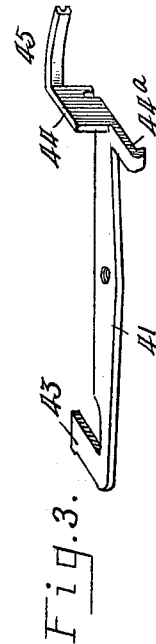
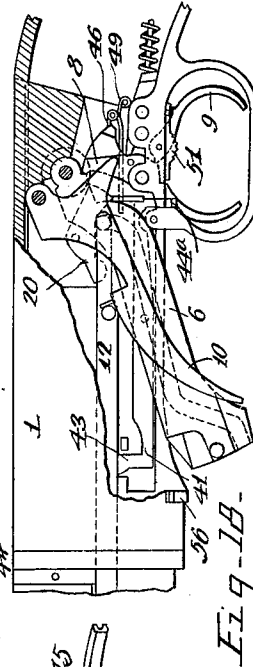
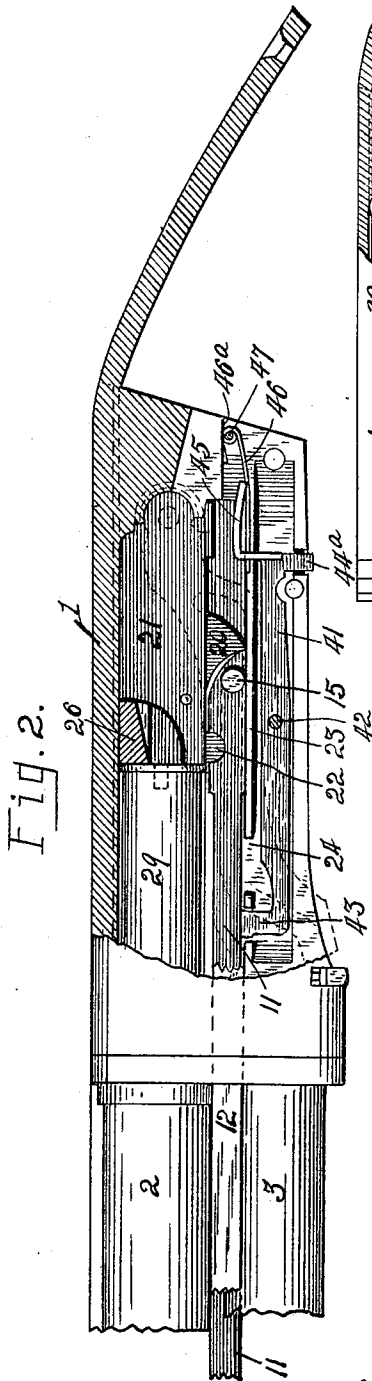
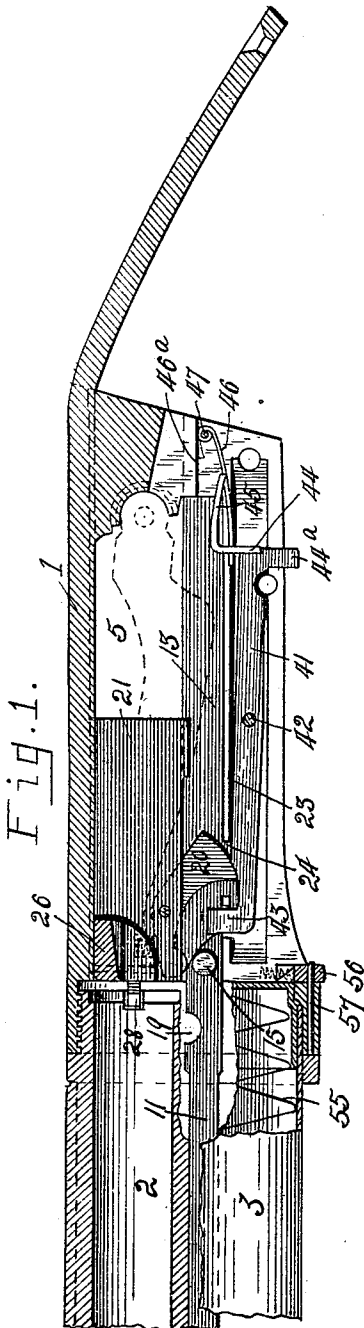


992,720.

Patented May 16, 1911.

4 SHEETS—SHEET 1.



WITNESSES:

D. C. Walter
M. G. Gaskell

INVENTOR.

Charles F. Lefever,
By Owen & Owen,
His attys.

C. F. LEFEVER.
FIREARM.

APPLICATION FILED AUG. 5, 1910.

Patented May 16, 1911.

4 SHEETS—SHEET 2.

992,720.

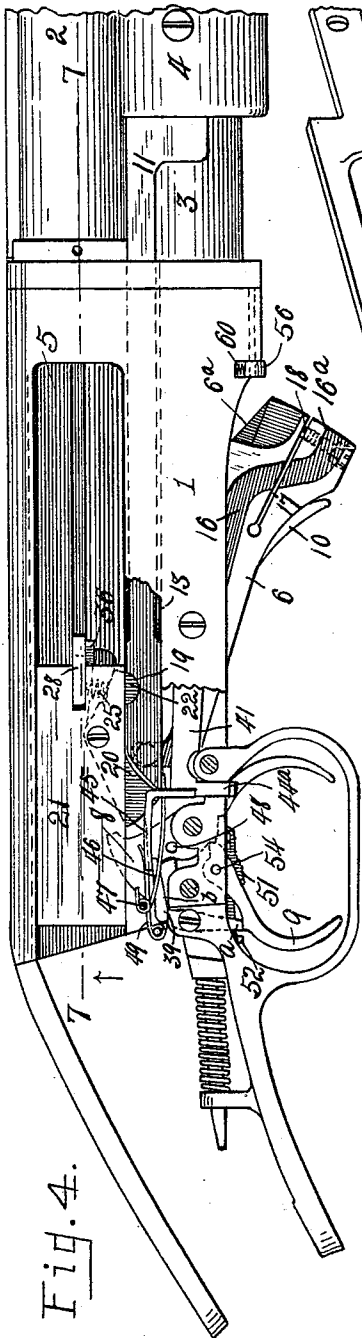


Fig. 4.

