

- (a) There is a worn shoulder of the main-spring lever or rebound arm of the hammer, the reason being that there is no rebound action; therefore, the point is always protruding.
- (b) The safety stud on the pawl is broken. The result would be that the trigger would not be rotated to engage with the hammer catch. The trigger remains still.
- (c) The spring of the hammer catch deficient. The result would be that it is not mechanically safe with the muzzle directed upwards.

8. The shield on the pistol is farther away from the cylinder at the bottom, to allow for expansion of the fired case; less at the top, owing to cartridge head space.

9. The recoil of the cylinder is taken by the recoil stud on the cylinder engaging in the slot to the side of the pawl. The tendency is to close up the pawl slot and jam the pawl and prevent the trigger from returning.

MECHANISM HINTS

1. **No. 1 Pistol.**—When the trigger is pressed the front stop is lowered from the recess in the cylinder.

No. 2 Pistol.—When the trigger is pressed, the cylinder stop is lowered from the recess in the cylinder by the trigger catch.

2. The pawl, being attached to the trigger, rises and, engaging with the teeth of the extractor, rotates the cylinder clockwise.

3. The nose of the trigger engaging with the hammer catch rotates the hammer, compressing the long arm of the main spring.

4. The main-spring lever is caused to rise through bearing on a shoulder of the pawl, compressing the short arm of the main spring.

5. **No. 1 Pistol and No. 2 Pistol Mark I**.**—There is no safety stop in these pistols.

No. 2 Pistol Mark I*.—The safety stop rises opposite the recess in the hammer.

6. The nose of the trigger slips the hammer catch. The hammer slides forward under the influence of the long arm of the main spring.

7. The cylinder stop rises again, engaging in the recess of the cylinder, and prevents over-rotation of the cylinder.

8. The cylinder is held locked in the fired position by the cylinder stop, the right side of the pawl and the stop of the pawl. (*Note.*—There is no stop on the pawl of the No. 1 pistol.)

9. Rebound action is the distance the hammer is withdrawn from the fired case brought about by the short arm of the main spring forcing down the main-spring lever. Its shoulder meets the rebound arm of the hammer, causing the hammer to rotate backwards.

10. The long arm of the main-spring lever, bearing on the shoulder of the pawl, returns the trigger to its foremost position. The nose of the trigger re-engages with the hammer catch, and the trigger catch with the cylinder stop.

11. **The Mechanical Safety of the No. 1 Pistol.**—Should the hammer receive a blow, the rebound arm of the hammer bearing against the shoulder of the main-spring lever causes the lever to rise. Its long arm meets the safety stud on the pawl, which lifts the trigger. Its nose meets the downcoming hammer catch and the forward movement of the hammer is arrested.

12. **The Mechanical Safety of the No. 2 Pistol.**—Should the hammer receive a blow, a safety stop is engaged in front of the hammer and the metal of the body, preventing the forward movement of the hammer. (*Note.*—This applies only to the No. 2 Mark I*.)

13. Extraction and Ejection :

(a) On opening the pistol the metal of the body meets the step of the extractor lever, causing it to revolve. Its curved arm, engaging the nut of the extractor, forces up the extractor, which compresses its spring. The metal of the barrel forces the lever inwards until it is clear of the body. The extractor spring reasserts and returns the extractor, causing the lever to revolve and compress the auxiliary spring.

(b) On closing the pistol the body is carried round until it clears the step of the lever. The auxiliary spring forces the lever out to engage again with the body.

14. When the barrel is not locked to the body, the peak of the hammer meeting the barrel catch will either close it automatically or arrest the movement of the hammer.

Note.—All the above points are common to the No. 1 and No. 2 pistols except where stated.

ADJUSTMENTS

1. To lengthen the protrusion on the No. 1 pistol the wings of the hammer are reduced on either side. Care must be taken that the shoulder of the main-spring lever and the rebound arm of the hammer are clear when the hammer falls.

2. In the case of the No. 2 pistol, if the protrusion is insufficient then change the firing pin. If unsuccessful, adjust the stopping face of the hammer in a similar manner to the No. 1 pistol.

