Aug. 16, 1938. W. C. ROEMER 2,126,816

SLIDE-ACTION FIREARM

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Fig. 1.

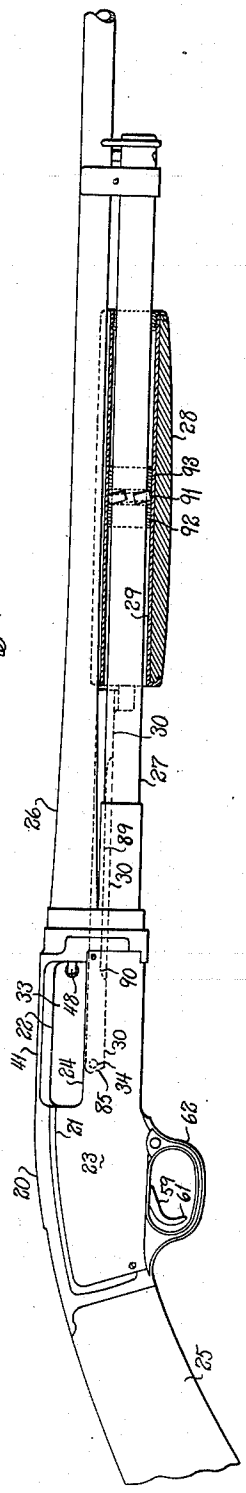


Fig. 6.



Fig. 11.

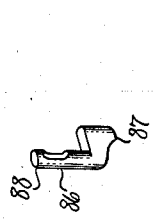


Fig. 14.

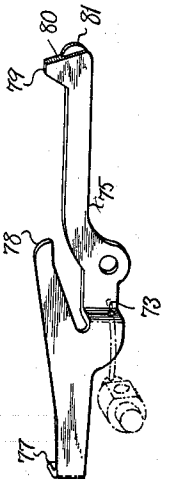


Fig. 15.



Fig. 12.

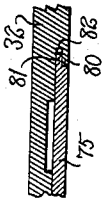
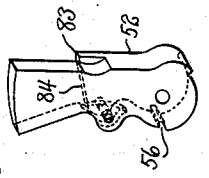


Fig. 13.



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Fig. 2.

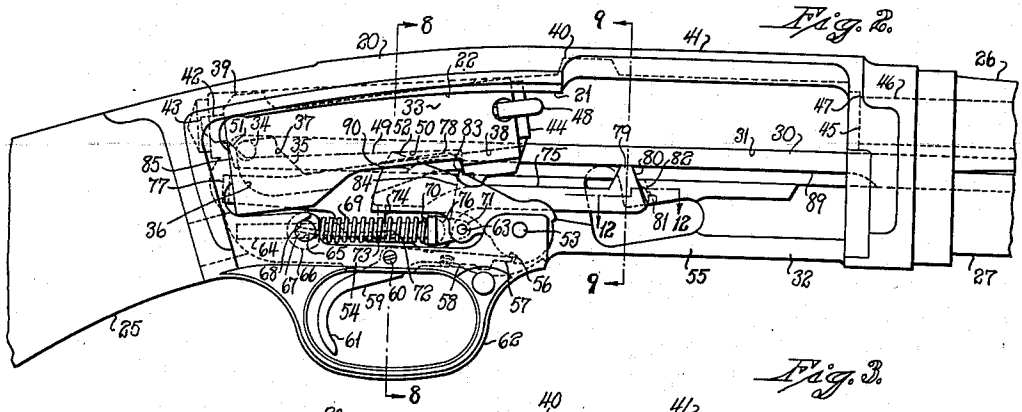


Fig. 3.

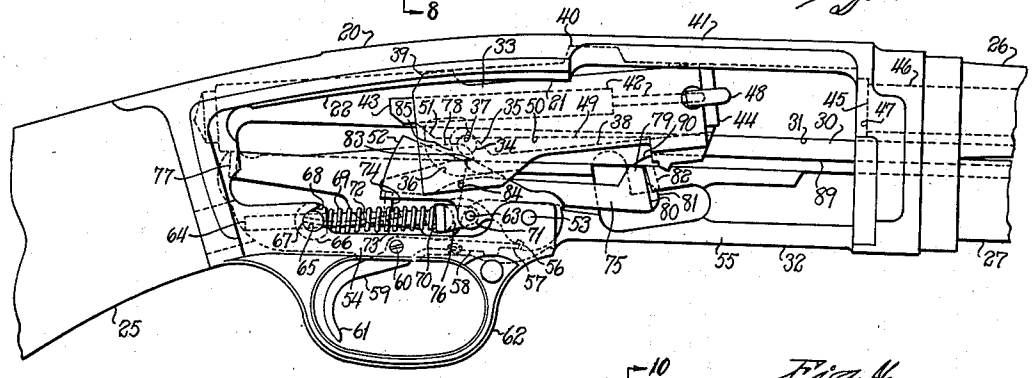


Fig. 4.