WITNESSES:
D. C. Walter
M. G. Gaskell

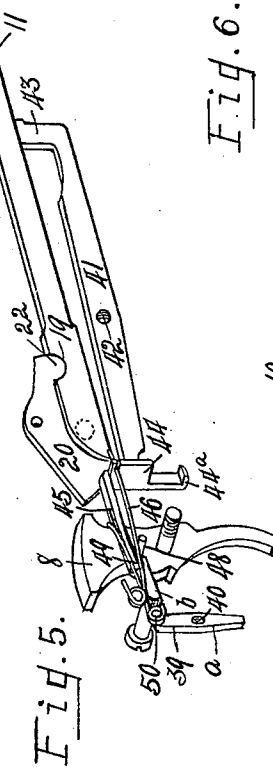


Fig. 5.

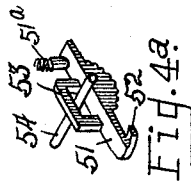
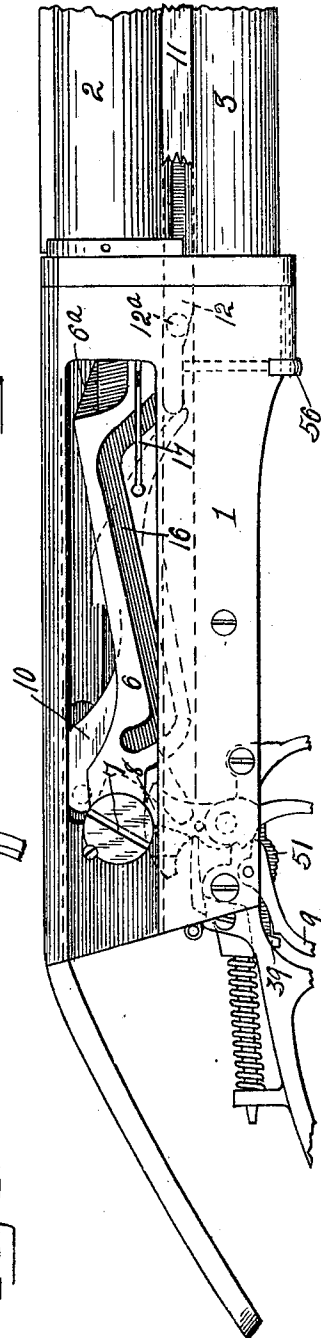


Fig. 4a.

Fig. 6.



INVENTOR.
Charles F. Lefever,
By Owen & Owen
His attys.

C. F. LEFEVER.

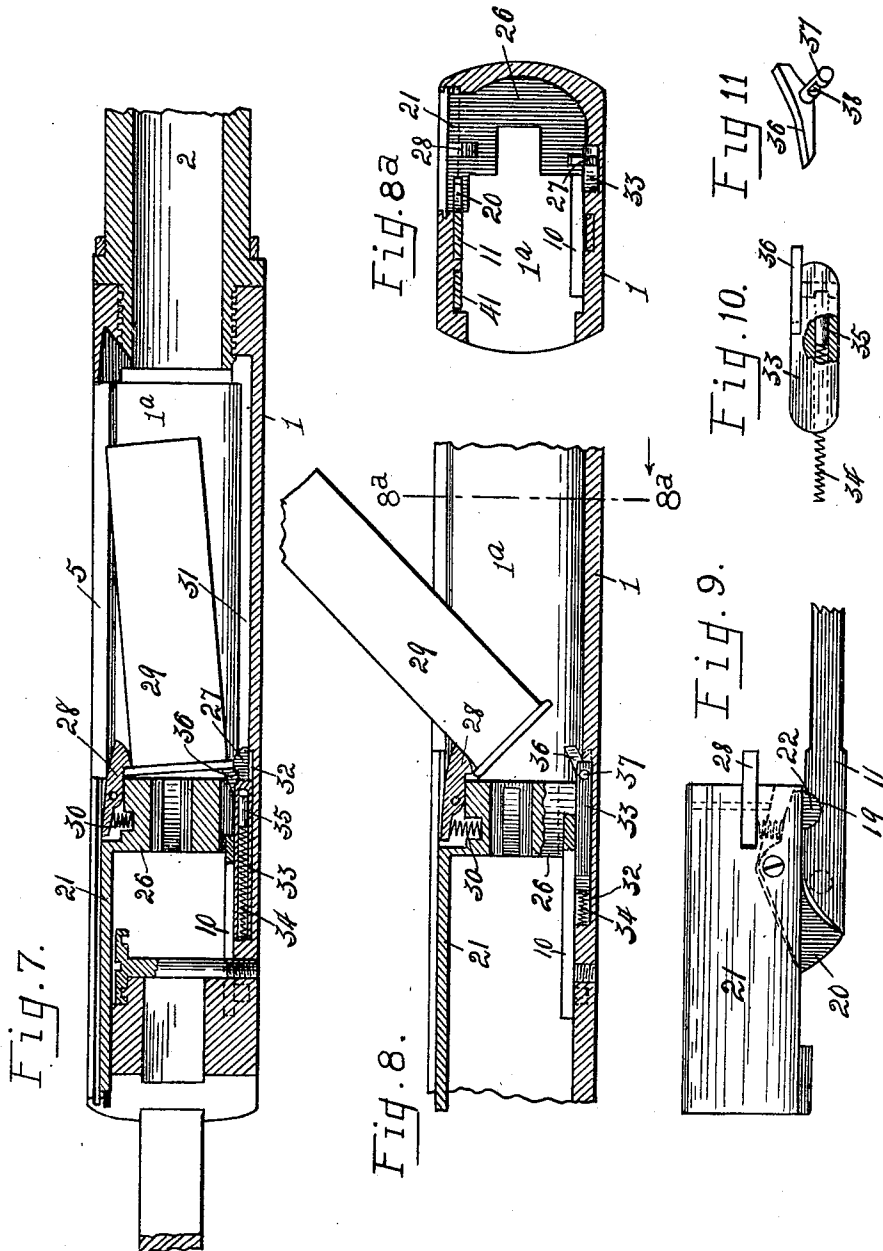
FIREARM.

