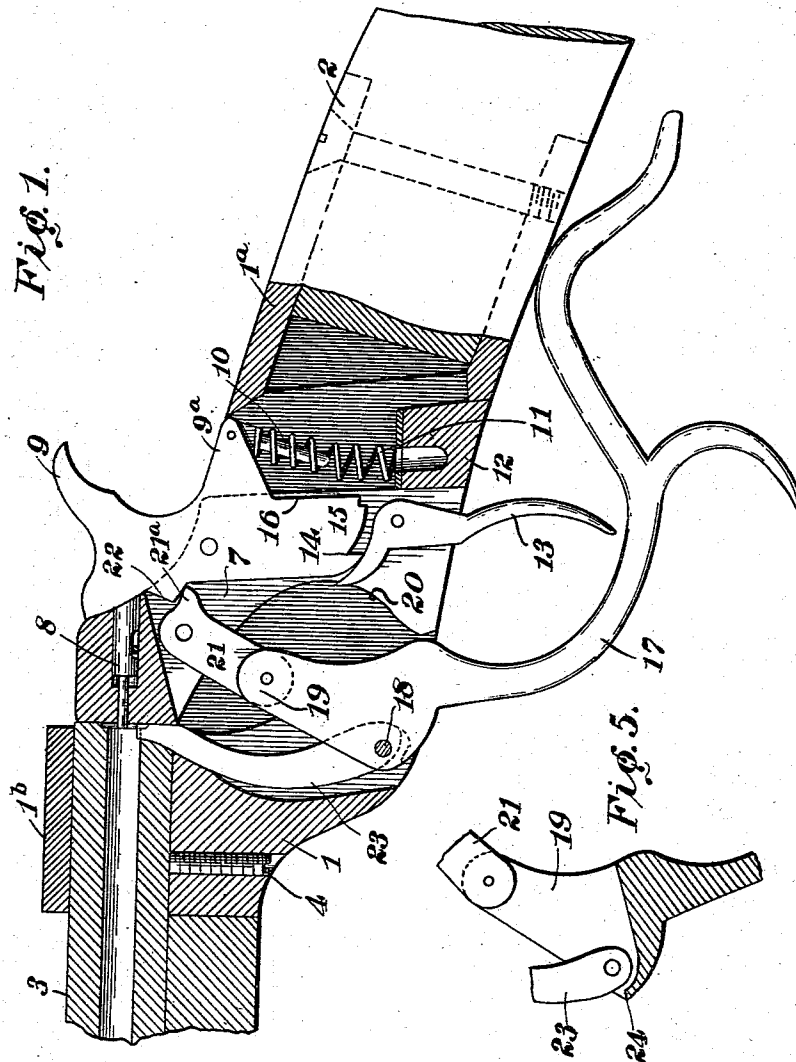


T. B. GOYETTE.
ACTION FOR FIREARMS.
APPLICATION FILED JULY 9, 1908.

972,076.

Patented Oct. 4, 1910.
2 SHEETS—SHEET 1.



Witnesses
[Signature]
W. P. Stoddard

Inventor
T. B. Goyette.