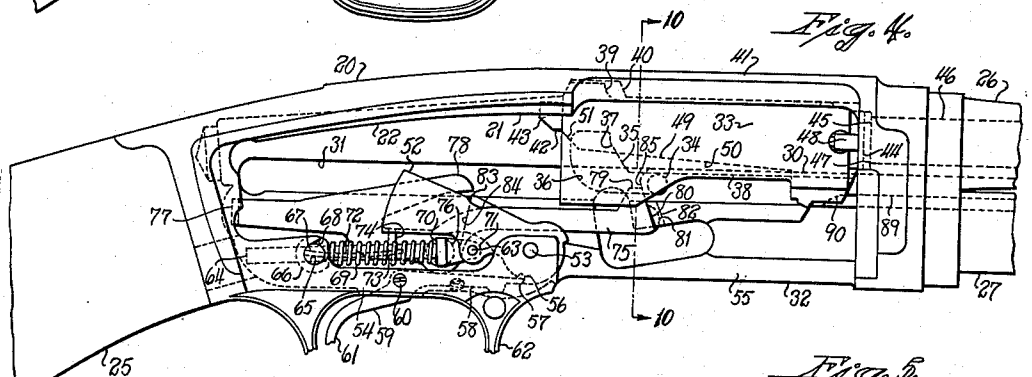
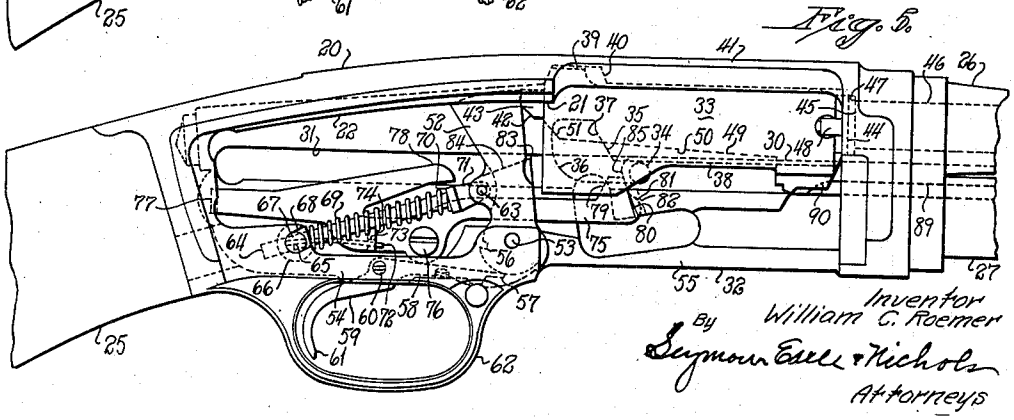


Fig. 5.



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Fig. 6.

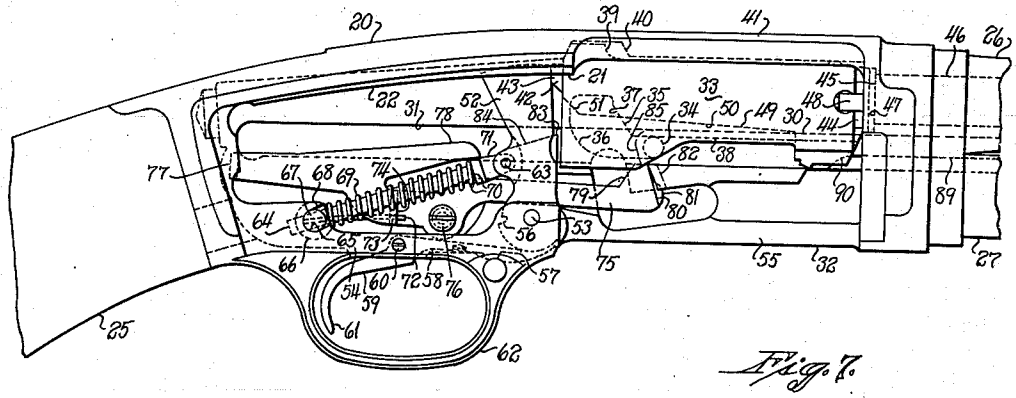


Fig. 7.