APPLICATION FILED AUG. 5, 1910.

Patented May 16, 1911.

4 SHEETS-SHEET 3.

992,720.



WITNESSES.

D. C. Watter
M. G. Gaskell.

INVENTOR.

Charles F. Lefever,
By Owen & Owen
His attys.

C. F. LEFEVER.
FIREARM.

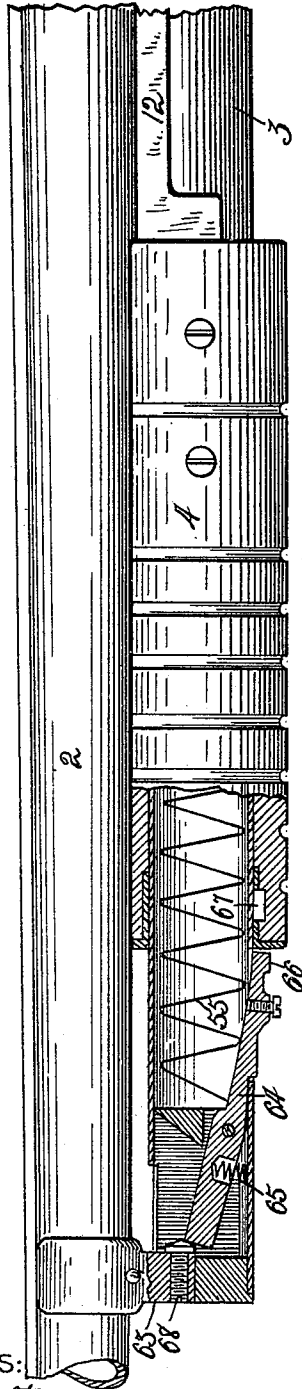
APPLICATION FILED AUG. 5, 1910.

Patented May 16, 1911.

4 SHEETS-SHEET 4.

992,720.

Fig. 12.



WITNESSES:

S. C. Walter

M. G. Gaskell.

Fig. 15.

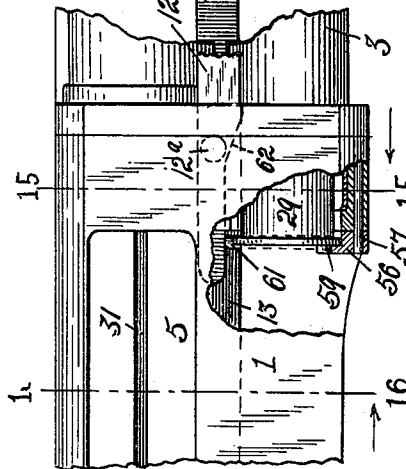
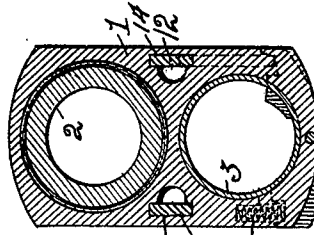


Fig. 14.

Fig. 13.

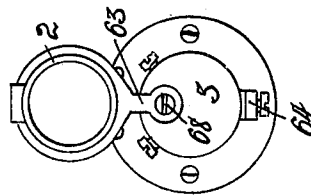


Fig. 16.

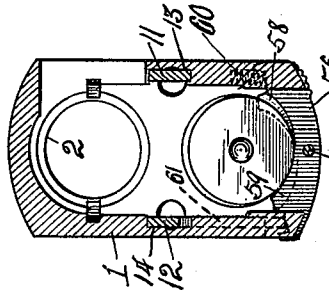


Fig. 17.



INVENTOR.

Charles F. Lefever,
By Owen & Owen,
His attys.

UNITED STATES PATENT OFFICE.

CHARLES F. LEFEVER, OF TOLEDO, OHIO, ASSIGNOR OF ONE-HALF TO ELIAS S. TRITES,
OF TOLEDO, OHIO.

FIREARM.

992,720.

Specification of Letters Patent.

Patented May 16, 1911.

Application filed August 5, 1910. Serial No. 575,824.

To all whom it may concern:

Be it known that I, CHARLES F. LEFEVER, a citizen of the United States, and a resident of Toledo, in the county of Lucas and State of Ohio, have invented a certain new and useful Firearm; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to fire-arms of the repeating type, and particularly to magazine or repeating shot-guns, but is not restricted to such use as it may be used in any connection for which it may be adapted or appropriate.

The object of my invention is the provision, in a gun of this class, of simple, improved and highly efficient mechanism, which is operative, upon a movement of the shell transferring mechanism, to automatically lock the hammer against a premature firing movement, and to release the hammer when the operative parts have returned to firing position.