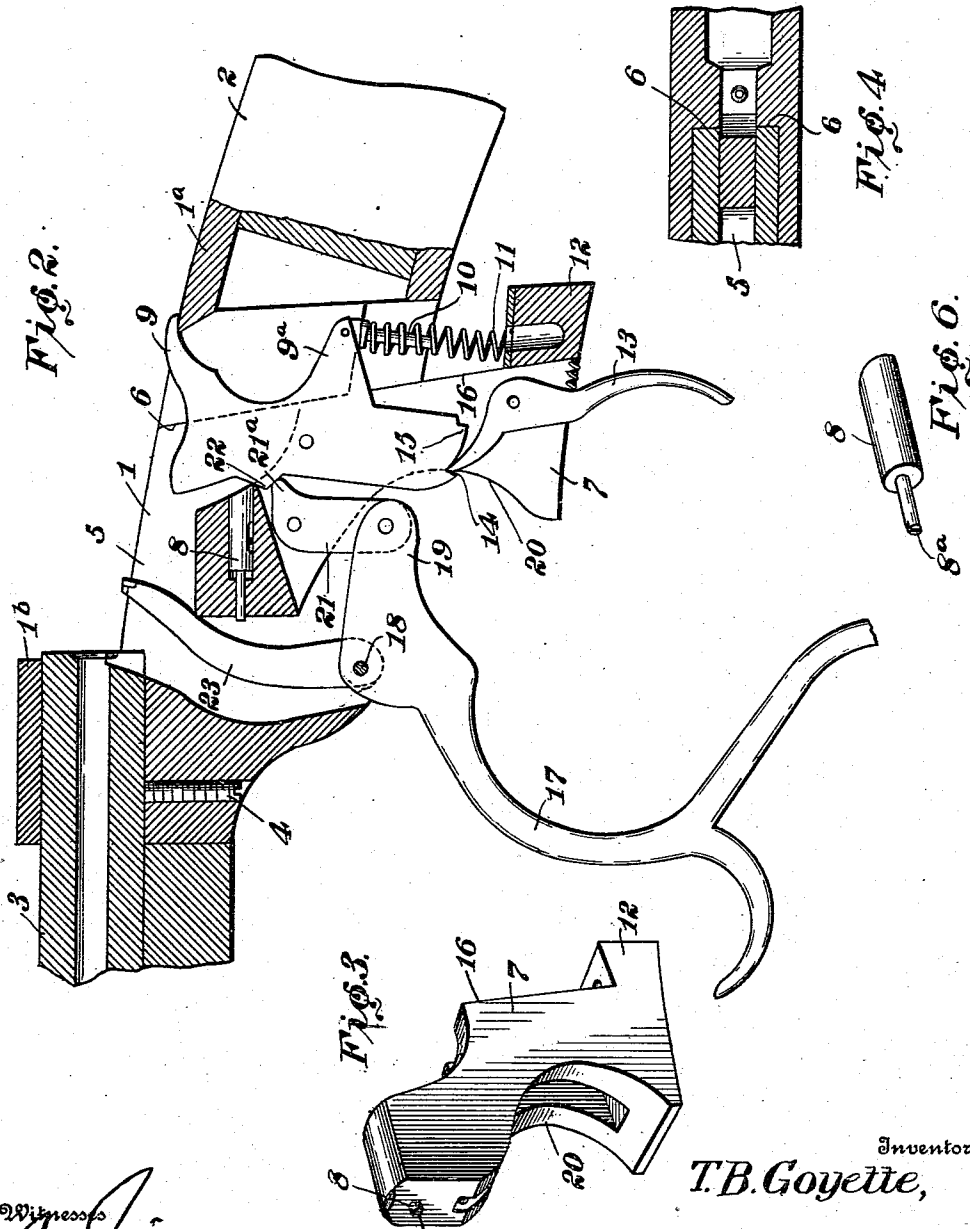
By *[Signature]* Attorneys

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UNITED STATES PATENT OFFICE.

TREPHLE B. GOYETTE, OF CHICOPEE FALLS, MASSACHUSETTS.

ACTION FOR FIREARMS.

972,076.

Specification of Letters Patent.

Patented Oct. 4, 1910.

Application filed July 9, 1908. Serial No. 442,768.

To all whom it may concern:

Be it known that I, TREPHLE B. GOYETTE, citizen of the United States, residing at Chicopee Falls, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Actions for Firearms, of which the following is a specification.

The present invention relates to certain new and useful improvements in fire arms of that type in which the breech block is controlled by a finger lever, and the primary object of the invention is the provision of a novel action in which the breech block is carried by the finger lever and all of the parts of the mechanism are connected to the frame by a single fastening member.

The invention further contemplates an action for fire arms which is safe in its operation and will leave the breech end of the barrel entirely unobstructed for the removal of a shell or for cleaning purposes when opened.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a longitudinal sectional view through the improved action for fire arms, the breech block being shown as moved upwardly into an operative position. Fig. 2 is a similar view with the breech block lowered into an inoperative position. Fig. 3 is a detail view of the breech block. Fig. 4 is a horizontal sectional view through the rear portion of the frame. Fig. 5 is a detail view of the arm projecting from the pivot end of the finger lever, portions being broken away. Fig. 6 is a detail view of the firing pin.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings, the numeral 1 designates the frame, the rear end of the frame being provided with the usual tangs 1^a for attachment with the stock 2 while the forward portion of the frame is extended upwardly at 1^b and provided with the usual opening for receiving the breech end of the barrel 3, a set screw 4 being employed for preventing the barrel from working loose. A vertical opening 5 is formed in the frame