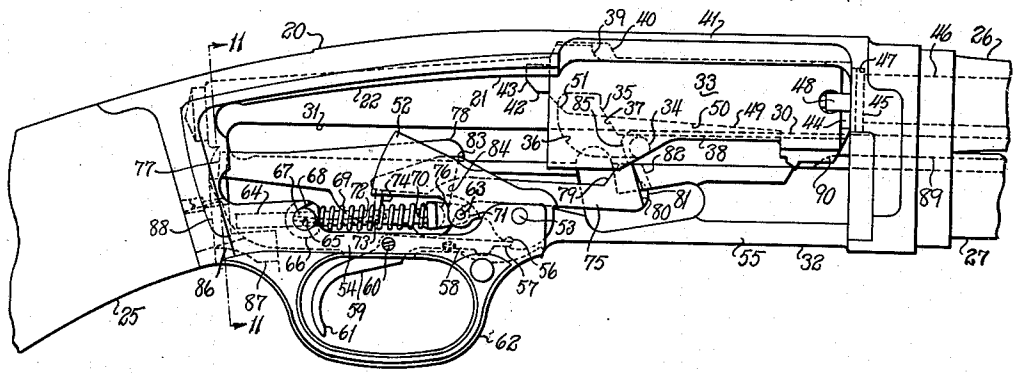


Fig. 8.

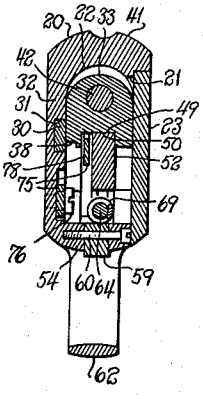


Fig. 9.

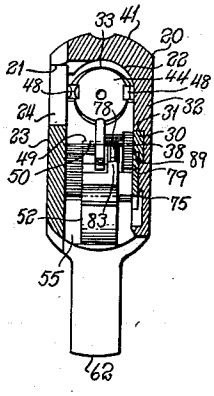


Fig. 10.

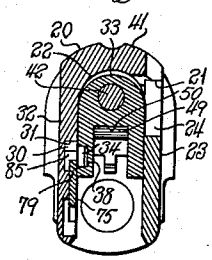
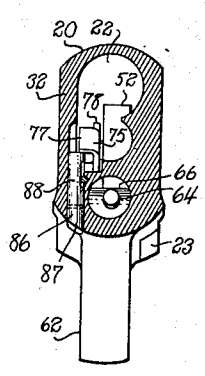


Fig. 11.



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UNITED STATES PATENT OFFICE

2,126,816

SLIDE-ACTION FIREARM

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Application January 12, 1937, Serial No. 120,218

9 Claims. (Cl. 42—17)

This invention relates to an improvement in firearms of the class which are manually operated by means of a reciprocating slide, and which are for that reason commonly referred to as "slide-action" firearms.

One of the main objects of the present invention is to provide a superior firearm of the type referred to with simple, reliable and effective means for holding the manually-operable slide-handle or equivalent member against displacement during the interval between the closing of the bolt and the firing of the gun, to thus prevent the unintentional partial retirement of the bolt during such interval and the consequent failure of the gun to properly fire when the trigger is pulled.

Another object of the present invention is to provide a superior firearm of the type referred to in which reliable and effective automatic means is provided for preventing a premature release of the bolt after the same has been moved into and locked in its breech-closing position to thus guard against accidents due to hang-fires.

A further object of the present invention is to provide simplified and direct acting means whereby the hammer of the gun is automatically prevented from firing the same until such time as the bolt has been fully closed.

With the above and other objects in view, as will appear to those skilled in the art from the present disclosure, this invention includes all features in the said disclosure which are novel over the prior art and which are not claimed by me in a separate application.

In the accompanying drawings, in which certain modes of carrying out the present invention are shown for illustrative purposes:

Fig. 1 is a broken view mainly in side elevation of a slide-action firearm constructed in accordance with my invention, the slide-handle and immediately associated parts being shown in vertical longitudinal section;

Fig. 2 is a broken view in side elevation of the receiver portion thereof, with the receiver cover-plate removed, and the butt-stock, barrel and magazine broken away, the parts being shown in the positions which they assume when the bolt is moved into its fully open or retracted position;

Fig. 3 is a corresponding view but showing the parts in the positions which they assume when the bolt is about midway in its forward travel toward its closed position;

Fig. 4 is a similar view but showing the parts in the positions which they assume after the bolt has been moved from the position in which it is shown in Fig. 3 into its fully closed position;

Fig. 5 is a similar view showing the parts in the positions which they assume at the instant the hammer strikes the firing-pin;

Fig. 6 is a similar view showing the parts in the positions which they assume after the gun has been fired and after the recoil has taken place;

Fig. 7 is a similar view showing the bolt in its closed position and the hammer in its fully cocked position, and the slide-locking member manually tilted by means of the release-plunger to permit the retraction of the bolt without having previously released the hammer from its cocked position;

