L. N. DIEHM.

PISTOL.

APPLICATION FILED SEPT. 4, 1920.

1,405,765. Patented Feb. 7, 1922.

Fig. 1.

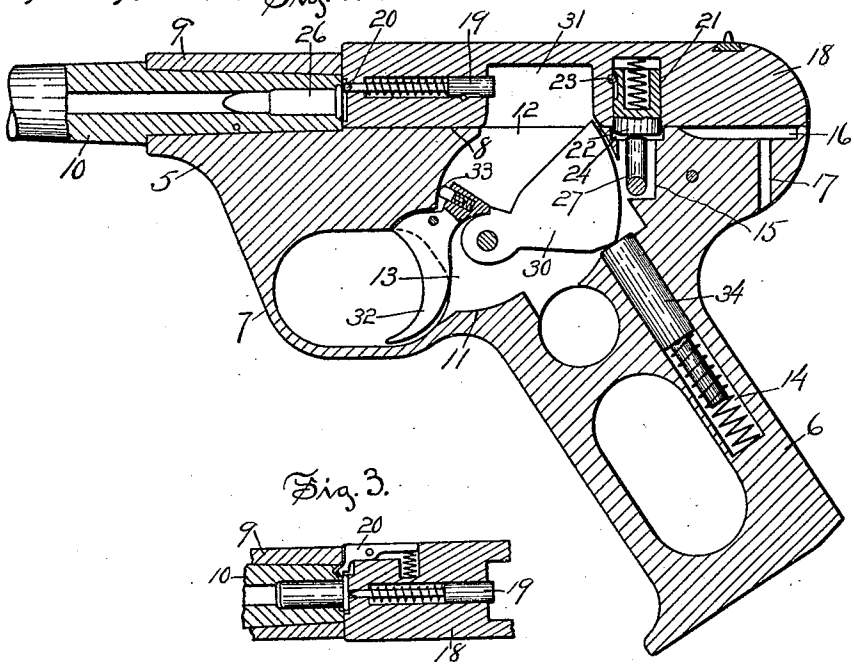


Fig. 3.

Fig. 2.

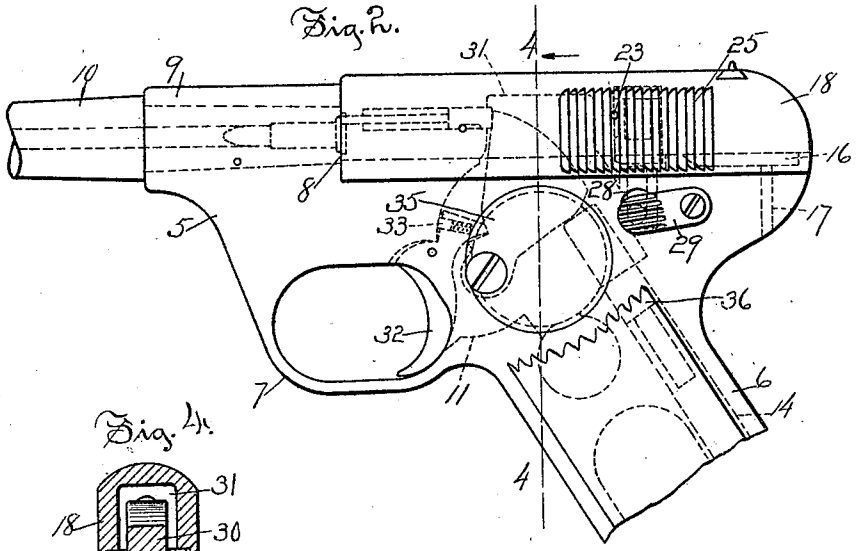
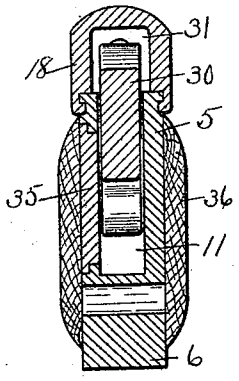


Fig. 4.



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PISTOL.

1,405,765. Specification of Letters Patent. **Patented Feb. 7, 1922.**

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To all whom it may concern:

Be it known that I, LUCIUS N. DIEHM, a citizen of the United States and a resident of West Hartford, in the county of Hartford and State of Connecticut, have invented new and Improved Pistols, of which the following is a specification.

My invention relates to the class of firearms designed to be held in the hand while being discharged, and one especially designed for firing single shots, and an object of my invention, among others, is to provide a pistol of this kind that shall be extremely simple in its construction and particularly efficient in its operation.

One form of pistol embodying my invention and in the construction and use of which the objects herein set out, as well as others, may be attained, is illustrated in the accompanying drawings, in which—

Figure 1 is a view in central lengthwise section through a pistol embodying my invention, the barrel being broken off.

Figure 2 is a view in side elevation of the same.

Figure 3 is a detail view in section through a portion of the barrel and breech-bolt.

Figure 4 is a view in cross section on plane denoted by dotted line 4—4 of Figure 2.

In the accompanying drawings the numeral 5 indicates the receiver of my improved pistol that comprises one part of a frame made up of the receiver and a handle 6 all integrally formed together with a trigger guard 7. The receiver is cut-away at its upper back edge to provide a breech-bolt notch 8, thereby creating a barrel receiving projection 9 within which a barrel 10 is secured in any suitable manner.

A particular feature of my invention resides in the simplicity of construction of the frame that is cut in from one side to form a hammer chamber 11 with an opening 12 through the top, a trigger opening 13 through the front edge into the opening within the trigger guard, a well 14 in the bottom and extending into the handle, and a breech-bolt lock opening 15 extending to the upper edge of the frame. This upper edge of the frame is also provided with a breech-bolt stop recess 16 located back of the opening 15 and with a stop releasing hole 17 extending from said recess through the bottom of the back part of the receiver.