A further object of my invention is the provision of simple, improved and efficient means for forcefully ejecting a shell from the frame chamber when retracted to ejecting position.

A further object of my invention is to provide means for controlling the discharging movements of the shells from the magazine whereby only one shell is permitted to leave the magazine and enter the frame chamber at a reloading operation.

Further objects of my invention consist in the provision of means in the breech-block to permit of an adjustment of such block to compensate for wear of the parts and maintain the firing-pin in line with the center of a shell cap when in the barrel, and also the provision of means for compensating for wear in the magazine holding means whereby to prevent relative endwise movements of the barrel and magazine.

Further objects of my invention will be apparent from the following description.

The invention is fully described in the following specification, and while, in its

broader aspect, it is capable of embodiment in numerous forms, a preferred embodiment thereof is illustrated in the accompanying drawings, in which,—

Figure 1 is a central longitudinal section of the gun frame and portions of the barrel and shell magazine, with the operative parts in normal firing position, and a portion removed. Fig. 2 is a similar view with the parts retracted in shell ejecting position. Fig. 3 is a perspective view of the safe-bar. Fig. 4 is a view of the right side of the gun-frame, with portions broken away and the operative parts in retracted or shell ejecting position. Fig. 4^a is a perspective view of the positive safe-slide and trigger pin. Fig. 5 is a perspective view of different parts of the operating mechanism in assembled relation. Fig. 6 is a view of the right side of the frame with the operative parts in firing position. Fig. 7 is a section on the line 7, 7 in Fig. 4 with a shell just being released from the inner or left retainer finger. Fig. 8 is a similar view of a part thereof with a shell partly thrown from the frame opening. Fig. 8^a is a cross-section on the line 8^a, 8^a in Fig. 8. Fig. 9 is an outer side view of the sliding side plate and cooperating moving parts. Fig. 10 is a top plan view of the ejector slide and associated parts with a portion broken away. Fig. 11 is a perspective view of the ejector lever. Fig. 12 is a side view of the forward portions of the barrel, magazine and handhold, with portions in section. Fig. 13 is an outer end view of the barrel, magazine, handhold and retainer lug. Fig. 14 is an enlarged side view of the portion of the gun adjacent the inner ends of the barrel and magazine with parts broken away. Figs. 15 and 16 are cross-sections on the lines 15, 15 and 16, 16, respectively, with the shell stop in Fig. 16 rocked from normal position. Fig. 17 is a plan of the shell stop, and Fig. 18 is a side elevation of a portion of the left side of the gun with a part broken away and the parts shown in the position which they assume when the hammer cocking rod is at the limit of its rearward movement.

Referring to the drawing, 1 designates the gun frame to which the stock (not shown) is secured, 2 the barrel which is threaded or

otherwise suitably secured to the forward end of the frame, 3 the shell magazine carried by the barrel beneath the same, and 4 the handhold, which is mounted for sliding movements on the magazine tube.

The frame 1 is of the usual construction, being hollow, to form the chamber 1^a and provided in one side wall thereof with the elongated longitudinally extending opening 5 through which the shells are ejected after firing, and having its bottom open for the breech-block 6 which is pivoted at 7, to work through when lowered. The forward end of the breech-block 6 is tapered on its upper edge, as shown at 6^a, to serve to direct a shell upwardly within the frame chamber 1^a when forced into such chamber from the magazine. In the lower rear portion of the frame 1 are located the usual hammer 8 and trigger 9, the former being cocked by an oscillation of the cocking arm 10 in the usual manner.

Projecting rearwardly from the sliding hand-hold 4 at opposite sides thereof are the right and left side-bars 11 and 12, respectively, which pass through the forward end of the frame 1 and work in longitudinal grooves or races 13 and 14, respectively, in the inner sides of the frame side walls, as best shown in Figs. 8^a and 16. The bar 11 is provided adjacent its nose on its inner side with a stud 15 which works in a cam groove or race 16 in the adjacent side of the breech-block 6 to impart oscillatory movements to such block in the usual manner when said bar is reciprocated. When the side bar 11 is at the limit of its forward movement, the stud 15 coacts with a neutral portion 16^a of the groove wall to hold the breech-block elevated in firing position. The side-bar 12 has a stud 12^a on its inner side, which upon a rearward movement thereof coacts with the cocking arm 10 to cock the hammer.

In practice it is found that the wear of the stud 15 and coating wall of the breech-block race permits a dropping of the forward end of such block and a consequent moving of the firing pin (not shown), which is carried by the breech-block, out of center with a shell cap. To obviate this the nose of the breech-block is longitudinally split or slotted above the portion 16^a, as shown at 17 Fig. 4, and a set-screw 18 is threaded through the lower furcation thus provided and bears at its inner end against the inner side of the other furcation, to serve to effect a separation of such parts. As the lower furcation rests upon the stud 15 the separation of it from its companion effects a necessary raising of the upper furcation to center the firing pin with the shell cap, as is apparent.

