WASC 2394

Thompson Submachine gun Handbook

MUSEUM OBJECT ENTRY FORM

MUSEUM NAME: THE ROYAL GUNPOWI	SER IMILLS Form No:
Received from: Fred Ambrose Address: 7 Cannons Mead Standon Massey Brentwood CIMIS OEH	Owner (if different): Address:
Tel No:	Tel No:
DESCRIPTION OF OBJECT/COLLECTION (note obvious it found or used; names, dates & details of the people who made or performance of the Thompson model of 1928	reviously owned it, etc. Continue on a new sheet if necessary)
ADDED TO WASC-2394	
17 10 10 10 10 10 10 10 10 10 10 10 10 10	Total no. of items:
PEASON FOR ENTRY (tick as applicable, and sign) Donation - I offer to donate the object(s) listed above to the muse sale - I offer to sell the object(s) listed above to the museum's go Loan - I offer to loan the object(s) listed above for the use of the Identification - I leave the object(s) listed above for identification I confirm that the information given on this form is correctly the terms and conditions described overleaf. Signed:	overning body (price sought £). museum's governing body for a period of months. & undertake to collect these no later than 4 weeks from today.
ADDITIONAL AGREEMENT (DONATIONS/SALES OF	NLY) (tick as applicable, and sign)
I, the owner, confirm that I have undisputed title to the object(s) lissuch title to the museum's governing body. OR I, the depositor acting on behalf of the owner(s), confirm that the full power to dispose of the items and transfer such title to the muse act on their behalf to that effect. The title in the objects listed above, & subject to the congoverning body of the museum. Signed: MUSEUM SIGNATORY	e owner(s) have undisputed title to the object(s) listed above, with useum's governing body, & that I am authorised by the owner(s) to
	oviledes d
Receipt of the object(s) described above is hereby ackn Signed: on behalf of the museum's governing body	Date: 13/12/16
RETURN OF OBJECT TO OWNER (tick as applicable, and I, the depositor/owner, acknowledge the return of the obsolid following: identification the end of the period of loan the museum's governing body declining to accept the donation,	oject(s) described above in a satisfactory condition
Signed: Countersigned (for m	useum): Date:

Mr. B Parker, Waltham Abbey Royal Gunpowder Mills, Beaulieu Drive, Waltham Abbey, EN9 1JX.

Fred Ambrose, 7 Cannons Mead, Stondon Massey, Brentwood, Essex, CM15 0EH.

21st December 2016

Dear Mr. Parker,

I am pleased that you are able to accept the Thompson Machine Gun Handbook that I recently sent you for your collection and return the Handbook and the signed documents as requested.

Yours Faithfully,

Fred Ambrose

The Museum Curator, Waltham Abbey Royal Gunpowder Mills, Beaulieu Drive, Waltham AbbeyEN9 1JX

ALL ASSE

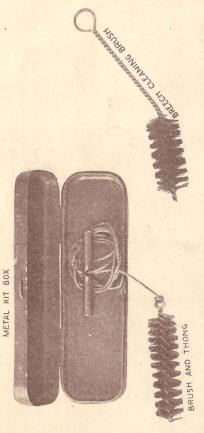
Fred Ambrose, 7 Cannons Mead, Stondon Massey, Brentwood, Essex, CM15 0EH.

Dear Sir,

I have found this Thompson Submachine Handbook which belonged to a recently deceased relative and am sending it to you as you may like it for your archives.

Yours Faithfully,

Fred Ambrose



The Metal Kit Box is same size as Type XX box magazine and can be carrier case. XX Magazine pocket on the guncase or in either type of XX Box Magazine web carrier case. The parts shown above together with the following parts are furnished with this box: Extractor, Firing Pin, Firing Pin Spring, Hammer Pin, Sear Spring, Sear Lever Spring, and Trigger Spring.

EDITION OF 1940

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HANDBOOK

of the

THOMPSON SUBMACHINE GUN

MODEL OF 1928

AUTO-ORDNANCE CORPORATION

NEW YORK, N. Y., U. S. A.

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Attention should be paid to taking the correct position. The left foot should be pointed toward the target. The right foot toward the right, as illustrated in picture, which shows the stance which should be taken when shooting the Thompson Submachine Gun. The right shoulder should be turned around toward the target, bending the body slightly from the hips. This will give a strong, steady shooting position when the gun is being used in rapid fire or full automatic in bursts of two or three shots. The gun should be held firmly to the shoulder with the right hand by the rear grip and controlled with the left hand by the foregrip. Do not pull rearward with the left hand as this has a tendency to force the operator backward. Note the position of left arm as demonstrated in picture.

If the correct position as described is taken it will be found that good results will be obtained immediatey.

Page two

TABLE OF CONTENTS

Page
. 8
12
22
25
38
45
48
54

NOTE

The directions and *pre-cautions* contained herein should be carefully noted before operating the gun.