Fig. 8 is a vertical transverse sectional view taken on the line 8—8 of Fig. 2;

Fig. 9 is a similar view taken on the line 9—9 of Fig. 2;

Fig. 10 is a vertical transverse sectional view taken on the line 10—10 of Fig. 4;

Fig. 11 is a vertical transverse sectional view taken on the line 11—11 of Fig. 7;

Fig. 12 is a broken detail sectional view taken on the line 12—12 of Fig. 2;

Fig. 13 is a perspective view of the hammer detached;

Fig. 14 is a similar view of the slide-locking member detached;

Fig. 15 is a broken perspective view of the rear end of the operating slide bar;

Fig. 16 is a perspective view of the oscillating plunger-guide detached together with its operating-spring; and

Fig. 17 is a similar view of the manually-operable release-plunger detached.

The particular slide-action firearm herein chosen for the illustration of the invention includes, as shown, a receiver 20 which may be briefly described as being open as at 21 in its right side face and being provided with an internal mechanism-receiving chamber 22 in which is mounted the major portion of the moving parts of the gun mechanism in the usual manner of firearms. The opening 21 in the right side face of the receiver 20 is closed by a receiver cover-plate 23 (Figs. 1, 8, 9 and 10) and as shown, the upper forward corner of the said cover-plate 23 is cut away as at 24 to provide a lateral ejection-opening leading outward from the chamber 22 in the said receiver 20.

Secured in any approved manner to the rear end of the receiver 20 is a butt-stock 25, while projecting from the forward end thereof is the

usual gun-barrel 26, below which is mounted a tubular magazine 27 which latter is adapted in the usual manner of tubular magazines to successively feed cartridges into the lower forward end of the chamber 22 in the receiver 20.

The magazine 27 serves as a guide and support for a reciprocating slide-handle 28 preferably formed from wood or other heat-insulating material and mounted upon an operating-sleeve 29 which encircles the said magazine 27 and has projecting from it an operating slide-bar 30 which extends rearwardly into the chamber 22 in the receiver 20 for reciprocation in and guidance by a guide-groove 31 formed in the integral left side wall 32 of the said receiver 20 opposite the open face 21 thereof.

The rear end of the operating slide-bar 30 is operatively connected to a reciprocating and tilting bolt 33 with freedom for limited relative movement with respect thereto, as will hereinafter appear, by means of a stud 34 mounted adjacent the extreme rear end of the said bar 30 and inwardly projecting therefrom into a substantially L-shaped cam-groove 35 formed in the left side of the said bolt 33 and consisting of a depressing-and-retracting cam-surface 36, a closing-and-lifting cam-surface 37, and a bolt-locking surface 38, with which latter the said stud 34 is normally engaged when the said operating slide-bar 30 is at or near the limit of its forward movement, as shown in Figs. 4 to 7 inclusive.

When the operating slide-bar 30 and the bolt 33 are at the limit of their forward movement and the bolt-locking surface 38 is resting upon the stud 34, the bolt will be locked against downward tilting movement by the said stud and will be locked against rearward displacement by having its locking-lug 39 entered into a locking-recess 40 formed in the under surface of the upper wall 41 of the receiver 20, with the sloping rear surface of the said lug engaged with the similarly sloped rear wall of the said locking-recess 40.

In the bolt 33 is mounted a reciprocating firing-pin 42 which may be of any approved construction and normally has its rear end 43 projecting beyond the rear end of the bolt for being struck by a suitable hammer, as will hereinafter appear. The forward end of the bolt is formed with a forwardly-projecting cylindrically-contoured extension 44 which is adapted to seat within a similarly-shaped recess 45 formed in the receiver 20 immediately adjacent the rear end of a concentric cartridge-chamber 46 formed in the rear portion of the barrel 26, the rear face of which latter provides a seat 47 for the rim of a cartridge. The bolt 33 is also provided with the usual complementary extractors 48 adapted to engage the rim of a cartridge and extract the same from the chamber 46 when the bolt is moved rearwardly.

The under face of the bolt 33 is formed centrally with a longitudinal upwardly-and-rearwardly-sloping hammer-receiving groove 49 having the extreme rear end of its top wall 50 chamfered as at 51 and adapted to engage and override a pivotal hammer 52. The said hammer 52 is pivotally mounted upon a transverse pin 53 mounted in the bottom wall 54 of the receiver 20 just to the rear of the loading-opening 55 therein. The said hammer is provided upon its rounded lower end with a sear-abutment 56 adapted to be engaged by a sear-finger 57 forwardly projecting from a sear-arm 58 constituting the upper forward arm of a trigger 59 pivotally mounted upon a transverse pin 60 in the lower wall 54 of the receiver and having its finger-piece 61 operating within a trigger-guard 62 formed integral with the said receiver, as shown.