The nose of the side-bar 11 is preferably rounded on its upper edge and a short dis-

tance in front of its nose is provided on its upper edge with a rounded notch or depression 19. A rocker 20 is pivoted to the side-plate 21, which plate is slidingly mounted in the frame opening 5 to uncover and close such opening, and such rocker is formed on the under side of its forward end portion with a rounded detent or boss 22 for seating in the notch 19 of the side-bar 11, and has its opposite end or tail curving around the nose of such bar when engaged therewith and terminating adjacent the lower edge thereof as shown in Fig. 4. The shoulder or lower wall 23 (Fig. 1) of the race 13 in which the side bar 11 operates is cut away adjacent its forward end as at 24 to permit the tail of the rocker 20 to drop therein whereby to coact with the end of the shoulder 23 to prevent a rearward or opening movement of the rocker 20 and its side-plate 21 except when said rocker is oscillated to permit it to pass over said shoulder. A compression spring 25 acts on the forward end of the rocker 20 to influence the engagement of its detent 22 with the side-bar notch 19. When the parts are in normal or firing position the nose of the side-bar 11 engages under the forward end of the rocker 20 to retain its tail in locking engagement with the end of the shoulder 23 whereby to prevent an opening or rearward sliding movement of the side-plate 21. Upon a rearward movement of the side-bar 11 its rounded nose coacts with the alining rounded under side of the rocker tail approximately at the time the notch 19 moves into register with the detent 22 of the rocker 20, thus effecting an oscillation of the rocker to move its tail from locking engagement with the shoulder 23 and to move the detent 22 thereof into the notch 19. The continued rearward movement of the side-bar 11 causes the side-plate 21 to move rearwardly therewith due to the interlocking of the side-bar 11 and rocker 20, such rocker being prevented from having a bar releasing movement by reason of its tail riding upon the shoulder or lower wall 23 of the side-bar race. When the side-plate 21 has returned to its normal closed position upon the forward movements of the side-bar 11, the rocker 20 disengages the side-bar due to its tail being permitted to work down into the recess 24 provided at the forward end of the shoulder 23, the rocker being held in such rocking position by the coaction of the nose of the side-bar 11 with the rocker lug 22.

The side-plate 21 is provided at its forward end with a head or block 26 which fits within the upper portion of the frame chamber and is provided at the side thereof opposed to the plate 21 with a shell extracting finger 27, and at the side thereof adjacent the plate 21 with a pivoted shell extracting finger 28. The fixed finger 27 is notched

on its inner side to receive the flange of a shell 29, while the finger 28 is hooked to adapt it to engage over the opposite side edge of such flange in the usual manner having its engaging movement influenced by a compression spring 30. The finger 27 works in the race 31 in the associated side wall of the frame. Mounted for limited reciprocatory movements in a race 32 provided in the frame adjacent the rear end of the extraction-finger race 31 is a shell ejector slide 33 which is yieldingly held at its limit of forward movement by the action thereon of a coiled compression spring 34, such spring being mounted within a socket in said slide and having one end thrust against a plunger 35 within the slide socket and its other end thrust against the wall at the rear end of the race 32. An ejector-lever or finger 36 is pivotally carried at the forward end of the slide 33 and has its nose normally projecting inwardly within the frame chamber in position to abut at its end against the rear end of a shell 29 at the edge thereof opposed to the pivoted extractor finger 28. The finger 36 is provided with a shaft 37 which is journaled in the slide 33 and has its rear side flattened as at 38 to receive the forward end thrust of the plunger 35 whereby said plunger, the spring 34 and the flattened portion of the shaft cooperate to yieldingly retain the finger 36 in shell engaging position. Upon a retracting of the slide plate 21, as above described, a shell 29, the flange of which is oppositely engaged by the cooperating action of the extractor-fingers 27 and 28, is drawn from the barrel 2 into position to be ejected laterally from the frame chamber through the side opening 5 therein. When the side-plate 21 is near the limit of its rearward movement, the rear end of the shell moves into engagement with the alining end of the ejector finger 36, thus causing said finger and its slide 33 to move rearwardly with the slide-plate 21 against the tension of the spring 34 until stopped by coaction with the rear end of its race 32. The side-plate 21 has a sufficient movement to the rear of the point of stopping of the ejector-slide 33 to cause the finger 36 to force the adjacent edge of the shell flange from engagement with the extractor-finger 27. Upon such release of the shell flange from the extractor-finger 27, the slide 33 and its finger 36 move swiftly forward under the influence of the spring 34 and cause the shell to be laterally thrown from the frame chamber through the opening 5 in the side wall as indicated in Figs. 7 and 8, the pivotal movement being occasioned by reason of the extractor-finger 28 continuing in engagement with the shell flange while the ejector finger 36 is throwing the shell outwardly. It is thus apparent that I have provided a simple and efficient mechanism for force-

fully ejecting the shell from the gun when retracted into lateral register with the opening 5.

Referring to Figs. 4, 5 and 6, 39 designates a safe-rocker which is of L-shape and has its vertical arm *a* pivoted intermediate its ends as at 40 and its horizontal arm *b* laterally offset from the arm *a* and projecting forwardly therefrom, as indicated. Mounted within the frame 1 beneath the race 13 for the side bar 11 is what may be termed a safe-bar 41, which is pivoted to the frame wall as at 42 and has its forward end provided with the upstanding lug 43 and its rear end provided with the cross-piece 44 from the upper edge of which projects a tail-piece 45. This tail-piece projects over the free end of the finger *b* of the safe-rocker 39 in position to coact with and effect a rocking of said safe-rocker when the safe-bar 41 is oscillated to lower its tail-piece 45. A spring 46, which may be termed the safe-bar spring, bears against a shoulder 46^a of the frame 1, then coils about a pin 47, projecting inwardly from the frame side to the rear of the hammer with its other end extended forwardly over a pin 48 projecting from the hammer side and projected within a notch or recess in the cross piece 44 of the safe-bar 41. When the hammer is uncocked the pin 48 acts on the spring 46 to elevate the rear end of the safe-bar 41, and when cocked the pin 48 is lowered from engagement with the spring 46 to permit the rear end of the safe-bar 41 to lower under the influence of the spring 46, when the nose of the side-bar 11 has moved forward from contact with the upper end of the lug 43 over which it passes. The elevating of the forward end of the safe-bar 41 raises its lug 43 in the path of movement of the nose of the side-bar 11 to lock such side bar and its attached parts against rearward movement until the forward end of the safe-bar has been again lowered upon a firing of the gun or uncocking movement of the hammer. A trip-lug 44^a projects without the frame 1 from the cross-piece 44 of the safe-bar 41 to permit such bar to be moved by hand to lower its forward end from the side-bar locking position shown in Fig. 1. A spring 49 projects rearwardly from the arm *b* of the safe rocker 39, thence is coiled as at 50 and has its free end extending forwardly and resting upon the tail-piece 45 of the safe-bar 41. This spring normally influences the engagement of the safe rocker 39 with the trigger 9 to lock such trigger against a hammer releasing movement, as shown in Fig. 4. It is thus apparent that when the hammer is in uncocked position, the forward end of the safe-bar 41 is lowered, and that upon a rearward movement of the hand-hold 4, the side-bar 12 moves rearwardly to coact with the cocking-arm 10 to cock the hammer, and

