LEE STRAIGHT PULL RIFLE

CALIBER

.236

(6 M/m)

ADOPTED BY THE

UNITED STATES
NAVY



MANUFACTURED BY THE

WINCHESTER REPEATING ARMS COMPANY,
NEW HAVEN, CONN., U.S.A.

STORES: 312 BROADWAY, NEW YORK CITY. 418 AND 426 MARKET STREET, SAM FRANCISCO, CAL



WINCHESTER REPEATING ARMS COMPANY, NEW HAVEN, CONN., U.S.A.

STORES: 312 BROADWAY, NEW YORK CITY. 418 AND 420 MARKET STREET, SAN FRANCISCO, CAL.



THIS gun is known as the Lee Straight Pull Rifle, and has been adopted as the small-arm for use in the United States Navy. The caliber of the gun is .236 in. (6 m/m.) and it employs a smokeless powder cartridge with a hardened lead bullet, having a copper jacket plated with tin, and giving an initial velocity of 2,550 feet (777.24 meters) per second. The magazine holds five cartridges, which may be inserted separately or at one time, in which latter case they are placed in the magazine in a pack, held together by a steel clip.

The point-blank range of this rifle is between 600 and 700 yards (550-640 meters), within which the trajectory of the bullet is so flat as to make the entire range a zone of danger, and at a range of 1,000 yards (915 meters) the bullet rises at the highest point in its trajectory but 24 feet (7.4 meters). At a distance of 5 feet (1.5 meters) from the muzzle, it gives a penetration of fifty-four $\frac{7}{8}$ in. (22 m/m.) pine boards and of a $\frac{1}{2}$ in. (13 m/m.) steel plate, and at a distance of 100 feet (30.5 meters) a penetration of a 7-16 in. (11 m/m.) steel plate.

The superiority of this rifle over all other types of bolt gun lies in the fact that the operation of opening and closing is by a "straight pull," instead of the customary "up turn" and "pull back."

The fact that this gun is a rapid-fire repeating rifle should be borne in mind. It is always ready for rapid fire, as the time consumed in opening the breech and inserting a clip is very short, when five shots are instantly ready for delivery. These five shots may be delivered without taking the gun from the shoulder, and it may also be loaded in this position, as it need not be brought down to insert a clip unless desired.

It should also be remembered that this gun may be used as a single loader, and at the same time retain a magazine charged with five cartridges, it merely being necessary to place a sixth cartridge under the extractor; on closing the bolt the cartridge will be pushed into the chamber; this mode of firing may be continued as long as desired, and yet the gun will be ready for any emergency with its magazine charged.

Another important point in favor of this rifle is its adaptability as a single loader. It may be operated with single cartridges with great speed, as no special care is necessary in inserting them in the gun,—they may be placed either directly in the chamber, in front of the extractor or under it,—and this can be done without taking the gun from the shoulder.

In this gun, the recoil from the discharge has the effect of locking the breech mechanism. The bolt has on its under side a recoil shoulder, which, when the bolt is closed, lies against a corresponding shoulder in the receiver. This recoil shoulder, being below the line of recoil, causes the thrust of the discharge to be slightly downward, tending to more securely lock the bolt, and yet offering no resistance to the opening of the breech by the operator.

The gun is furnished with a brush cleaner, carried in a recess in the butt closed by a sliding cover. Adjustable slings and knife bayonets, United States Navy pattern, can be furnished.

MANIPULATION.

THE trigger having been pulled, grasp the cam-lever handle, and pull the bolt smartly to the rear. Grasp a clip or pack, containing five cartridges, between the thumb and first two fingers of the right hand, and, pushing the extractor to the left with the lowest cartridge, insert the pack in the magazine, either side up,

keeping the clip close to the face of the bolt. With the thumb on the pack near the head of the top cartridge, push it down until the cartridges are released from the clip, which will drop out through the bottom of the magazine in the course of firing; the cartridges are then raised by the follower until the top one touches the under side of the extractor, and the upper portion of its head is in front of the bolt.

Close the gun by pushing the bolt forward smartly, thus entering a cartridge

into the chamber.