THOMPSON SUBMACHINE GUN

Model 1928

The Thompson Submachine Guns are now made in two models. Model 28A and 28AC. These two models are identical with the exception that the Model 28AC is equipped with Cutts Compensator. These guns can be fired either full automatic or semi-automatic. The semi-automatic action is accomplished by turning the rocker pivot, or fire control lever as it is sometimes called, rearward on the word "semi-automatic." Both 28A and 28AC can be obtained with either horizontal or vertical fore grips and equipped with either 50 cartridge capacity drum magazine or 20 cartridge capacity box magazine.

Model 1928 fires at the cyclic rate of 700 to 725 shots per minute.

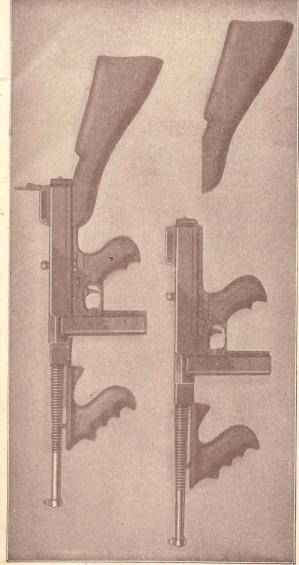


PLATE I stock attached and sight leaf up; and gun with leaf down and stock removed. Thompson Submachine gun calibre .45 with butt

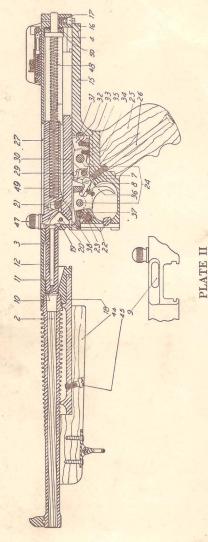
sequently there may be a considerable variation in hits when the same sight setting is used by different persons. Holding the gun loosely tends toward shooting high. On page 22 the sight correction for one foot at the various ranges is tabulated. It will aid in judging these small measurements to bear in mind that the thickness of the projection on the sight slide containing the battle sight notch is .05-inch, and that the thickness of the eye piece is also .05-inch.

The natural tendency of all automatic rifles, especially in automatic-firing is to raise the muzzle; that of the average marksman is to shoot high; consequently the submachine gun should be sighted slightly low, with a fine sight (the top of the front sight just appearing in the bottom of the peep or open sight), in order to obtain maximum accurate results. The slightly upward and to the right tendency of this gun, especially in automatic-firing can be corrected by a small amount of practice on the part of the gunner, in holding steady.

TO FIRE

First be sure gun is well cleaned and oiled with sufficient oil on the oil pads of the breech oiler (4).

Then SET SIGHT. The sight is set by raising the leaf and sliding the slide to the range desired. Lateral correction (right or left) is obtained by turning the small thumb screw.



Sectional view of gun with bolt in closed position and locked, numbered to correspond with and following text. See page 7 the numbers in the list of components.

To Fire — Semi-Automatically (A Single Shot for Each Pull of the Trigger).

To accomplish this semi-automatic action first cock the bolt (3) by grasping the actuator (47) with the left hand and pull it rearward as far as possible, i. e., until it clicks twice. Note: IT IS NECESSARY TO HAVE THE BOLT COCKED BEFORE EITHER THE SAFETY LEVER (31) OR THE FIRE CONTROL LEVER (30) CAN BE TURNED TO THE POSITION DESIRED. It is advisable to turn the safety lever (31) to the safe position, that is, so that it points rearward. Then turn the fire control lever (30) so that it also points rearward. The rear end of the gun is towards the butt. The piece is now in its cocked position for semi-automatic fire but locked with the safety lever (31) on.

Face the target pointing the barrel in general direction of range and insert loaded magazine of the type desired. When in the proper position the magazine will click in place. In the case of the box type magazine (see Plate IV—Page 10) it is pushed upward into the groove at the end of the trigger guard until it clicks into place. The 50-capacity, Type L, Drum Magazine (see Plate IV—Page 10) is inserted from left to right into the horizontal grooves of the piece as shown on Plate IV, Page 10, the distinction being that the 20-capacity magazine is inserted upward or vertically while the drum magazine is inserted sidewise or hor-

izontally. In all cases be sure and push magazines well up or in so that the magazine catch can snap into position and hold the magazine securely. Then set the safety (31) to "Fire" by turning the safety lever (31) so that it points forward towards the muzzle at the position marked "Fire." Pull the trigger and release it quickly for each shot desired.

To Fire Full-Automatically.

The Thompson Gun can be fired very effectively full-automatically, i. e., (like a machine gun) by following the above directions for semi-automatic fire, with the exception that the fire control lever (30) is set for full-automatic fire, i. e., with the fire control lever (30) pointing forward or towards the muzzle. In firing full-automatic after pulling trigger then immediately releasing the trigger you will obtain two or three shots in a burst of fire for each pull of the trigger. This method is called full-automatic fire by bursts. After each burst of fire rearrange aim and continue in this manner as may be desired.

In order to insert magazines, to set the safety lever (31) or to set the fire control lever (30) the bolt must be in its rearward or retracted position in all cases.

In firing from the box magazine the bolt will automatically be held in the open position when the last shot has been fired therefrom. In the drum magazine the bolt closes on the empty chamber after the last shot has been fired and a rattling noise can be heard in these magazines which indicates they are empty.