the side-bar 11 moves rearwardly to throw the breech-block 6 to open position and to slide the side-plate 21 to uncover the shell ejecting opening 5, as shown in Fig. 4. Upon the cocking movement of the hammer the pin 48 thereon lowers from supporting engagement with the spring 46 and permits such spring to act on the safe-bar 41 to lower its rear end when the side-bar 11 is moved forwardly from above the lug 43 of the safe bar. As the rear end of the safe-bar 41 lowers, the tail piece 45 thereof lowers into contact with the free end of the arm *b* of the safe-rocker 39 to effect a movement of such rocker from locking engagement with the trigger 9.

51 designates a thumb or finger slide which is mounted on the under side of the frame 1 at one side of the trigger 9, and is provided at the rear of the lower end of the arm *a* of the safe rocker 39 with a spur 52, which may be moved upon a forward movement of the slide 31 into contact with the lower end of the arm *a* of the safe-rocker 39 to hold it in trigger locking position. The slide 51 has a slotted part 53 which works over the trigger pin 54 to slidingly hold the slide 51 to the frame and is provided with a spring 51^a which serves to resist a free movement of the slide.

The magazine 3 contains a coiled compression spring 55 which acts upon the shells therein to successively force the same outwardly into the frame chamber when the breech-block 6 is lowered for such purpose. In order to prevent more than one shell from entering the frame chamber at each loading operation, I provide a shell stop 56 at the lower forward portion of the frame 1 at the point of opening of the magazine chamber into the frame chamber. This shell stop is centrally pivoted as at 57 at the lower edge of the magazine mouth to adapt it to have a rocking movement and has its upper or inner edge provided at the side of its fulcrum with a stop shoulder 58 and at the other side of its fulcrum with stop shoulder 59. These shoulders are of segmental form and disposed in parallel planes but spaced from each other transversely of the stop 56, as indicated, whereby to permit the flange of the shell to first engage one stop shoulder on its rearward movement from the magazine, and when the stop 56 is rocked to then release such shoulder from the shell and move the other shoulder into shell stopping position. The stop member 56 is normally held in position for its outer stop shoulder 59 to stand in the path of movement of a shell due to the action of a compression spring 60 thereon, which spring is mounted in one side of the frame 1, as shown in Figs. 15 and 16. A plunger 61 is mounted in the side of the frame 1 opposite the spring 60 and has its lower end working against an

end of the stop member 56 and its upper end disposed in position for the slide bar 12 to work over and act thereon to effect a lowering of such plunger when the cam surface 62 of such bar passes over the same. It is thus apparent that when the hand-hold 4 is moved rearwardly to actuate the shell charging parts, the side-bar 12 works over the plunger 61 to effect a lowering of such plunger whereby to rock the stop member 56 against the tension of its spring 60 to lower the shoulder 59 from the path of movement of the shell flange and raise the shoulder 58 to stop the outward movement of the next shell until the side-bar 12 has returned to its normal forward position.

The forward end of the magazine 3 contacts with a retainer lug 63 carried by the barrel 2 to coöperate with a socket in the forward end of the frame 1 to secure the magazine in operative position as is customary in firearms of this class. A retainer lever 64 is mounted in the forward end of the magazine 3 and is adapted to have its rear end depressed within the magazine against the tension of the holding spring 65 to permit the forward end of the handhold 4 to move over such end of the lever 64 and to interlock therewith due to the lug 66 on the lever working into a notch 67 in the handhold when it is desired to hold the handhold against movement on the magazine. When the lever 64 is in normal position its outer or forward end abuts against the retainer lug 63 to hold the barrel and magazine in assembled position. It is found in practice that the magazine frequently becomes loose within the retainer parts so as to permit it to have a slight play longitudinally of the barrel. To prevent this, I thread an adjusting screw 68 through the retainer lug 63 in position for its inner end to bear in the present instance against the forward end of the lever 64 whereby to tend to force the rear end of the magazine to its seat in the frame 1. Should a slight play occur in the magazine, the screw 68 may be turned to compensate for such play, as is apparent.