1 and the rear portion of this opening is contracted to form the shoulders 6 which are disposed upon opposite sides of the frame and are inclined so as to have a cam action upon the breech block as will be hereinafter described and force the same tightly against the breech end of the barrel. Slidably mounted within the opening 5 is a breech block 7 which may be raised so as to fit over the breech of the barrel or lowered within the frame so as to leave the breech entirely unobstructed. The upper portion of the breech block which is designed to fit against the end of the barrel is provided with a firing pin 8 and a hammer 9 which is designed to strike against the firing pin to explode a cartridge is pivotally mounted upon the rear portion of the breech block. In the preferred construction the extremity of the firing pin is bifurcated as indicated at 8^a, such a construction having the advantage of striking against the rim of the cartridge in two distinct places. Projecting rearwardly from the pivot portion of the hammer is an arm 9^a and loosely connected to the extremity of this arm is a pin 10 which is received within one end of a coil spring 11, the opposite end of the coil spring fitting within a cavity in an extension 12 projecting rearwardly from the base of the breech block and the spring normally tending to swing the hammer against the firing pin. A trigger 13 is pivotally mounted upon the lower portion of the breech block, the lower portion of the trigger projecting below the breech block while the upper end of the trigger is designed to engage the usual notches 14 and 15 upon the hammer for holding the latter either at a half cock or at a full cock. When the breech block is moved upwardly within the opening 5 of the frame the rear end 16 thereof which is inclined engages the cam shoulders 6 and coöperates therewith to force the breech block forwardly and hold the upper portion thereof securely against the end of the barrel.

A finger lever 17 is pivotally mounted by means of the pin 18 upon the frame 1 and when in normal position serves in the usual manner to form a guard for the trigger 13. Projecting upwardly from the pivot end of the finger lever is a bifurcated arm 19 which is received within a cut away portion 20 of the breech block. A link 21 has the opposite ends thereof pivotally connected to the

breech block and finger lever respectively, that end of the link connected to the breech block being formed with a cam finger 21^a which is designed to engage a projection 22 upon the hammer 9. When the finger lever is swung downwardly the link 21 is first moved so that the cam finger 21^a thereof engages the projection 22 of the hammer and moves the latter to half cock. A continued movement of the lever then lowers the breech block within the frame 1 so as to leave the breech of the fire arm entirely unobstructed. In the reverse manner when the lever is swung upwardly the breech block is moved to its original position, the inclined rear end thereof having a cam engagement as previously set forth with the shoulders 6 to force it forwardly and hold it securely against the end of the barrel.

For the purpose of removing an exploded cartridge from the chamber an extractor 23 is utilized, the extractor being in the nature of a curved arm the upper portion of which fits within a notched portion of the barrel so as to engage the rim of the shell in the usual manner while the lower end is pivotally mounted upon the pin 18 which also forms a bearing for the finger lever. This finger lever is formed at its pivot end with a shoulder 24 which is designed to engage the extractor arm when the lever has been swung downwardly to lower the breech block and in this manner the extractor is swung rearwardly so as to withdraw the empty shell from the chamber.

Particular attention is directed to the fact that the breech block which carries all of the mechanism for exploding the cartridge is not connected directly to the frame in any manner, but is carried by the finger lever 17, both the finger lever and breech block being removable when the pivot pin 18 has been removed. It will also be observed that the extractor 23 is mounted upon the same pin 18 as the lever and will drop out of position as soon as the lever and breech block have been removed. This construction has the advantage of enabling all of the various parts of the cartridge exploding mechanism to be assembled before the breech block is placed in position and enables the parts to be withdrawn so that ready access can be had thereto for cleaning or repairing purposes.

Having thus described the invention, what is claimed as new is.