3. The cartridge head space is the space between the cylinder and the shield. At the top it is .052 for the No. 1 pistol and .067 for the No. 2 pistol. If .052 enters the No. 1 pistol or the .067 enters the No. 2 pistol it is a factory repair. Washers would be fitted in the No. 1 pistol and the axis exchanged in the No. 2 pistol.

4. An unserviceable extractor is a factory repair. Complete cylinder is required for exchange.

5. To test the main spring, place tester over the peak of the hammer. Squeeze the trigger and first movement will give the answer. To lighten the main spring reduce the long arm by rubbing. To strengthen, a new spring is necessary.

TESTS

1. See that the trigger guard is bedded down and that there is a slight clearance between the trigger and guard in the forward and rear positions. This is necessary to enable the trigger to travel far enough forward to engage the hammer catch in the trigger or pullthrough action. (This is not applicable to the No. 2 pistol.)

2. Ensure that the cylinder is clear of the breech end of the barrel (.002 minimum, .008 maximum). Should a foul occur, the face of the barrel should be eased until there is the required clearance. (*Note.*—Washers .007 inch and .01 inch thick are only fitted for the purpose of reducing the cartridge head space.)

3. Test the functioning of the trigger stop.

Note.

(a) The function of the above is to limit the rotation of the cylinder after firing on the return of the trigger to enable the pawl to engage the next tooth of the ratchet on the extractor.

(b) On pressing the trigger or cocking the hammer it should disengage itself from the stop recess in the cylinder to enable the cylinder to revolve; and re-engage the recess when the hammer is in the cocked, rebound and fired positions.

4. Test the pressure of the pawl on the tooth of the ratchet. In order to do this, press the trigger until both stops are clear of the cylinder, and revolve the cylinder.

5. Test the cylinder for jamming and pawl slipping. This is done by exerting slight pressure with the thumb in the flutes of the cylinder.

6. Test the initial play of the trigger.

7. Test the freedom of the trigger nose in the bent.

8. Test the length of the pawl. First ensure that there is no grit, etc., in the front of the trigger and the seating of the body or that the solid stop of the trigger fouls the cylinder when rising. The method of testing the pawl is to draw back the hammer into the full cock position. Should the trigger nose enter hard into the bent of the hammer, it can now be assumed that the pawl is long.

Note.—The function of the pawl is to rotate the cylinder on its axis until the chamber of the cylinder is concentric with the bore of the barrel, and to assist the solid stop on the trigger to lock the cylinder in the fired position.

9. Test the circumferential movement of the cylinder. This movement is due to the trigger nose falling into the bent of the hammer and the pawl leaving the tooth of the ratchet. The looseness is corrected when the hammer is in the fired position.

10. Test the overdraw of the hammer.

Note.—The hammer is pulled back against the overdraw shoulder of the body. There should be a slight movement between the full cocked and overdraw position. This must not be excessive, as the trigger nose is apt to slip under the bent of the hammer and lock the action.

11. Test the pull-off for drag.

(a) The firmness of the cylinder in the fired position.

(b) Freedom of the hammer.

(c) The clearance of the rebound shoulders of the hammer and the main-spring lever.

(d) See that the hammer is clear of the barrel strap end.

(e) The barrel catch must not ride over the peak of the hammer in the fired position.

(f) Test the fitting of the barrel catch and spring and jointing.

(g) Test the freedom of the pawl in the slot of the body.

(h) Test the freedom of the hammer nose through the firing hole and the height.

(i) Test the trigger stop for correct fitting.

12. See that the face of the shield is clear.

See that the face of the cylinder revolves freely in the loading position.

See that the extractor rises and falls correctly.

13. Load the dummy cartridge and test concentricity of chambers with the bore of the barrel.

Note.—The pistol should piker in the fired position, *i.e.*, from cocking and pullthrough action.

14. Test the weight of springs and pull-off.

Pull-off	...	...	...	...	6 to 8 lb.
Trigger action	...	...	...	...	15 to 18 lb.
Mainspring from top of hammer with trigger held back	...	...	...	...	3½ to 4½ lb.
Barrel catch spring	...	...	...	...	4 to 6 lb.