Loading of Magazines (See Plate V)

Box Magazines

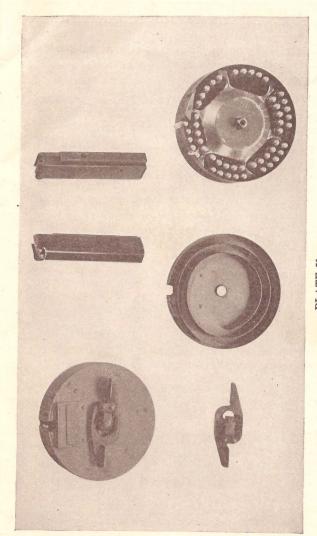
The normal capacity of a box magazine is 20 cartridges. It may be possible to force an extra cartridge into the magazine, but this should be avoided.

The cartridges feed into the magazine with ease and without binding. If for any reason excessive force is required to feed the cartridges out of the magazine, the energy of the bolt is taxed to such an extent that a misfire may result. The forward edge of the magazine is rounded to prevent loading cartridges backward.

The lips of the mouth of the box magazine should be a distance of .55-inch apart. If by accident the magazine mouth should become deformed, the lips should be carefully bent back to this dimension.

Drum Magazines (See Plate V)

To load a drum magazine, remove the winding key by lifting the flat spring thereon and sliding the key off. The cover can then be removed. Place the cartridges, bullet up, into the spiral track of the body, beginning with a full section at the mouth. The simplest method to begin loading is to fill one outer section and then rotate the rotor until this section reaches the mouth. Thereafter, continue to fill successive sections until the end of the spiral track has been reached. Fill each section complete; do not skip any section and do not fill beyond the en' of the spiral track.



lype L (50 cartridge) drum magazine shown assembled above, and with covers removed and propery loaded below. The box magazine (Type XX 20-cartridge) is shown on the right, loaded and empty. PLATE

After the magazine is properly filled replace the cover and key and wind to the number of clicks indicated on the magazine nameplate.

Caution: Drum magazines when wound to the number of clicks indicated on their cases, namely, nine clicks, should not be re-wound after many shots have been fired. That is to say, a loaded magazine which has been wound up should not be fired a few shots and then re-wound, as the resultant strong spring tension will both interfere with surety of action of the gun, as well as incurring the possibility of breaking of the main spring of magazine.

PRECAUTIONS

- 1. It is deemed advisable to habitually set the gun at the "Safe" position while changing the magazines and during lulls in firing.
- 2. Do not attach loaded magazine until you are ready to fire. See that the magazine is loaded and attached properly.
- 3. When getting ready to fire semi-automatically make certain your fire control lever (30) is set to "single" and your safety (31) to "safe" before attaching magazine. Just before you are ready to fire raise gun to shoulder and set safety (31) to "fire" position; in other words, when the lever is pointing forward. Apply the same precautions for full-automatic

fire making sure of the desired position of the fire control lever (30).

- 4. Do not place the trigger finger within the trigger guard until you are ready to fire and have the gun pointed toward the target.
- 5. When you stop firing set the safety (31) to "safe"; remove the magazine by pressing up with your right thumb on the magazine catch handle. Grasp the magazine in the left hand when it is released by raising the magazine catch (22). In an emergency where great speed of fire is desired and it is necessary to quickly replace the magazine with another the box magazine will fall to the ground of itself upon the release of the magazine catch (22). See that there are no cartridges in the chamber before you turn from your firing position.
- 6. When not in operation the bolt should be closed, i. e., in its forward or uncocked position, but closed on an empty chamber. Before closing bolt at any and all times be sure to remove magazines from gun.

To close bolt on empty chamber, remove magazine and let bolt go forward slowly by retarding actuator knob with left hand. Unless magazine is removed, the bolt if released will fire cartridge from loaded magazine AS THIS GUN FIRES ON THE FORWARD STROKE OF THE BOLT.

7. Each time before firing, assure yourself as to the type of fire that is desired, whether full-automatic or single shot and make certain that the fire control lever (30) is set accordingly.

- 9. For anticipated action carry the gun with bolt cocked (retracted) and safety on. Otherwise bolt should be left in closed position on empty chamber, to relieve strain on recoil spring. To close bolt on empty chamber, remove magazine and let bolt go forward slowly by retarding actuator knob with left hand. Unless magazine is removed, the bolt if released will fire cartridge from loaded magazine AS THIS GUN FIRES ON THE FORWARD STROKE OF THE BOLT.
- 10. For night operation, remember that with both the safety (31) and fire control lever (30) in forward direction the gun is ready for full-automatic fire.
- 11. Do not snap bolt on empty chamber unnecessarily.
- 12. In single shot fire, release the trigger as each pull of the trigger delivers but a single shot.
- 13. When firing full-automatically do not fire more than two or three shots to a burst.

MALFUNCTIONS

In case of a misfire, due to faulty ammunition or otherwise, retract or cock the bolt with a sharp quick pull on the actuator knob. This should insure ejection of the misfired cartridge.