Pivotally connected to the hammer 52 by means of a transverse pin 63 is the forward end of a plunger 64 serving also, in the construction shown, as a hammer-spring guide-rod and having sliding bearing in a diametrical passage 65 formed in an oscillating guide-member 66 which also serves as a spring-abutment. The said guide-member is formed at each of its respective opposite ends with a cylindrical trunnion 67, each of which oscillates in a forwardly-and-upwardly-sloping notch 68 formed in the receiver 20. The respective trunnions 67 of the guide-member 66 are maintained in their respective notches 68 by a hammer-spring 69 encircling the plunger 64 and abutting at its rear end against the said guide-member 66, while its forward end abuts against the rear face 70 of the head portion 71 of the said plunger.

The guide-member 66 has rigidly mounted in one of its cylindrical trunnions 67 the rear end of a wire-like slide-lock operating-spring 72, the forward end of which extends into a bearing-passage 73 formed in the laterally-extending portion 74 of an oscillating sheet-metal slide-locking member 75. The said slide-locking member 75 is mounted for rocking movement in a vertical plane upon a transverse stud 76 mounted in the receiver 20, before referred to.

The extreme rear end of the slide-locking member 75 is transversely bent to provide a releasing-member 77 and is formed about midway of its length with an upwardly-and-forwardly-sloping guard-finger 78, for the purpose as will hereinafter appear. At its forward end, the said member 75 is provided with an upwardly-extending wedge-shaped slide-locking nose 79. The sloping forward end 80 of the slide-locking member 75 is adapted to act as a locking-abutment, as will hereinafter appear, and is formed with a forwardly-offsetting semicircular retaining-lip 81 adapted to slide within an under-cut groove 82 formed in the left side-wall 32 of the receiver 20.

The guard-finger 78 of the slide-locking member 75 is adapted under certain conditions to be moved over the upper forward corner 83 of a guard-ledge 84 formed upon the left side of the hammer 52, when the said hammer is in its rearwardly-swung position, as shown in Figs. 2, 3, 4 and 7. The said guard-finger 78 is engaged by the corner 83 of the ledge 84, just referred to, to guard against the movement of the said hammer prior to the movement of the bolt 33 into its fully-closed and locked position, as will more fully appear from the following.

For the purpose of enabling the user of the firearm to unlock the bolt 33 and move the same into its fully-retired position shown in Fig. 2 without first requiring the release of the hammer 52, I provide manually-operable means for rocking the slide-locking member 75 to withdraw its locking-nose 79 from the path of the operating slide-bar 30 and out of engagement with the rear end 85 thereof. The said rear end 85 of the slide-bar 30 is sloped, as shown, to correspond to the slope of the forward end 80 of the slide-locking member 75, for the purpose of securing a frictional engagement between the two said surfaces, for the purpose as will hereinafter appear.

The means above referred to, for manually un-

locking the bolt 33, consists, mainly as shown in Figs. 7, 11 and 17, of a vertically-reciprocating releasing-member 86 which includes a finger-button 87 and a cylindrical upwardly-extending shank 88, which latter is adapted to engage with the under-surface of the releasing-finger 77, before described, which extends laterally from the rear end of the slide-locking member 75.

As shown particularly well in Fig. 15, the operating slide-bar 30 is formed in its right under corner with a longitudinal groove 89 terminating at its rear end in a downwardly-curved cam-surface 90 adapted to cam the slide-locking nose 79 of the slide-locking member 75 downward as the said slide-bar is moved forward from its rearmost position for the purpose as will hereinafter appear.

For the purpose of normally maintaining the rear end 85 of the operating slide-bar 30 in frictional engagement with the similarly-sloped forward end 80 of the slide-locking member 75 when the breech is in its fully closed position, I employ a sheet-metal spring 91 which encircles the tubular magazine 27 and has its respective ends laterally offset in opposite directions, as shown in Fig. 1. One of the laterally-offset ends of the said spring 91 engages the forward end of a collar 92 soldered, brazed, or otherwise secured to and within the sleeve 29 of the slide-handle 28 and adapted to slide freely upon the said magazine 27. The complementary oppositely-offset end of the spring 91 is adapted to abut against the rear edge of a collar 93 encircling the magazine 27 and to which it is secured by solder, brazing, or otherwise, and upon the outer periphery of which the sleeve 29 of the slide-handle 28 is adapted to freely slide.

For the purpose of making clear the operation and functioning of the slide-action firearm herein chosen for illustration, let it be presumed that the slide-handle 28 has been manually moved to the limit of its rearward movement, with the effect of moving the parts into the positions in which they are shown in Fig. 2, in which figure it will be noted that the bolt is fully retired, so that a cartridge may be introduced into the chamber 46 either directly or from the magazine 27 by means of suitable mechanism (not shown).