1. An action for fire arms comprising a frame formed with a vertical opening there-through, the opposite walls of the opening being formed with cam shoulders extending downward and rearward, the lower end of the opening being rearwardly enlarged or cut away, a breech block slidably mounted within said opening, the rear opposite edges of the breech block having inclined faces

extending downward from the upper end thereof and adapted to engage the cam shoulders when moved into operative position, said breech block being formed with a rearwardly extending projection fitting the rearwardly enlarged portion of the frame opening, a hammer pivoted in the breech block, a coil spring carried upon the rearward extension of the breech block and engaging the hammer, a trigger mounted in the lower end of the breech block, and a finger lever pivoted intermediate of its ends in said frame, and a connection from the finger lever to the breech block.

2. An action for fire arms comprising a frame formed with a vertical opening there-through, the opposite walls of the opening at the rear thereof being formed with opposite cam shoulders extending downward and rearward along the whole extent of said opening, the lower end of said opening being rearwardly enlarged or cut away, a breech block slidably mounted within said opening, said block being composed of integral side pieces and top and bottom connecting pieces, the upper portion of the rear edges of the side walls being downwardly and rearwardly inclined to fit against the faces of the opposed shoulders, the lower end of said block having a rearwardly extending portion adapted to fit into the cut away portion at the lower end of the rear wall of the frame, cartridge exploding means mounted upon the breech block and between the side walls thereof, a hammer pivoted to the breech block and having a rearward prolongation thereon extending into the space between said cam shoulders, a spring mounted upon the rearwardly extending portion of the breech block and engaging with the prolongation of the hammer, and a finger lever pivoted to the frame and having a link connection with said breech block.

3. An action for fire arms, comprising a frame formed with a vertical opening, the rear of said opening having two separated cam shoulders extending downwardly from the upper end of the opening nearly to the lower end thereof, the rear wall of the opening below said frame being also downwardly and rearwardly inclined, a breech block slidably mounted within the opening, the upper portion of the breech block being rearwardly and downwardly inclined to fit against said shoulders, the lower portion of the block being rearwardly extended to fit against the lower ends of said shoulders, said extended portion having a socket, a hammer pivotally mounted upon the breech block, and having a rearward prolongation, a pin pivoted to said prolongation, a spring surrounding said pin and engaging said rearward prolongation, trigger mechanism mounted on the breech block and adapted to operate the hammer, and a finger lever piv-

otally mounted upon the frame and having a linked engagement with said breech block to raise or lower the same.

4. In an action for fire arms, the combination of a frame formed with a vertical opening, the rear wall of said opening being provided with downwardly extending separated cam shoulders, the face of said shoulders being rearwardly and downwardly inclined, the frame below the shoulders being cut away, a breech block slidably mounted within the vertical opening of the frame and formed with a rearward prolongation adapted to fit said cut-away portion of the frame, the rear face of the breech block being upwardly and forwardly inclined to fit against said cam shoulders and to be forced tightly against the breech end of the barrel when moved upwardly, a firing pin mounted upon the breech block, a hammer mounted upon the breech block, said hammer being formed with a projection, a trigger mounted upon the breech block for actuating the hammer, a removable pin upon the frame, a finger lever pivotally mounted upon the pin and formed at its pivoted end with a shoulder and also with an arm which projects within a cut-away portion of the breech block, a link connecting the arm of the finger lever to the breech block and formed with a cam finger designed to engage the before-mentioned projection upon the hammer to move the hammer to a half-cock when the finger

lever is lowered to lower the breech block, and an extractor pivotally mounted upon the before-mentioned pin and adapted to be engaged by the shoulder upon the finger lever to withdraw a cartridge when the finger or lever is lowered.

5. In an action for firearms, the combination with a frame having rearwardly and downwardly inclined cam shoulders, of a breech block, the rear face of which is rearwardly and downwardly inclined, a firing pin mounted in the upper end of the breech block, a hammer pivoted in the breech block, said hammer having a rearward prolongation intermediate its ends, opposite to the pivot of the hammer, a coil spring mounted at its lower end upon the breech block, the upper end of said spring engaging with said rearward prolongation of the hammer, a finger lever pivoted to said frame, and a link pivoted at one end to the extremity of the finger lever and at its other end pivoted to the breech block, said link having a rearward and upward extension adapted to hold the hammer at half cock when the breech block is lowered.

In testimony whereof I affix my signature in presence of two witnesses.

TREPHLE B. GOYETTE. [L. S.]

Witnesses:

A. JENNIE REDDY,
EMMA F. LAWLOR.