In case of any other malfunction, retract the bolt as above and clear the throat and chamber of the gun by turning the gun over on its side and letting the case or cartridge roll out. If necessary remove the magazine quickly and the cartridge or case will fall out from the bottom. While manipulating the gun under these circumstances it is deemed highly advisable to always set the gun at "Safe."

In case of any stoppage of gun, before resuming fire be sure that chamber of barrel is clear of any cartridge which might have been left unfired in chamber due to stoppage of gun.

Remember you must first cock the piece by pulling the actuator handle all the way back before inserting magazines or setting the fire control and safety levers.

Part III

AMMUNITION AND BALLISTICS FOR CALIBRE .45 THOMPSON SUB-MACHINE GUN MODEL 1928

The United States Army automatic service pistol model of 1911 fires calibre .45 pistol ball cartridges with a bullet weighing 230-grains. This is also standard ammunition for the Thompson Submachine Gun, calibre .45, Model 1928.

The regular Colt calibre .45 automatic pistol ball cartridges of either the military or commercial design can be readily purchased from representatives of the leading cartridge manufacturers of the United States.

Sight Setting

The sight on the Thompson Submachine Gun, Model 1928, is graduated for the 230 grain bullet ammunition.

Sight Correction for Elevation

Correction on sight in decimals of an inch for one foot elevation on target at ranges indicated for standard 22.3-inch sight radius.

	0	
Range, Yards		Sight Correction, Inch
50		.148
100		.074
200	*****************	.037
300		.024
400		.018
600	***************************************	.014
000	* * * * * * * * * * * * * * * * * * * *	.012

Following tables give the height of the trajectory and drifts of the 230-grain bullet.

Page twenty-two

THOMPSON SUBMACHINE GUN

Height of Trajectory Above Line of Sight for Standard Ammunition

		Hei	ght o	of Traj	ectory	at P	oints	Indic	ated	
RANGE Yards	50 Yds.		100 Yds.		150 Yds.		200 Yds.		250 Yds.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
230-grain 500 500 500 500	0 1 2 3 5	$\begin{array}{c} 4^{13} & 16 \\ 4^{13} & 16 \\ 6^{5} & 8 \\ 11^{3} & 8 \\ 7 \end{array}$	1 4 7 10	0 10 ¹³ / ₁₆ 3 0 2 ³ / ₈	1 5 9 14	65/8 0 23/8 0	4 10 16	0 7 ³ / ₁₆ 1 ⁷ / ₁₆ 6	2 9 17	11 ³ / ₈ 95/ ₈ 83/ ₈
RANGE Yards	300 350 Yds. Yds.		400 Yds.		450 Yds.		500 Yds.			
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1300-grain 1000 300 400 500	8 17	0 2 ³ / ₈ 7 ³ / ₁₆	4 15	10^{13}_{16} 10^{5}_{16}	12	0 6	7	113/16		0

Table of Drift

		Drift to Right of Line of Bore of Gun at Points Indicated								
AMMU- NITION			100 Yds.		150 Yds.		200 Yds.		250 Yds.	
230-grain bullet	Ft.	In.	Ft.	In. 13/16	Ft.	In.	Ft.	In.	Ft.	In.
AMMU- NITION	300 Yds.		350 Yds.		400 Yds.		450 Yds.		500 Yds.	
230-grain bullet.	Ft.	In. 413/16	Ft.	In. 35/8	Ft.	In.	Ft.	In.	Ft.	In.

Table of Penetration

The remaining energy of the bullet at the various ranges is shown in the following table in which the figures show the number of 3/4 inch yellow pine boards spaced one inch apart, that were penetrated by bullets from the firing points indicated.

Number of ¾ inch boards penetrated from firing points indicated:

 Ammunition Point
 100
 200
 300
 400
 500

 230-grain
 Blank bullet....
 Yards
 Yards

Calibre .45 tracer ammunition can be used in conjunction with the 230 grain bullet to indicate ranging of shots at the longer ranges from 350 to 600 yards.

Part IV

GENERAL DESCRIPTION OF GUN AND OPERATING PRINCIPLE

(Note numbers correspond to parts shown on Plates II and III, pages 6 and 7.)

The gun is composed of two distinct groups: the *Receiver* (27) with the parts attached thereto and contained therein, and the *Frame* (15) with its attached and contained parts.

The Receiver Group

The receiver (27) forms the skeleton of the gun and has the barrel (2) screwed thereon. Immediately beneath the barrel (2), at the front end of the receiver (27), is anchored the fore grip mount, to which is secured the fore grip (13). The fore grip mount (18) is held in place by the barrel (2).

The receiver (27) immediately to the rear of the barrel (2) is provided with an opening for magazines and with a bolt well. Beyond the magazine opening is a uniform enlarged cavity which contains the body of the bolt (3), with recoiling space for the same, also the recoil spring (49) and buffer (48).

The bolt (3) consists of a rectangular body portion which fits into the cavity in the receiver (27), and a round forwardly projecting portion which fits into the forward bolt well of the receiver (27). The forward end of the bolt (3) being of a reduced size permits the

magazine to be brought up in close proximity to the chamber and as near as possible to the axis of the bore.