A breech-bolt 18 is formed to fit the notch 8 and to slide therein, said bolt being attached to the receiver to slide thereon as by means of interengaging ribs and grooves, and in a manner that will be readily understood. The breech-bolt has the usual firing pin 19 and an extractor 20 located and operating in a manner common to firearms of this type.

A breech-bolt lock recess 21 is formed in the under side of the breech-bolt opposite the opening 15 when the breech-bolt is in its closed position, said recess 21 containing a spring actuated breech-bolt lock 22 slidably mounted in the recess and retained therein as by means of a pin 23, the upper part of the opening 15 being counterbored as at 24 to receive said lock. When the breech-bolt is in its closed position the location of the lock in the counterbore 24 will hold said bolt against any force created by firing operations.

The sides of the breech-bolt are roughened as at 25, as a means of grasping said bolt to force it backwardly into open position preparatory to inserting a cartridge 26 into the chamber in the barrel. A breech-bolt lock release comprises a finger 27 extending through an opening 28 in the side of the receiver and into the opening 15, said finger being rigidly secured to a breech-bolt lock releasing lever 29 pivotally attached to the side of the receiver and extended for manual operation as a means for releasing the breech-bolt lock to allow the breech-bolt to be moved to its open position. When the breech-bolt is thus moved to its open position the breech-bolt lock will enter the stop recess 16, striking the rear edge of said recess to limit the backward movement of the breech-bolt. When it is desired to remove the breech-bolt from the receiver, an instrument may be thrust through the hole 17 to engage the breech-bolt stop to move it inwardly sufficiently to disengage it from the rear end of the recess 16 and thus allow the breech-bolt to be removed from the receiver.

A hammer 30 is pivotally mounted in the hammer chamber 11 in position to operate against the firing pin 19, said hammer being insertable through the opening 12 when the breech-bolt is removed.

An important feature of the invention resides in that structure of the breech-bolt whereby a hammer recess 31 is formed in the under surface of the breech-bolt within which recess the end of the firing pin pro-

jects to be engaged by said hammer. A trigger 32 is pivotally mounted in the opening 13 and is formed to engage a notch or notches in the hammer, in a manner common to pistols of this type. A trigger plunger 33 is seated upon a spring in a recess in the trigger, as clearly shown in Figure 1 of the drawings, said plunger thrusting against the front wall of the chamber 11, and a hammer plunger 34 is seated upon a spring in the well 14 and thrusts with its free end against the hammer to force it against the firing pin when said hammer is released by the trigger.

The chamber 11 presents an opening of uniform width through the floor of the notch 8 into the opening in the trigger guard, and a hole opening through the side of the frame into this chamber is closed as by means of a cap 35 secured as by a screw, as shown in Figure 2 of the drawings, and grips 36 of any suitable material may be affixed to the sides of the handle in any desired manner.

I claim—

1. A pistol comprising a frame having a hammer chamber formed in one side with a hammer opening from said chamber to the upper edge of the frame and an opening from said chamber into the trigger guard opening and also with a breech-bolt lock opening rearwardly of the hammer opening, and firing mechanism mounted on the frame and including a breech-bolt having a breech-bolt lock projecting into the breech-bolt lock opening.

2. A pistol comprising a frame including a receiver having a recess for a breech-bolt lock to hold the breech-bolt in its closed position, said receiver also having a recess for said lock to limit backward movement of the breech-bolt, a breech-bolt slidably mounted on said frame, a breech-bolt lock located to project below the under surface of the breech-bolt to engage said recesses, and means for releasing said lock from the recess that holds the breech-bolt in its closed position.

3. A pistol comprising a frame, and firing mechanism mounted on said frame and including a breech-bolt slidably attached thereto, a breech-bolt lock mounted in the breech-bolt and adapted to project below the under surface thereof into a recess in said frame, a finger projecting through an opening in the frame to disengage said lock from said recess, and a lever pivotally attached to the frame and supporting said finger.

4. A pistol comprising a frame including a receiver, and firing mechanism mounted in the frame and including a breech-bolt slidably attached to the receiver, a breech-bolt lock adapted to project below the under surface of the breech-bolt to engage a recess in the upper edge of said receiver, and a hole projecting from said recess to the under part of said receiver.

5. A pistol comprising a frame having a hammer chamber therein and with an opening from said hammer chamber to the upper edge of the frame and another opening from said chamber to the upper part of the frame for a breech-bolt lock, and firing mechanism mounted on said frame and including a breech-bolt slidably attached thereto and with a recess in its under surface to register with said hammer opening, and a breech-bolt lock located in an opening back of said recess to engage said breech-bolt lock opening.

6. A pistol comprising a frame having a flat upper edge to receive a breech-bolt and with an opening having a substantially parallel sides extending vertically through the floor of said flat upper edge and horizontally through the frame to the front of the latter, said opening being enlarged intermediate its ends to provide a hammer chamber, and firing mechanism mounted in said frame and including a breech-bolt mounted to slide on said floor, a hammer mounted in said chamber, and a trigger in engagement with said hammer.

7. A pistol comprising a frame having a flat support edge to receive a breech-bolt and with a downwardly extending handle, a trigger guard located in the angle between the receiver and the handle, said structure having a hammer chamber therein with openings located at angles one to another, one of said openings extending through the upper edge of the receiver and the other opening extending through the front of the handle into said trigger guard, a trigger located in the last mentioned opening, and a hammer located in the other opening.

LUCIUS N. DIEHM.