DEFECTS

1. **Trigger stop defective.**—On releasing the trigger, the stop jumps up and down again. In order to correct this, remove a small portion from the corner at the bottom of the shoulder.

2. **Trigger stop fails to rise and engage the cylinder.**—The spring is either loose on the top step, or apply remedy as in para. 1.

3. **Clickers** (not due to hammer catch).—A clicking sound can sometimes be heard when testing freedom of hammer. This is caused by the main hammer spring or swivel not being quite free.

4. **Damaged pawl slot and recoil stud.**—A blow on the right side of the cylinder will cause the action to jam by driving the recoil stud of the extractor against the body in the pawl recess and close up the pawl slot sufficiently to cause a jam.

5. Misfires

(a) Weak main spring.

(b) Distance between the face of the body and cylinder excessive.

(c) Short hammer point.

(d) Hammer point not striking centrally.

(e) Pawl slipping the teeth of the ratchet.

(f) Bad pokering.

(g) No clearance between rebound arm of auxiliary and main spring.

(h) Hammer catch low.

(i) Catch barrel not closed.

6. Defective striking.

(a) Long or short hammer point.

(b) Radius of hammer point incorrect.

(c) Bent or broken hammer point.

(d) Pawl long or short.

(e) Defective pokering.

(f) Cylinder loose in the fired position.

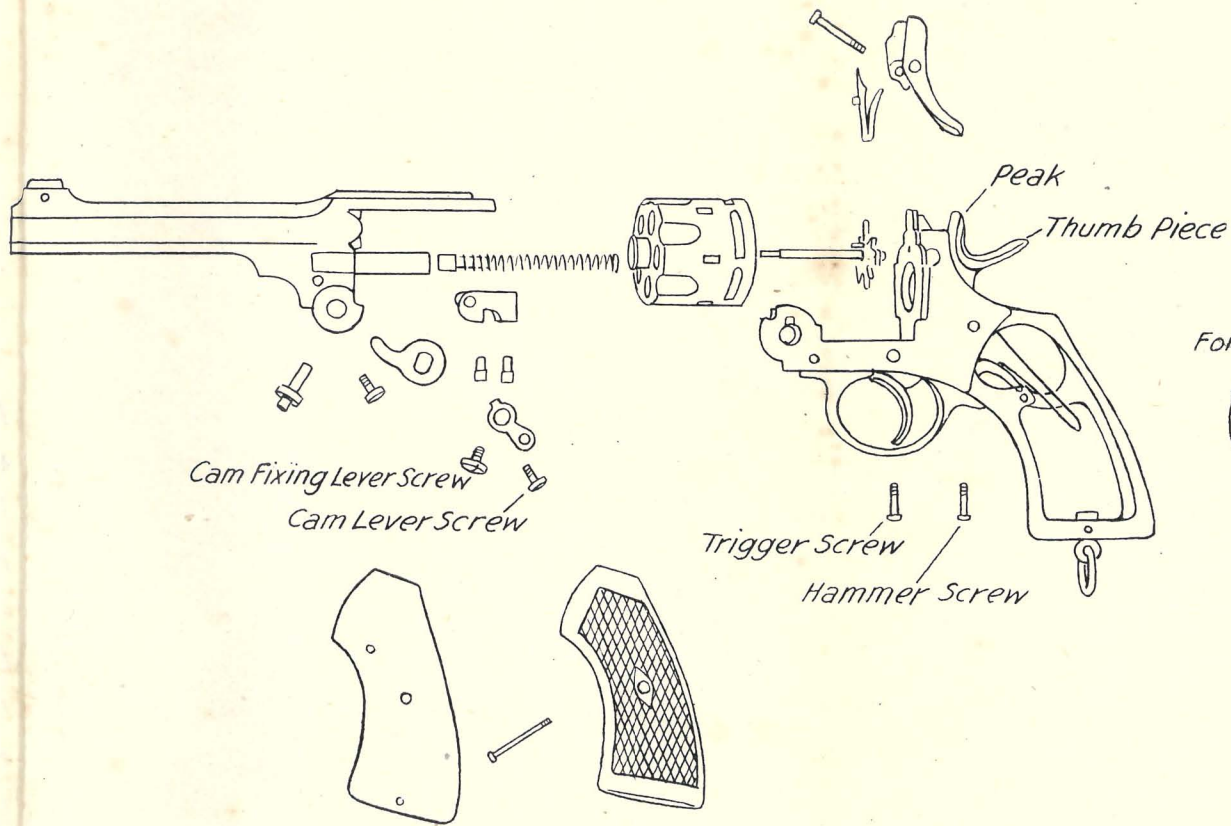
(g) Low or short hammer catch.