The lock (21) consists of an "H" member with lugs extending on each side thereof. The sides of the lock (21) engage with the bolt, (3), and the lugs thereon engage with grooves in the receiver (27). The central bar is engaged by the actuator (47) for control by the recoil spring (49) and for manual operation.

The explosive pressure of the cartridge is transmitted through the forward end of the bolt (3) to the lock (21), and through the lock (21) to the locking surfaces of the receiver (27). The bolt (3) is limited in its forward travel by the abutment on the forward end of the rectangular section of the bolt (3) abutting against the corresponding abutment in the receiver (27). In the portion of the bolt (3) between this abutment and the lock (21) is pivoted a hammer (19) in the form of a reversed lever. The lower end of this hammer (19) strikes the abutment in the receiver (27) slightly in advance of the bolt (3). The upper end of the lever contacts with the firing pin (11) which extends through the round forward portion of the bolt (3) to the cartridge seat and is held in rearmost position by the firing pin spring (12). The hammer (19) is so constructed that it will strike the abutment of the receiver (27) and cause the discharge of the cartridge only when the bolt (3) is completely locked.

The actuator (47) rests slidably on top of the bolt (3) and engages the cross-bar of the lock

(21) with two fingers; the rear finger also engages the forward end of the recoil spring (49). The cavity in the rectangular portion of the bolt (3) forms a housing for the recoil spring (49), and the buffer (48) serves as an arbor therefor. The buffer (48) has a flange at its rear end which furnishes a seat for the rear end of the recoil spring (49) and a buffing abutment for the rear end of the bolt (3) and is held in place by its prolonged end fitting into a hole in the receiver therefor.

Held in place by the buffer pilot (6) and extending forwardly in undercuts in the receiver is a breech oiler (4) formed of spring steel which holds oil saturated felt pads to relubricate the locking lugs on the lock (21) at each recoil of the bolt (3). These pads also tend to keep the sides of the bolt (3) lubricated.

The principle of bolt action is this, that during the period of high chamber pressure the lock (21) is fixed in position by adhesion of its surfaces and moves to clear the locking surfaces in the receiver (27) only after the high pressure in the chamber has subsided. The angle of the lock (21) is so chosen that at the moment the lock (21) is moved clear of the receiver locking surfaces, there is only sufficient residual powder pressure in the chamber to force the bolt (3) to recoil rearward, eject the empty case and impart sufficient inertia to the bolt (3) to completely compress the recoil spring (49) and prepare the bolt (3) for a new cycle of operation. On its forward movement,

under impulse of the recoil spring (49), the bolt (3) feeds a cartridge from the magazine into the chamber and as the bolt (3) approaches its foremost position, the lugs on the lock (21) engage the forward surfaces of the receiver (27) locking grooves, which in conjunction with the recoil spring (49) pressure on the lock (21) through the actuator (47), drives the lock (21) downward into locked position.

The receiver (27) is provided on the right side with an ejection opening. The forward end of the bolt (3) is provided with an extractor (10) secured by an undercut and limited in horizontal movement by a stud. The extractor (10) is retained in its assembled position under its own spring tension.

The opposite side of the receiver (27) is provided with an ejector (9) which is screwed into place and secured in position by a projection on the end of a spring leaf engaging with a detent on the receiver (27). The ejector (9) extends into the path of the bolt (3), a clearance cut on the bolt (3) being provided therefor.

At the rear end the receiver (27) is provided with a projection which contains the frame latch (16) and frame latch spring (17). This member locks the frame (15) to the receiver (27) when the former is assembled thereto.

The parts thus far mentioned comprise the receiver group, which with the exception of the fore grip mount (18), the fore grip (13) and screw (14), and frame latch (16) with

its spring, composes the working parts of the gun.

The Frame Group

The frame (15) houses the entire trigger mechanism, furnishes a seat for the rear grip (25), an attachment for the box magazine, and contains a catch to hold the latter in place. The rear projection of the frame (15) is also provided with a guideway, to which the butt stock can be attached.

Of greatest importance in the trigger mechanism group is the sear (32) which under impulse of the sear spring (33) engages one of the sear notches in the bolt (3) when the latter is in retracted position. The trigger (36) is mounted in the frame (15) forwardly of the sear (32), and carries pivotally mounted on a rearward projection thereon the disconnector (7), which under impulse of the disconnector spring (8) is continually urged toward the sear (32). The forward portion of the trigger (36) houses trigger spring (37), which urges trigger (36) to its normal released position.

Surrounding the upper portion of the trigger (36) and mounted on the same pivot, the trip (38) extends forwardly into the path of the box magazine follower, and rearwardly over a forwardly projecting member of the disconnector (7). The relation of trip (38) to disconnector (7) is such that when trigger (36) is pulled, the trip (38) (when the last shot has been fired from the box magazine) will be lifted by the follower of magazine and will move

disconnector (7) away from sear lever (34), thus allowing sear (32) to engage bolt (3) to hold it "open."