The gun is now ready to be discharged, and the bolt cannot be drawn back unless the bolt-release is pushed down, or until the trigger is pulled, which of

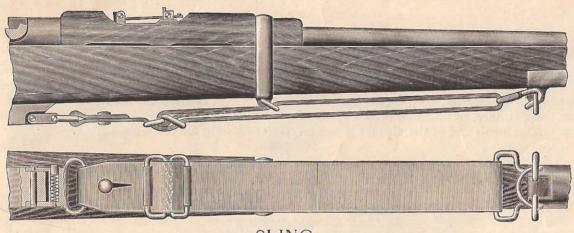
course discharges the gun.

If it is not desired to fire the gun at once, the firing-pin may be rendered inoperative by pulling up the firing-pin-lock, on the left of the receiver, until it clicks. The firing-pin-lock must be pulled up with some force, in order to overcome the tension of the mainspring. Pushing the firing-pin-lock down releases the firing-pin striker, and, if the trigger is pulled, the gun will be discharged.

After firing, draw the bolt back smartly, the empty cartridge case being extracted and ejected to the right.

On again closing the bolt, another cartridge is pushed into the chamber.

If it is desired to use ammunition without clips, the magazine may be charged with single cartridges, which should be inserted under the extractor, with their heads at the rear of the magazine and in front of the clip-release-ways.



SLING.

To attach sling to the gun, pass end containing button-holes (smooth side of sling-strap towards stock) through swivel of lower band from the rear. Attach securing-hook to stacking-swivel on upper band by passing loop over stacking-swivel, tilting it to one side to clear ends of stacking-swivel, and drawing it downward so that beak of securing-hook passes through loop of stacking-swivel. Pass sling-strap through loop of securing-hook and backwards through loops of sling-strap slide; then through loop of snap-swivel, turning back free end between sling-strap and stock, and fastening with sling-strap button. Attach snap-swivel to trigger-guard by pressing in on push-pin of swivel, swinging snap-bar to one side, engaging shank of swivel with hole in forward part of trigger-guard, and allowing snap-bar to drop back and over end of shank. Pull sling-strap slide to the rear, thus tightening sling.

To remove sling from gun, proceed in reverse order.

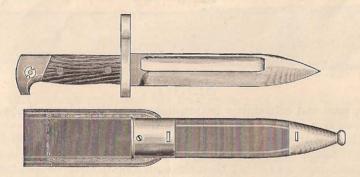
To carry the gun by means of sling, draw sling-strap slide forward until sling hangs loose, and disengage securing-hook from stacking-swivel. Unhook snap-swivel from trigger-guard and snap it into swivel-base in butt of stock. Push sling-strap slide forward as far as is necessary to give ample length of strap. The gun is thus slung between stock-swivel and swivel of lower band.

CLEANING.

In cleaning the gun, enter the weight of the cleaner into the muzzle and let it run through the barrel. Draw the brush through the bore and chamber. If the bore appears dirty after two or three trials, insert a small piece of soft cloth, saturated with oil, in the loop of the cleaner, and again draw it through the barrel.

To clean the chamber, put a small piece of cloth in the loop of the cleaner, and thrust it into the chamber

from the rear. The brush end of the cleaner is made sufficiently long for this purpose.



TO FIX BAYONET.

THE slot in the handle passes over the stud on the upper band, the muzzle goes through the hole in the bayonet guard, and the handle is pressed down until the bayonet catch snaps into place.

TO UNFIX BAYONET.

Press on bayonet catch to release bayonet, then slip bayonet off.



TO DISMOUNT THE GUN.

THE trigger being pulled, press outward and downward on bolt-stop thumb-piece, and pull out bolt to the rear, keeping thumb on end of extractor to prevent its dropping. Push firing-pin striker out from bolt until notch on its lower end is freed from nib of cam-lever, and turn cam-lever clear of striker; then let go of striker. Remove cam-lever, then firing-pin striker. Drive out firing-pin stop-pin, and shake firing pin and firing-pin spring out from bolt. Remove collar from firing-pin striker, and take off mainspring by unscrewing to the front through slot at point of striker. Unscrew trigger-guard screw and receiver tang-screw, and remove trigger-guard. Place finger on rear end of follower, and push down until lugs are opposite clearance cut in magazine wall; spring right-hand lug out through cut, and allow elevator-arm to rise, turning completely over; then remove elevator-arm from its seat. Remove sear spring and sear-fly. Unscrew trigger spring screw. Remove sear and trigger by driving out pins securing them. Take out band screws and remove bands. Raise rear-sight-leaf to its vertical position, sight-slide at top. Press barrel cover forward to clear bevel under front end of rear-sight-base, and remove it from barrel. Lift barrel and receiver out of stock. Press out on bolt-stop thumb-piece to clear stop-slot, and push bolt-stop down and out. Remove lock-pin, located in rear of firing-pin-lock on under side of receiver, by means of notch in front side of head. Spring out checked end of bolt-release, to clear stop-pin from slot, and take out bolt-release. Push firing-pin-lock down until lug at its lower end clears guide; then turn it outward, and remove through slot in frame of receiver.