If, now, the slide-handle 28 is moved forwardly so as to move the bolt from the position in which it is shown in Fig. 2 into the position in which it is shown in Fig. 3, the cam-surface 90 on the operating slide-bar 30 will have engaged the nose 79 of the slide-locking member 75 with the effect of depressing the same and thereby rocking the entire slide-locking member about its pin 76 in a clockwise direction, with the effect of causing the guard-nose 78 of the said member 75 to move into camming engagement with the corner 83 of the guard-ledge 84 of the hammer 52 to thus further depress the said hammer and cause its sear-abutment 56 to move slightly out of contact with the sear-nose 57 of the trigger 59, though the said sear-nose remains in the path of the said abutment, as will clearly appear by reference to Fig. 3.

The clockwise rocking movement of the slide-locking member 75 caused by the action of the cam-surface 90 of the operating-slide 30, as just above described, will occur against the tension of the operating-spring 72, which latter, under the conditions above described, will exert a constant effort to swing the locking-member 75 in a counterclockwise direction.

The continued forward movement of the slide-handle 28 to the limit of its forward movement, in which the spring 91 is placed under tension, will move the bolt bodily forwardly and rock the same upwardly into its locked position, as shown in Fig. 4. During the forward travel of the operating slide-bar incident to the moving of the bolt into its fully closed position, as just described, the rear end 85 of the said slide-bar 30 will be moved forwardly of the forward end 80 of the slide-locking member 75 and thus permit the already tensioned spring 72 to rock the member 75 in a counterclockwise direction and move the nose 79 thereof upwardly into the path of the said slide-bar 30.

Upon the release of the forward manual thrust upon the slide-handle 28 the spring 91 will assert itself and cause the rear end 85 of the slide-bar 30 to frictionally engage with the forward end 80 of the slide-locking member 75 to frictionally hold the same in the position in which it is shown in Fig. 4 for the purpose as will hereinafter appear. As the slide-locking member 75 is rocked in a counterclockwise direction, as just described, its guard-nose 78 will thereby be moved out of engagement with and out of the path of the corner 83 of the guard-ledge 84 and thus permit the hammer 52 to swing to a slight degree in a clockwise direction to reengage its sear-abutment 56 with the sear-nose 57.

As the operating slide-bar 30 is moved forwardly from the position in which it is shown in Fig. 3 into the position in which it is shown in Fig. 4, its stud 34 will have engaged the closing-and-lifting cam-surface 37 of the bolt 33 so as to first move the said bolt to the limit of its forward movement and subsequently tilt the rear end of the same upwardly to engage the rear surface of its locking-lug 39 with the rear wall of the locking-recess 40. After the bolt has been moved forwardly and tilted, as just described, the stud 34 will under-ride the locking-surface 38 thereof and support the bolt in its locked position.

With the parts in the positions shown in Fig. 4, the gun is in condition for firing, which may be effected in the usual manner by a rearward draft upon the finger-piece 61 of the trigger 59.

The rearward draft upon the finger-piece 61 of the trigger will disengage the sear-nose 57 from the sear-abutment 56 and thus permit the hammer-spring 69 to drive the hammer 52 in a clockwise direction and cause the upper portion of its forward face to impinge against the rear end 43 of the firing-pin 42, as shown in Fig. 5, which illustrates the position of the parts at the instant the said hammer engages with the said firing-pin and just prior to the forward travel of the latter to fire the cartridge.

As the hammer 52 swings in a clockwise direction, as just above described, the plunger 64 will have moved bodily forwardly in the passage 65 of the guide-member 66, and will at the same time have been rocked in a counterclockwise direction, and similarly rock the said guide-member 66, as may be observed by comparing Fig. 4 with Fig. 5. The counterclockwise turning movement of the guide-member 66 will serve to reversely tension the operating-spring 72, which will now tend to swing the slide-locking member 75 in a clockwise direction and, therefore, tend to move the locking-nose 79 thereof out of the path of the operating slide-bar 30. However, owing to the rearward pressure exerted upon the said slide-bar 30 by the spring 91, the frictional engagement between the rear end 85 of the said slide-bar and the forward end 80 of the member

75 will be sufficient to prevent the operating-spring 72 from effecting the clockwise turning movement of the member 75 until such time as recoil takes place in the firearm, as will be presently described.