The operation of my improved gun is as follows:—After a firing of the gun the operator slides the hand-hold 4 rearwardly upon the magazine 3, thus causing the side-bar 11 to pass over the safe-bar 41, and to act on the rocker 20 to release its locking engagement with the shoulder 23 and move the side-plate 21 to uncover the shell ejecting opening 5 in the frame 1. The side-bar 11, upon its rearward movement, also effects a lowering of the breech-block 6, due to the stud 15 working in the cam groove 16 of such block. As the side plate 21 is retracted, the extractor fingers 27, and 28 carried thereby withdraw the fired shell from the barrel into lateral register with

the frame opening 5. When the side-plate 21 is near the limit of its rearward movement, the rear end of the shell moves into contact with the alining end of the ejector-finger 36, thus causing said finger and its carrying slide 33 to move rearwardly with the side plate against the tension of the spring 34 until stopped by striking the rear end of its race 32. After the stopping of the ejector-slide 33, the side plate 21 has a sufficient rearward movement to cause the finger 36 to force the adjacent edge of the shell flange from engagement with the extractor finger 27. Upon such release of the shell flange, the slide 33 and its finger 36 move swiftly forward under the influence of the spring 34 and cause the shell to have a lateral circular ejecting movement from the frame chamber through the opening 5 in its side wall, as indicated in Figs. 7 and 8, due to the extractor-finger 28 continuing in engagement with the shell flange during the ejecting action of the ejector-finger 36 thereon. Upon the rearward movement of the side-bar 12 it acts on the plunger 61 to oscillate the shell stop 56 to release the outer shoulder 59 from an engaged shell to permit such shell to move into the frame chamber when the breech-block 6 has been lowered sufficiently for such purpose. This movement of the shell stop 56 also forces the stop shoulder 58 upwardly into the path of movement of the succeeding shell, thus preventing more than one shell from entering the frame chamber during a reloading operation. If it be desired to quickly remove the shells from the magazine, the shell-stop can be rocked by hand for such purpose. The continued rearward movement of the side-bar 12 causes the stud 12^a thereon to act on the cocking arm 10 to cock the hammer 8. When the hammer is cocked, the trigger 9 lowers from the uncocked position, shown in Fig. 6, so as to permit the safe-rocker 39 to move into locking engagement with such trigger, as shown in Fig. 4, due to the action of the spring 49 thereon which spring has its free end bearing on the tail piece 45 of the safe bar 41. The trigger 9 thus remains locked against a hammer releasing movement until the side bar 11 has moved to the limit of its forward movement where it passes from over the lug 43 to the safe bar 41. As the safe bar 41 is thus freed to oscillate, the spring 46 acts to lower the rear end thereof and to effect a consequent coaction of the tail-piece 45 with the end of the arm 7 of the safe-rocker 39 to move such safe-rocker from locking engagement with the trigger. It is thus apparent that the hammer when cocked is locked against a firing movement until the breech-block and other operative parts have returned to firing position, whereby to prevent a premature firing. If it is desired to positively lock

the gun against being fired when the parts are in firing position, the positive safe-slide 51 may be moved so that its lug 52 engages and prevents a tripping of the trigger.

I wish it understood that my invention is not limited to any specific construction or arrangement of the parts except in so far as such limitations are specified in the claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is—

1. In a firearm of the class described, the combination of a hammer, a trigger, a member for coacting with the trigger to prevent a pulling thereof, an oscillatory element having a part adapted to coact with said member to move it from trigger locking position when said element is oscillated in one direction, means yieldingly acting on said member to move it into trigger locking position, means yieldingly acting on said element to move it to release the trigger locking member when the hammer is cocked, and means coacting with said element to prevent a movement thereof to release the trigger locking member until such latter means has moved to a predetermined position.

2. In a firearm of the class described, the combination of a hammer, a trigger, a safe-rocker for locking the trigger against a hammer releasing movement, an oscillatory safe-bar having a part for coacting with the safe-rocker to move it from trigger locking position when the safe-bar is oscillated in one direction, means yieldingly acting on the safe-rocker to influence it to engage the trigger, means acting on the safe-bar to influence its safe-rocker releasing movement, a bar movable over the safe-bar in contact with a part thereof and adapted to prevent a trigger releasing movement of said safe-bar until said bar has reached a predetermined point in its permissible movement, and means carried by the hammer for effecting a movement of the safe-bar when the hammer is in uncocked position.

3. In a firearm of the class described, a hammer having a lug projecting from the side thereof, a trigger, a safe-rocker for locking the trigger against a hammer releasing movement, an oscillatory member in advance of the hammer and having a part at its rear end for coacting with the safe rocker to release it from the trigger when said member is oscillated in one direction, means for influencing a movement of said member to move the safe-rocker to release the trigger and coöperating with said hammer lug to effect a movement of said member in the opposite direction when the hammer has a firing movement, and mechanism operative to cock the hammer and to prevent a movement of said member to release the safe-rocker from the trigger until such mecha-

nism has reached a predetermined point in its movement.

4. In a fire-arm of the class described, the combination of a hammer, a trigger, an L-shaped safe-rocker for locking the trigger against a hammer releasing movement, means influencing a trigger engaging movement of said safe-rocker, an oscillatory member disposed in advance of the hammer and having an upstanding spur at its forward end and a tail piece at its rear end for coacting with the safe-rocker to release it from engagement with the trigger when said member is oscillated in one direction, a spring acting on said member to influence its movement to release the safe rocker from the trigger and coöperating with a part of the hammer to effect an opposite movement of the member when the hammer is uncocked, and means movable to cock the hammer and to coact with the spur on said member to prevent a movement of such member under the influence of its spring until said means has reached a predetermined point in its movement, said spur serving to lock said means against movement when in normal position and when the hammer is cocked.

5. In a firearm of the class described, the combination of a hammer, a trigger, an oscillatory trigger locking member, an oscillatory safe-bar disposed in advance of the hammer and having a part projecting in position to be manually moved, means influencing the movement of said safe-bar to act on said member to move it from trigger engaging position, means influencing an engagement of said member with the trigger, and means operative to cock the hammer and having a part movable over said safe-bar to prevent it from moving to release said member from engagement with the trigger until said means has returned to its normal position, said safe bar serving to lock said latter means against movement when said means is in normal position and the hammer is cocked.