TO ASSEMBLE THE GUN.

ENTER firing-pin-lock through slot in side of receiver, and turn it up, and in, until lug at its lower end clears guide; then press it up into place. Put in bolt-release and spring it into position. Force in lock-pin, with lug bearing against firing-pin-lock. Enter bolt-stop and slide it into place. Place barrel and receiver in stock. Put on barrel cover and bands, and screw in band screws. Place sear, trigger, and trigger spring in trigger-guard, securing them by their pins and screw. Enter sear-fly in its seat on sear, and put in sear spring. Place elevator-arm in its seat, follower down, engaging hole in elevator spring with pin; swing elevator-arm over, holding point of follower up, and push lug through clearance cut; then allow elevator-arm to rise into place. Place trigger-guard in stock, and screw in trigger-guard screw and receiver tang-screw. Enter square end of mainspring into slot at point of firing-pin striker and screw it on. Put collar on firing-pin striker so that square end of mainspring rests in notch on its front end. Place firing-pin spring on firing-pin and enter them into bolt, securing firing-pin by stop-pin. Put firing-pin striker in bolt, and enter cam-lever in its seat. Turn handle of cam-lever back until nib engages notch on firing-pin striker. Hold rear end of extractor against small lug on left side of bolt; then enter bolt and extractor into receiver. Pull up bolt-stop and thumb-piece to lock bolt in receiver.

TABLE OF DIMENSIONS AND WEIGHTS.

Daniel (Myserve)	English.	Metric.
BARREL. (MUSKET.)	.236 in.	6 m/m.
Diameter of bore, land to land,	28 "	711.2
Total length,	24.965 "	634.1 "
Length of rifled portion,	3.035 "	77.1
Length of chamber,	23.125 "	587.4 "
Horizontal distance between sights,	43.145	397.4
Number of grooves of rifling,	.100 "	2.5 "
Width of groove, measured on arc of bore,		2.3
Radius of groove,	.089 "	0. I "
Depth of groove, uniform,	.004 "	0.1
Twist, uniform, one turn in,	7.500 "	190.5
Width of lands, measured on arc of bore,	.024 "	0.6
BAYONET.	8.35	212 "
Length of blade,	1.05 "	27
Width of blade,	11 OZ.	311 gm.
Average weight of bayonet,		155
Average weight of scabbard,	5.5 oz.	133
Orma		
SLING. Average weight of sling,	4 OZ.	113
Average weight of sing,		
GUN, COMPLETE. (MUSKET.)		- to motors
Longth bayonet fixed	4 ft. 7.9 in.	1.42 meters.
Length, bayonet unfixed,	3 " 11.6 "	1.21

TABLE OF DIMENSIONS AND WEIGHTS.

Gun, Complete. (Musket.) Average weight, bayonet fixed, with sling, Average weight, bayonet unfixed, with sling, Average weight, without bayonet or sling,	English. 9 lbs. 7 oz. 8 lbs. 12 oz. 8 lbs. 8 oz.	Metric. 4.28 k/gm. 3.97 3.86 "
Ammunition.		
Length of cartridge case, Length of bullet, Length of loaded cartridge, Diameter of head of cartridge case, Diameter of bullet, cylindrical portion, Average weight of primed cartridge case, Average weight of bullet, Average weight of charge, Average weight of loaded cartridge, Average weight of clip, Average weight of charged clip or pack, Average weight of r80 rounds in clips,	2.355 in. 1.034 " 3.110 " 447 " .244 " 167 gr. 112 " 32.4 " 311.4 " 78 " 1635 " 8 lbs. 6 oz.	59.8 m/m. 26.3 " 79.0 " 11.4 " 6.2 " 10.82 gm. 7.26 " 2.10 " 20.18 " 5.05 " 105.95 " 3.8 k/gm.
BELT.		
Number of pockets, holding 3 clips each, Average weight of belt, empty, Average weight of belt, loaded with 180 rounds,	1 lb. 7 oz. 9 lbs. 13 oz.	o.65 '' 4·45 ''

TRAJECTORIES.