As the hammer 52 drives the firing-pin 42 forwardly from the position shown in Fig. 5 to that shown in Fig. 6 (which movement requires but a fractional part of a second), the gun will be fired, with the effect of causing the same to recoil and, owing to the fact that the slide-handle 28 is slidably mounted upon the magazine 27, the said slide-handle and its rigidly connected parts including the operating slide-bar 30 will, due to their inertia, and despite the tension of the spring 91, not immediately partake of the rearward movement of the remainder of the fire arm under the action of the recoil just referred to, but will lag behind, with the effect that the slide-locking member 75 (which immediately partakes of the recoil movement) will move rearwardly relative to the said slide-bar 30 and disengage the forward end 80 of the former from the rear end 85 of the latter, whereupon the slide-locking member will immediately turn in a clockwise direction under the urge of the operating-spring 72, so that the slide-locking nose 79 will be fully retired out of the path of the operating slide-bar 30. The parts will now have assumed the positions in which they are shown in Fig. 6.

The operating slide-bar 30 having been unlocked, as above described, may now be manually moved rearwardly by means of the slide-handle 28. This latter action will effect the retirement of the bolt 33 for the purpose of extracting the now fired cartridge from the chamber 46 and to permit the introduction of a fresh cartridge thereinto.

As the slide-bar is moved rearwardly for the purpose just above described, the stud 34 thereof will move rearwardly out from under the bolt-locking surface 38 of the L-shaped cam-groove 35 of the bolt and into engagement with the depressing-and-retracting cam-surface 36 thereof, with the effect of first rocking the rear end of the said bolt downwardly to disengage its locking-lug 39 from the locking-recess 40 and then moving the said bolt bodily rearward and ultimately into the position in which it is shown in Fig. 2.

As the bolt 33 is moved rearwardly, as above described, the rear end 43 of the firing-pin 42 will first be engaged with the hammer 52, with the effect of starting the swinging movement of the same in a counterclockwise direction against the tension of the spring 69. As the hammer rocks rearwardly, as described, it will subsequently be engaged by the chamfered surface 51 and ultimately by the top wall 50 of the hammer-receiving groove 49 in the said bolt, with the effect of tilting the said hammer sufficiently to cause its sear-abutment 56 to move over the sear-nose 57 and slightly past the forward end thereof.

As the hammer 52 is swung in a counterclockwise direction as just above described, the spring 69 will be further compressed and the plunger 64 will be moved rearwardly, through the passage 65 in the guide-member 66, with the effect of turning the said guide-member in a clockwise direction sufficiently to reverse the tension of the operating-spring 72 and cause the same to yieldingly urge the slide-locking member 75 in a counterclockwise direction. At substantially the same time that the rear end of the guard-ledge 84 of the hammer 52 reaches the forward end of the guard-finger 78, the rear end of the groove 89 in the slide-bar 30 will have been brought into line with the locking-nose 79 of the member 75, whereupon the said nose will rise under the tension of the spring 72 and the said member 75 will turn in a counterclockwise direction to a degree sufficient to retire the guard-finger 78 out of the path of the said ledge 84 and thus permit the hammer to pass rearwardly and downwardly into its fully retired position.

The parts will now have reassumed the positions in which they are shown in Fig. 2, preparatory to another cycle of operations corresponding to that already described.

In the event that after the gun is cocked and the breech closed, it should for any reason be desired to move the bolt into its fully retired position such, for instance, as to extract an unfired shell from the cartridge chamber, this may be accomplished without releasing the hammer, by an upward pressure exerted upon the finger-piece 87 of the releasing member 86 to cause its shank 88 to engage the under face of the releasing-finger 77 of the slide-locking member 75 and thus rock the latter member in a clockwise direction to forcibly depress its locking-nose 79 and move the same out of the path of the operating slide-bar 30, as shown in Figs. 7 and 11. With the locking-nose of the member 75 retired as just above described, the slide-handle 28 may be moved rearwardly and through the intermediary of the operating slide-bar 30 effect the unlocking and retirement of the bolt 33 into the position in which it is shown in Fig. 2.

Particular attention is called to the fact that by utilizing the swinging movement of the guide-member 66 or its equivalent, to reversely tension an operating-spring, not only is substantially the entire swing of the hammer utilized to effect the action referred to but a direct action is achieved which is both reliable and effective and lowers the cost and avoids the complexity of additional parts.

The invention may be carried out in other specific ways than those herein set forth without departing from the spirit and essential characteristics of the invention, and the present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive, and all changes coming within the meaning and equivalency range of the appended claims are intended to be embraced therein.

I claim:

1. In a slide-action firearm, the combination with the operating-slide, slide-locking member and firing-member thereof; of operating-means for causing said firing-member to shift the said slide-locking member into and out of its slide-locking positions, the said operating-means including an oscillating-member, a reciprocatable and tiltable member operatively connected to and both rocked and reciprocated by the movement of the said firing-member and having sliding movement relative to the said oscillating-member and coupled thereto for concurrent rocking movement therewith, and yielding spring-means actuated by the said oscillating-member and operatively interposed between the same and the said slide-locking member to shift the latter.