7. **Trigger nose slipping bent of hammer.**—This is caused by the bent of the hammer or trigger nose being incorrect figure, *i.e.*, bent of hammer must be square with the axis hole. Should the figure be correct, then the cause of the trouble is due to too much overdraw on the hammer.

Note.—When firing from the cocked position the hammer catch fouls the nose of the trigger and locks the action. The remedy is to tighten the axis screw.

8. **Sighting.**—Should the pistol shoot to the left, a new foresight blade .02 is fitted in the factory.

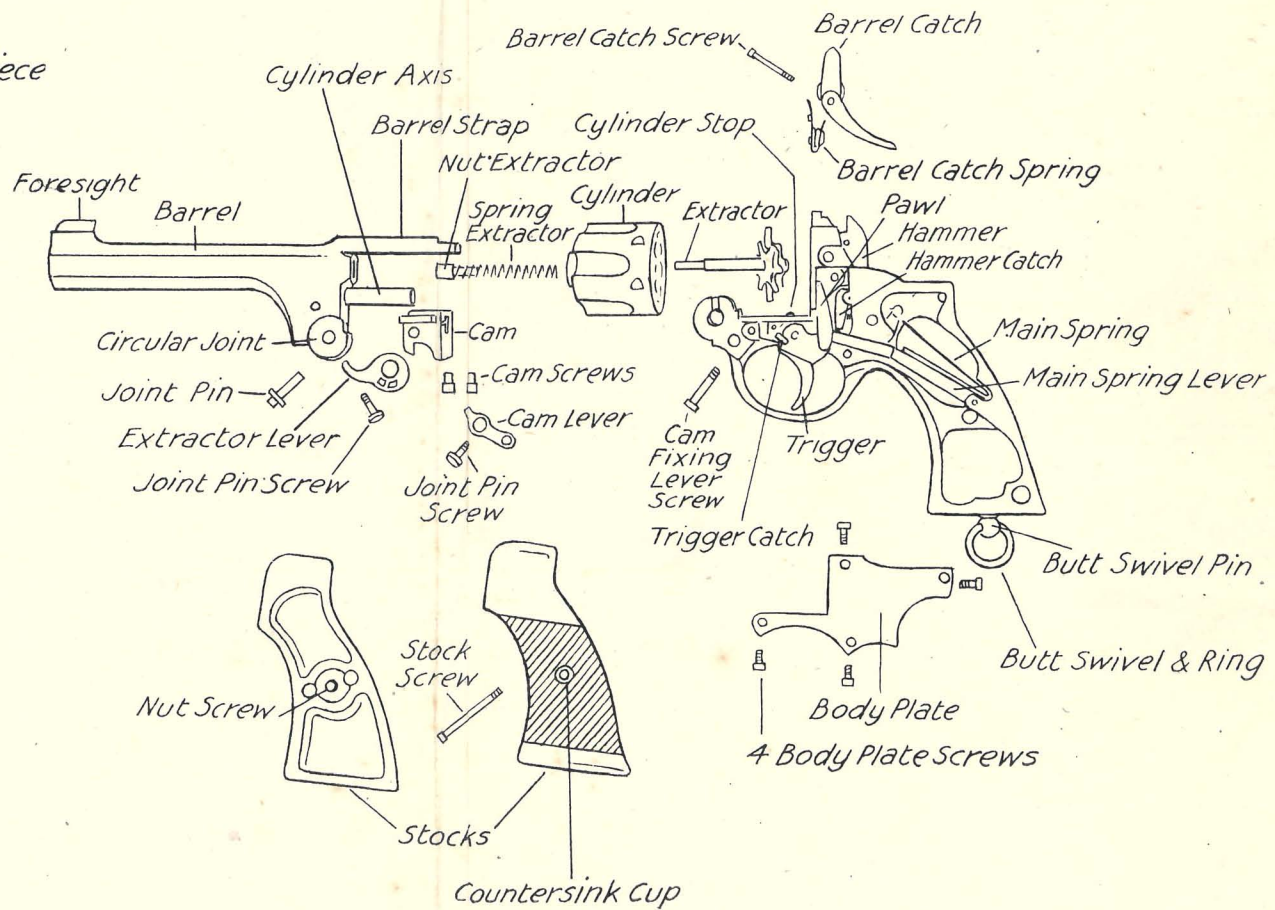
THE No. 2 PISTOL (.38) MARK I**



THE No. 1 PISTOL (WEBLEY MARK VI .45)

Plate from "The Armourer's Handbook, Part II, Machine Carbines and Pistols," published by Gale & Polden Ltd., Aldershot

To face page 30.



1... 13... 7	} Sep.
2... 15... 2	
3... 17... 2	
4... 21... 4	
5... 25... 4	
6... 4... 9	} Oct.
7... 9... 5	
8... 15... 6	
9... 18... 3	
10... 24... 6	
11... 1... 8	} Nov.
12... 8... 7	
13... 22... 14	
14... 30... 8	} Dec.
15... 13... 13	
16... 29... 16	
17... 5... 7	} Feb. Jan
18... 10... 5	
19... 5... ..	

THE Nos. 1 AND 2 PISTOLS

COMPARISONS

<i>Detail.</i>	<i>No. 1 Pistol.</i>	<i>No. 2 Pistol.</i>
Weight	2 lb. 6½ oz.	1 lb. 11½ oz.
Length	11½ in.	10½ in.
Length diagonally	12½ in.	11¼ in.
Depth	5½ in.	5 in.
Sight radius	6.875 in.	5.750 in.
Barrel length	6 in.	5 in.
Calibre ... ..	.441 in.	.352 in.
Bullet weight	265 gr.	200 gr.
Rifling: M.V.	580 ± 30 f./s.	590 ± 30 f./s.