Between the sear (32) and the disconnector (7) is interposed the sear lever (34) mounted on the same pivot with the sear (32). The sear lever (34) is urged downwardly by the sear lever spring (35). The disconnector (7) when moving upwardly, by a pull on the trigger (36) lifts the sear lever (34), and the sear lever in turn lifts the forward projection of the sear (32), causing the rear projection to become depressed and disengaged from the bolt (3). The bolt (3) is then free to move forward under impulse of the recoil spring (49) and will reciprocate in automatic action until the cartridges are exhausted, or the trigger (36) is released, or the bolt (3) is arrested in its retracted position by the action of the follower of the box magazine on the trip (38) when the last cartridge has been fed from the box magazine. In this last-mentioned instance the disconnector (7) will be disconnected from the sear lever (34), which will be free to resume its normal position and will in turn allow the sear (32) to re-engage the bolt (3).

Between the trigger (36) and sear (32) there is provided a rocker pivot (30) which carries a rocker (29) mounted on an eccentric portion thereof. This rocker (29) extends upwardly when the rocker pivot (30) is set for "automatic" or "Full-Auto" position to within a very short distance of the bolt (3). The forward edge of the rocker (29) rests against the disconnector (7). When the rocker pivot (30)

is rotated through an arc of 180-degrees to the "semi-automatic" or "single" position, the eccentric axis of the rocker pivot (30) causes the rocker (29) to project upwardly into the path of the bolt (3). There is provided on the bottom of the bolt (3) a groove to clear the rocker (29), of such length that the rear wall of this groove will strike the rocker (29) at the final stage of the forward movement of the bolt (3), imparting to the rocker (29) sufficient movement to cause it to throw the disconnector (7) forwardly and disengage same from the sear lever (34). The sear lever (34) immediately under impulse of the sear lever spring (35) assumes its normal position, leaving the sear (32) free to engage the bolt (3) in retracted position.

The function of the sear lever is this: That as the bolt (3) has reached its forward position and has caused the rocker (29) to disengage the disconnector (7) from the sear lever (34), if the sear lever (34) were not free to move downward, the disconnector (7) might re-engage the sear (32) when the bolt (3) starts rearwardly on its recoil, and the sear (32) would then not be free to re-engage the bolt (3).

The position of the rocker (29) controls the nature of fire of the gun, whether full-automatic or single shot. The rocker pivot (30) can be turned from "automatic" or "full-auto" to "semi-automatic" or "single" position, only when bolt (3) is retracted.

It can be turned in the reverse direction with the bolt (3) closed, but to avoid con-

fusion the bolt (3) should always be retracted when setting the rocker pivot (30) in either direction.

The safety (31) is mounted at the rear end of the sear (32). It consists of a cylindrical body with its central portion halved to clear the sear (32). The sear (32) is provided at the rear end with a half hole to engage the safety (31). When the safety (31) is turned to "safe" position it engages the sear (32) so that the latter is positively blocked against movement. When the safety (31) is turned to "fire" position, the half section of its body is rotated out of engagement with the sear (32) and the sear (32) is free to move.

The safety (31) can be turned to "safe" position only when the sear (32) is in engagement with the bolt (3) in its retracted position. Obviously since this is an open chamber gun, that is, the bolt (3) when released by the trigger pull loads and immediately fires the cartridge, the gun with the bolt (3) resting in forward position is completely inactive.

The pivot pin (24) for the trigger (36) and trip (38), and the pivot pin (24) for the sear (32) and sear lever (34) are both secured to a spring plate, which is provided with projecting spring fingers engaging grooves on the safety (31) and the rocker pivot (30), retaining these parts in assembled position.

The forward end of the frame (15) is provided with a dovetail cut, which engages a corresponding dovetail member of the box magazine. On the side of the frame (15) is pivoted the magazine catch (22) urged into engage-

ment with the magazine by a torsion spring. This magazine catch (22) engages the box magazine by a stud extending forwardly through the center of the trigger guard; and also holds the drum magazines in position by the engagement of its forward edge with a notch on these magazines.

The rear grip (25) is secured to the frame (15) by means of the rear grip screw (26). The frame (15) is assembled to the receiver (27) by undercut ways engaging corresponding ways on the receiver (27). When the frame (15) is in foremost position on the receiver (27) the frame latch (16) pocketed at the rear end of the receiver (27) is free under impulse of the frame latch spring to project downwardly into engagement with the frame (15), locking same to receiver (27).

Magazines (See Plates IV and V)

The Box Magazine has a capacity for twenty cartridges staggered. It consists of a formed sheet metal body with a dovetail projection on its rear edge for engagement with the frame and a hole therein for engagement with the magazine catch. This rearwardly extending dovetail also furnishes a path for a rear projection on the follower for contacting with the trip to cause the bolt to be held open when the last shot is fired from the magazine.

The follower serves as a table for the cartridges in the magazine and is urged upward by the magazine spring, which is supported at the bottom of the magazine by the floor plate.

Page thirty-three

This magazine consists of the four parts mentioned: the body, follower, magazine spring and floor plate.