2. In a slide-action firearm, the combination with the operating-slide, slide-locking member and pivotal hammer thereof; of operating-means for causing said pivotal hammer to shift the said slide-locking member into and out of its slide-locking positions, the said operating-means

including an oscillating-member having a transverse bearing-passage therein, a reciprocatable and tiltable member operatively connected to and both rocked and reciprocated by the pivotal movement of the said hammer and having sliding bearing in the bearing-passage in the said oscillating-member to effect the oscillation of the latter, and yielding spring-means actuated by the said oscillating-member and operatively interposed between the same and the said slide-locking member to shift the latter.

3. In a slide-action firearm, the combination with the operating-slide, slide-locking member and firing-member thereof; of operating-means for causing said firing-member to shift the said slide-locking member into and out of its slide-locking positions, the said operating-means including an oscillating-member, a reciprocatable and tiltable member operatively connected to and both rocked and reciprocated by the movement of the said firing-member and having sliding movement relative to the said oscillating-member and coupled thereto for concurrent rocking movement therewith, and a spring-arm carried by the said oscillating-member and operatively connected to the said slide-locking member to shift the latter.

4. In a slide-action firearm, the combination with the operating-slide, slide-locking member and pivotal hammer thereof; of operating-means for causing said pivotal hammer to shift the said slide-locking member into and out of its slide-locking positions, the said operating-means including an oscillating-member having a transverse bearing-passage therein, a reciprocatable and tiltable member operatively connected to and both rocked and reciprocated by the pivotal movement of the said hammer and having sliding bearing in the bearing-passage in the said oscillating-member to effect the oscillation of the latter, and a spring-arm carried by the said oscillating-member and operatively connected to the said slide-rocking member to shift the latter.

5. In a slide-action firearm, the combination with the operating-slide, slide-locking member and firing-member thereof; of operating-means for causing the said firing-member to shift the said slide-locking member into and out of its slide-locking positions, the said operating-means including a reciprocating-and-rocking plunger connected to the said firing-member, an oscillating-member oscillated by the said plunger, and yielding spring-means actuated by the said oscillating-member and directly interposed between the same and the said slide-locking members to shift the latter; and a firing-spring encircling the said plunger and thrusting against the said oscillating-member.

6. In a slide-action firearm, the combination with the operating-slide, slide-locking member and pivotal hammer thereof; of operating-means for causing the said hammer to shift the said slide-locking member into and out of its slide-locking positions, the said operating-means including a plunger pivotally connected to the said hammer, an oscillating-member having a transverse bearing-passage therein slidably receiving a portion of the said plunger, and yielding spring-means actuated by the said oscillating-member and operatively interposed between the same and the said slide-locking member to shift the latter.

7. In a slide-action firearm, the combination with the operating-slide and slide-locking member and firing-member thereof; of operating-means for causing the said firing-member to shift the said slide-locking member into and out of its slide-locking positions, the said operating-means including a reciprocating-and-rocking plunger pivotally connected to the said firing-member, an oscillating-member having a transverse bearing-passage therein and slidably receiving a portion of the said plunger, and a spring-arm carried by the said oscillating-member and operatively connected to the said slide-locking member for shifting the same.

8. In a slide-action firearm, the combination with the operating-slide, slide-locking member and pivotal hammer thereof; of operating-means for causing the said hammer to shift the said slide-locking member into and out of its slide-locking positions, the said operating-means including a plunger pivotally connected to the said pivotal hammer, an oscillating-member having a transverse bearing-passage therein and slidably receiving a portion of the said plunger, and a spring-arm carried by the said oscillating-member and operatively connected to the said slide-locking member for shifting the same.

9. In a slide-action firearm, the combination with the operating-slide, slide-locking member and pivotal hammer thereof; of operating-means for causing the said pivotal hammer to shift the said slide-locking member into and out of its slide-locking position, the said operating-means including an oscillating-member having a transverse bearing-passage therethrough and journaled for oscillating movement in a portion of the firearm structure which is normally stationary, a reciprocating-and-tilting plunger pivotally connected to the said pivotal hammer and having sliding movement in the bearing-passage in the said oscillating-member to turn the said oscillating-member as the said pivotal hammer is swung, and yielding spring-means actuated by the said oscillating-member and operatively interposed between the same and the said slide-locking member to shift the latter; and a hammer-actuating spring encircling the said plunger at a point intermediate the said hammer and the said oscillating-member and thrusting against the said oscillating-member.

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