6. In a firearm of the class described, the combination of a hammer, a trigger, a member influenced to normally engage the trigger to prevent a hammer releasing movement thereof, hammer cocking means, a part movable with a portion of said means, and mechanism automatically operable by said part to move said member to release the trigger when the hammer is cocked and said part is returned to its normal position.

7. In a firearm of the class described, a hammer, a trigger, a safe-rocker for locking said trigger against a hammer releasing movement, means influencing said safe-rocker to normally engage the trigger, means movable to effect a cocking of the hammer, a part movable with a portion of said cocking means, mechanism automatically operable by said part to release said safe-rocker

from engagement with the trigger when the hammer is cocked and the said part has reached a predetermined point in its movement, and means movable to coact with the safe-rocker to prevent a trigger releasing movement thereof.

8. In a firearm of the class described, a hammer, a trigger, a safe-rocker influenced to normally engage the trigger to lock it against hammer releasing movement, means movable to effect a cocking of the hammer, mechanism automatically operable by said means to effect a movement of the safe-rocker to release the trigger when the hammer is cocked, said cocking means having a part movable therewith which acts on said mechanism to prevent a safe rocker releasing movement thereof until the cocking means has returned to firing position.

9. In a firearm of the class described, a hammer, a trigger, a safe-rocker influenced to normally engage the trigger to lock it against a hammer releasing movement, means operative to effect a cocking of the hammer, and mechanism automatically operative to move the safe rocker to release the trigger when the hammer is in cocked position, said mechanism having a part which coacts with a part of the cocking means to prevent a movement thereof when in normal position and the hammer is cocked, and having a part which projects without the firearm to permit such mechanism to be manually moved to permit a movement of the cocking means when the hammer is cocked.

10. In a firearm of the class described, the combination of a hammer, a trigger, a safe-rocker influenced to normally engage the trigger to prevent a hammer releasing movement thereof, means operable to effect a cocking of the hammer, mechanism automatically operative to release the safe-rocker from engagement with the trigger when the cocking means has returned to its normal position and to lock such cocking means against further movement until the firearm is discharged, and a member movable to positively lock the safe rocker against a trigger releasing movement.

11. In a firearm of the class described, the combination of a hammer, a trigger, a member for coacting with the trigger to prevent a hammer releasing movement thereof, means movable to effect a release or engagement of said member relative to the trigger, shell charging mechanism, and means attached to and movable with said mechanism to effect a cocking of the hammer and to act on said member controlling means to prevent disengagement of the member from the trigger during a cocking of the hammer and until said mechanism has returned to its normal position.

12. In a firearm of the class described, the combination of a frame, a handhold, a part

projecting therefrom and having a notch in its rear end portion, a side-plate, and a rocker having a part for engaging in said notch and a tail-piece for locking with a portion of the frame to prevent movements of the side plate, said handhold part being normally in engagement with said rocker to retain its tail piece in locking engagement with the frame, and upon a rearward movement of the hand-hold adapted to release the rocker from frame locking position and to cooperate therewith to effect a rearward sliding movement of the side-plate.

13. In a firearm of the class described, the combination of a frame having an opening in the side thereof, of a side plate movable to close and uncover such opening, shell extracting fingers carried by such plate one of said fingers being pivotally movable, a slide yieldingly mounted adjacent the point of rearward movement of the fixed extractor finger, means yieldingly holding the slide at its limit of forward movement, a shell ejecting finger pivotally carried by said slide, said slide being forced rearwardly by a shell coacting with said shell ejecting finger and when the side-plate is at a predetermined point in its rearward movement effecting a release of the shell from the fixed extractor finger and moving to eject the shell laterally through said opening.

14. In a firearm of the class described, a frame having an opening in a side thereof and a race in its opposite side, a slide member movable longitudinally of the frame to open and close said opening, shell extracting means carried by said member, a slide movable in said race, a spring yieldingly acting on the slide to retain it at the limit of its forward movement, a shell ejecting finger pivoted to said slide and influenced by said spring to normally stand in the path of movement of the shell, said slide and its finger being compressed against the tension of its spring by the extracting movement of the shell and stopping short of the limit of rearward movement of said slide mem-

ber to effect a disengagement of the shell flange from the adjacent extractor finger and then moving under the influence of its spring to eject the shell in a pivotal manner laterally from the frame opening, and means for moving said slide member.

15. In a firearm, a breech block having its nose forked, means for supporting the breech-block in firing position, and means for relatively moving the furcations of such end of the breech block to effect adjustment thereof to compensate for wear.

16. In a firearm, the combination of a breech-block having its nose slotted transversely of the direction of shifting movements of the breech-block, means coacting with one of the furcations of such block to support the block in firing position, and means for relatively moving the two furcations to adjust the one in register with the shell to compensate for wear.

17. In a firearm of the class described, a frame having a magazine, a socket therein, a barrel carried by such frame, a magazine retaining lug projecting from the barrel, a shell-magazine held to the barrel by the co-operating action of the frame socket and said lug, a hand-hold slidingly mounted on the magazine, a lever carried by the magazine for yielding oscillatory movements and serving to limit the forward movements of the hand-hold on the magazine, said lever being movable to interlock with the hand-hold to prevent movements thereof on the magazine, and a screw threaded in said retainer lug and having its inner end bearing against the forward end of said lever and being adjustable to force the magazine home within the frame socket to compensate for wear.

In testimony whereof, I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

CHARLES F. LEFEVER.

Witnesses:

C. W. OWEN,
M. G. GASKELL.