Number of grooves	7	7
Direction	R.H.	R.H.
Form	Concentric	Concentric
Pitch	1 turn in 20 in.	1 turn in 15 in.
Width of groove ... ..	.155 in.	.125 in.
Depth of groove ... ..	.005 in.	.005 in.
Number of chambers	6	6
Maximum chamber pressure	4 to 5 tons/sq. in.	4.7 tons/sq. in.
Maximum range	1,300 yds. (at 30°)	1,100 yds. (at 30°)
Killing range (S.E. = 60ft./lb.)	625 yds.	500 yds.
Striking energy at 500 yards	81 ft./lb.	59 ft./lb.
Cordite charge	5½ gr.	4 gr.
Recoil energy	2.4 ft./lb.	2.6 ft./lb.
Pull-off, single action	6 to 8 lb.	5 to 6 lb.
Pull-off, double action	15 to 18 lb.	13 to 15 lb.
Main spring	3½ to 4¼ lb.	3 to 3½ lb.
Barrel catch spring	4 to 6 lb.	3 to 5 lb.
Gauging:		
Barrel accept ... ..	.441	.352 (a)
Barrel reject ... ..	.448	.356 (a)
Taper (lead) ... ..	.450 to .441	(b)
Chamber front accept ... ..	.449	(b)
Chamber front reject ... ..	.453	.364 (b)
Chamber rear accept ... ..	.481	(b)
Chamber rear reject ... ..	.485	.392 (b)
Chamber compound ... ..	.481 and .449	.387 and .359 (b)
Chamber concentricity ... ..	.441 and .3105	.3517 and .21 (c)
Striker protrusion accept ... ..	.044	.04 (a)
Striker protrusion reject ... ..	.054	.05 (a)
Striker radius reject ... ..	.038	.038 (a)
C.H.S. reject052	.067 (a)

(a) Armourers' gauges. (b) Special to Enfield and Weedon.

(c) Examiners' gauges.

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THE
**ARMOURER'S
HANDBOOK**

Part II
**MACHINE CARBINES
AND PISTOLS**

LABORE

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