The Drum Magazine, Type L, consists of a circular pan-like body provided with a cover. Rotatably mounted on a hub within the magazine is a rotor to which is attached a spring case housing a motor spring. To a flange on the hub is attached a ratchet consisting of a circular disc, so cut that four fingers are formed thereon and given a curvature to project beyond the plane of the ratchet. These fingers of the ratchet engage with inwardly protruding edges formed in the body of the magazine in such a manner that the fingers of the ratchet will pass over the projections when the hub is rotated in winding direction, and will abut on these projections when the hub is turned in opposite direction. The motor spring is fastened on its inner end to the hub, and on its outer end to the spring case.

The relation of these parts is such that when there are cartridges in the magazine, so that the rotor is not free to rotate, and the hub is turned in a feeding direction, the motor spring will become wound up and the fingers on the ratchet engaging the projections on the body will hold the hub from unwinding. The energy of the motor spring is then exerted through the spring case to the rotor to urge the cartridges to the mouth of the magazine.

Both the body and the cover of the magazine are provided with guide strips which

form a spiral path for a train of cartridges placed parallel to the axis of the hub. The motor is provided with radial fingers which occupy the space in the magazine between the guide strips of the body and the cover. These fingers are so constructed that they intercept the spiral train of cartridges in such a manner that all the sectors are of equal length; that is, the distance between fingers on the inner row of the spiral train is the same as on the outer row of the spiral train. In this manner a group of cartridges between fingers on the inner spiral train occupy the same space between fingers on the outer row of spiral train; the cartridges throughout the train being at all times held compactly to prevent them from tumbling.

The magazine body and cover are provided with an opening which forms the mouth of the magazine; the train of cartridges is here arrested by deflectors which guide each cartridge upward into the mouth ready for feeding into the chamber. The body and cover are also provided with side plates secured on the opposite sides which engage guideways therefor in the receiver for attaching the magazine thereto. The side plate on the magazine body is provided at the bottom with a notch for engagement with the magazine catch to hold the magazine in position on the gun. The hub is secured to the magazine body with a spring clip. The cover is secured by a winding key which fastens to the end of the hub and by means of which the motor spring is wound.

Page thirty-five

Sights

Sights are provided for use in connection with the butt stock to fire the gun from the shoulder.

The *front sight* consists of a one-piece member secured to the front end of the barrel with a pin.

The rear sight consists of a base which is riveted to the top of the receiver. The base is provided with side walls to protect the sight. It has a central housing for the plunger and plunger spring, and at its rear end it carries the sight leaf pivotally mounted thereon. The pivot end of the leaf is cylindrical and is provided with "V" slots for engagement with the plunger under pressure of the plunger spring. These "V" slots are so located that the plunger engages therewith when the leaf is in the "up" or in the "down" position and serves as a detent to hold the leaf in these two positions.

On the leaf is mounted a slide which is held in position by a small studded leaf spring secured on the edge thereof, the stud engaging with serrations on the edge of the leaf. Projecting from the slide is a forward wall notched for a battle sight and two lateral lugs which support a windage screw. This windage screw carries the eyepiece which extends below the slide. The eyepiece has an opening for a field view and an aperture for sighting. The upper end of the eyepiece is provided with a suitable edge for carrying an index mark for windage adjustment. Immediately above this edge on the battle sight wall is the windage graduation.

Butt Stock

To fire the gun from the shoulder there is provided a butt stock which can be readily attached to the frame, a catch locking the same in place.

The butt stock is of walnut. A slide which fits the frame of the gun is secured to the front end of the body by means of two screws. On this slide is mounted the catch to lock the butt stock to the frame.

At the butt plate end the stock is provided with a pocket for an oil can, and a butt plate is secured thereon with two wood screws. The butt plate is provided with a small circular hinged cap which serves as a door to the oil can pocket.

Part V

DIRECTIONS FOR DISMOUNTING AND ASSEMBLING

To DISMOUNT

1. Remove Magazine

Remove magazine by pressing upward with right thumb on magazine catch

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

2. Remove Frame from Receiver

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

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

Place gun upside down on knee or on a table, the barrel extending rearward, and steady against movement with the actuator knob. With thumb of left hand depress frame latch at rear end of the frame and with right hand tap frame sliding same rearward a short distance. Take the gun from table or knee, grasping rear grip in right hand, and grasping receiver with left hand pull trigger and slide frame off to the rear.

3. Remove Recoil Spring

Support muzzle of barrel on table or knee, 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 same back with the fingers of right hand. Holding the buffer down with thumb of left hand grasp the end of buffer with thumb and 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 (same being compressed) from springing out of 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 withdraw.

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

Then again slide actuator to rearmost position and withdraw same.

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 of leaf.

The ejector can be removed by lifting the leaf sufficiently to disengage the detent and unscrewing the same from receiver. The breech oiler can be removed by pressing its fingers together to clear undercut of the receiver. These two parts, however, need not be removed for ordinary cleaning purposes.

6. Remove Safety, Rocker Pivot and Rocker from Frame

(These parts need not be removed for ordinary cleaning purposes.)