2000 YARDS RANGE

TABLE

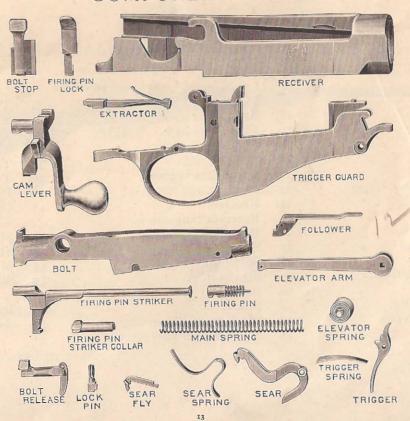
GIVING THE HEIGHTS OF TRAJECTORIES OF THE 112 GRAIN (7.26 GRAMME) BULLET ADAPTED TO THE .236 IN. (6 M/M) CALIBER LEE STRAIGHT PULL RIFLE, ADOPTED BY THE U. S. NAVY.



Smokeless Powder, Copper Jacketed Bullet. Initial Velocity, 2550 feet (777.24 meters) per second.

RANGE.		Height of Trajectory.		RANGE.		HEIGHT OF TRAJECTORY.	
Yards.	Meters.	Feet.	Meters.	Yards.	Meters.	Feet.	Meters.
100	91.44	0.064	0.0195	1100	1005.84	32.61	9.940
200	182.88	0.298	0.0908	1200	1097.28	42.66	13.003
300	274.32	0.783	0.2387	1300	1188.72	54.63	16.651
400	365.76	1.631	0.4971	1400	1280.16	68.75	20.955
500	457.20	2.994	0.9126	1500	1371.60	85.30	25.999
600	548.64	5.075	1.5469	1600	1463.04	104.57	31.873
700	640.08	8.089	2.4655	1700	1554.48	. 126.89	38.676
800	731.52	12.20	3.719	1800	1645.92	152.70	46.543
900	822.96	17.54	5.346	1900	1737.36	182.43	55.605
1000	914.40	24.33	7.416	2000	1828.80	215.74	65.758

COMPONENT PARTS.



NOMENCLATURE.

			Control of the Contro		
I.	Barrel.	17.	Firing-pin striker.	34.	Trigger.
2.	Barrel cover.	18.	Firing-pin striker collar.	35.	Trigger pin.
3.	Bolt.	19.	Firing-pin-lock.	36.	Trigger-guard.
4.	Bolt-stop.	20.	Lock-pin.	37.	Trigger-guard screw.
5.	Bolt-release.	21.	Lower band.	38.	Trigger spring.
6.	Butt-plate.	22.	Lower band screw.	39.	Trigger spring screw.
7.	Butt-plate screws.	23.	Mainspring.	40.	Upper band.
7· 8.	Cam-lever.	24.	Receiver.	41.	Upper band screw.
9.	Extractor.	25.	Receiver tang-screw.		11
10.	Elevator-arm.	26.	Rear-sight.	42.	Sling-strap.
II.	Elevator spring.	27.	Sear.	43.	Sling-strap button.
12.	Follower.	28.	Sear pin.	44.	Sling-strap securing-hook
13.	Follower hinge-rivet.	29.	Sear spring.	45.	Sling-strap snap-swivel.
14.	Firing-pin.	30.	Sear-fly.	10	0 1 1
15.	Firing-pin spring.	31.	Stock.	46.	Bayonet.
16.	Firing-pin stop-pin.	32.	Stock-swivel-base.	47.	Bayonet scabbard.
		33.	Stock-swivel-base screws.	17	

LEE STRAIGHT PULL SPORTING RIFLE.



PRICE LIST.

Lee Straight Pull Rifle, Caliber .236 (6 m/m.), (Musket,)	\$32.00
Lee Straight Pull Sporting Rifle, Caliber 236,	32.00
Bayonet and Scabbard, U. S. Navy Pattern,	6.00
Sling Strap, Complete with Fittings,	1.50
Belt, U. S. Navy Pattern,	3.00
Cartridges, per 1,000,	50.00
Cartridges, per 1,000, packed in clips,	58.00



CARTRIDGE BELT ADOPTED BY THE U. S. NAVY.