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 pivot, do not depress fingers on pivot plate more than necessary, to prevent setting or breaking.

7. Remove Pivot Plate and Firing Mechanism from Frame

(These parts need not be removed for or-

dinary cleaning purposes.)

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 disconnector can be removed from the trigger

by simply withdrawing same.

8. Remove Magazine Catch from Frame

Precaution: Do not remove magazine catch unless necessary. (The magazine catch can be assembled or removed only with the pivot plate

partially withdrawn.)

If required the magazine catch can be withdrawn from frame by rotating same counterclockwise 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

(The extractor need not be removed for ordinary cleaning purposes.)

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 of extractor.

To Assemble

1. Assemble Trigger Mechanism

First see that magazine catch is in assembled position.

Assemble disconnector to trigger by depressing disconnector spring and sliding disconnec-

tor 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 disconnector. 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 same 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 "automatic" or "full-auto" position.

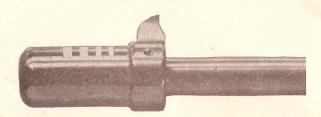
3. Assemble Ejector to Receiver

Screw ejector into receiver until stud on leaf engages and seats in depression therefor. Do

Parts: When ordering any parts for a Thompson Submachine Gun the serial number of the gun should be given; state specifically that it is a Model 1928; it is also necessary that the part number be given of whatever part is desired.

Illustration on page 50 shows Model 1928 Thompson Submachine Gun with horizontal foregrip, when equipped with a Cutts Compensator, and Type XX magazine.

This shows how conveniently swivels and sling strap can be fitted to a gun with horizontal foregrip.



CUTTS COMPENSATOR

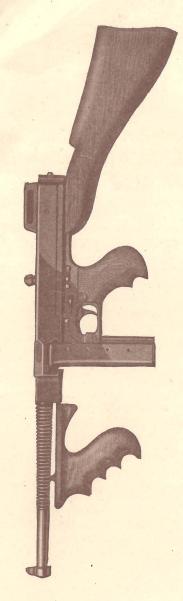
The Cutts Compensator on the Thompson gun is (see cut above) so constructed that the powder gases on coming to the muzzle are coned to higher pressures which are thrown out the orifices in the compensator in upward direction, pressing the muzzle downward, thus decreasing the tendency of muzzle rising in automatic firing. The compensator has a tendency also to reduce recoil.

In semi-automatic firing, the Cutts Compensator stabilizes the submachine gun, enabling greater accuracy of rapid firing.

To get full stabilizing effect of the Cutts Compensator, the gun must not be held too tightly against the shoulder.

Caution: To get the full effect of the compensator, it is recommended that the holes or orifices in its top be inspected to see that they are always open and not clogged with dirt, sand or clay.

Page fifty-two



Model 1928
With XX Magazine and Vertical Fore Grip

Page fifty-three

Part VIII

CARRYING EQUIPMENT AND ACCESSORIES

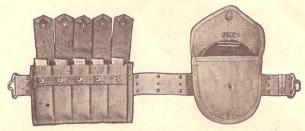
(A) Carrying equipment consists of Web Gun Carrier Case for Model 1928 when equipped with vertical foregrip. When ordering gun cases the model of gun and whether equipped with Cutts Compensator or not should be stated including type of foregrip on gun (i. e.) vertical or horizontal. The Web Gun Carrier Case contains a pocket for carrying detachable stock and a four cell pocket for carrying four twenty capacity type XX box magazines. There is also provided a Web Belt on which a five cell pocket web case for Type XX Magazines and a Web Case for Type L fifty capacity drum magazine can be attached. The Web Case for Type L drum magazine can be ordered with a shoulder strap for carrying if so desired instead of being carried on belt.



TYPE A

Gun Carrier Case showing holster for stock and four pockets for 20-capacity box magazines.

THOMPSON SUBMACHINE GUN

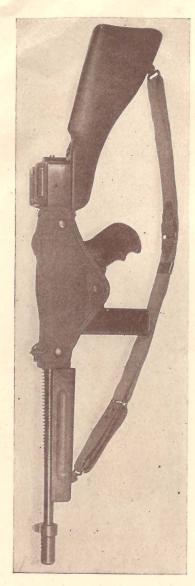


TYPE D

Five-pocket case for 20-round box magazines and case for 50-round drum magazine attached to web belt.



TYPE E Fifty round drum magazine case with shoulder strap.



Thompson Submachine Gun breech cover for the protection of gun mechanism—can be instantly taken off one continuous pull on cover flap. After being detached in an emergency, a leather thong holds cover on gun so it will not be lost.

Page fifty-six

Page fifty-seven

KIT BOX METAL

The Metal Kit Box is same size as Type XX box magazine and can be carried either in an XX Magazine pocket on the guncase or in either type of XX Box Magazine web carrier case. The parts shown above together with the following parts are furnished with this box: Extractor, Firing Pin, Firing Pin Spring, Hammer Pin, Sear Spring, Sear Lever Spring, and Trigger Spring.

EDITION OF 1940

There

HANDBOOK

of the

THOMPSON SUBMACHINE GUN

MODEL OF 1928

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