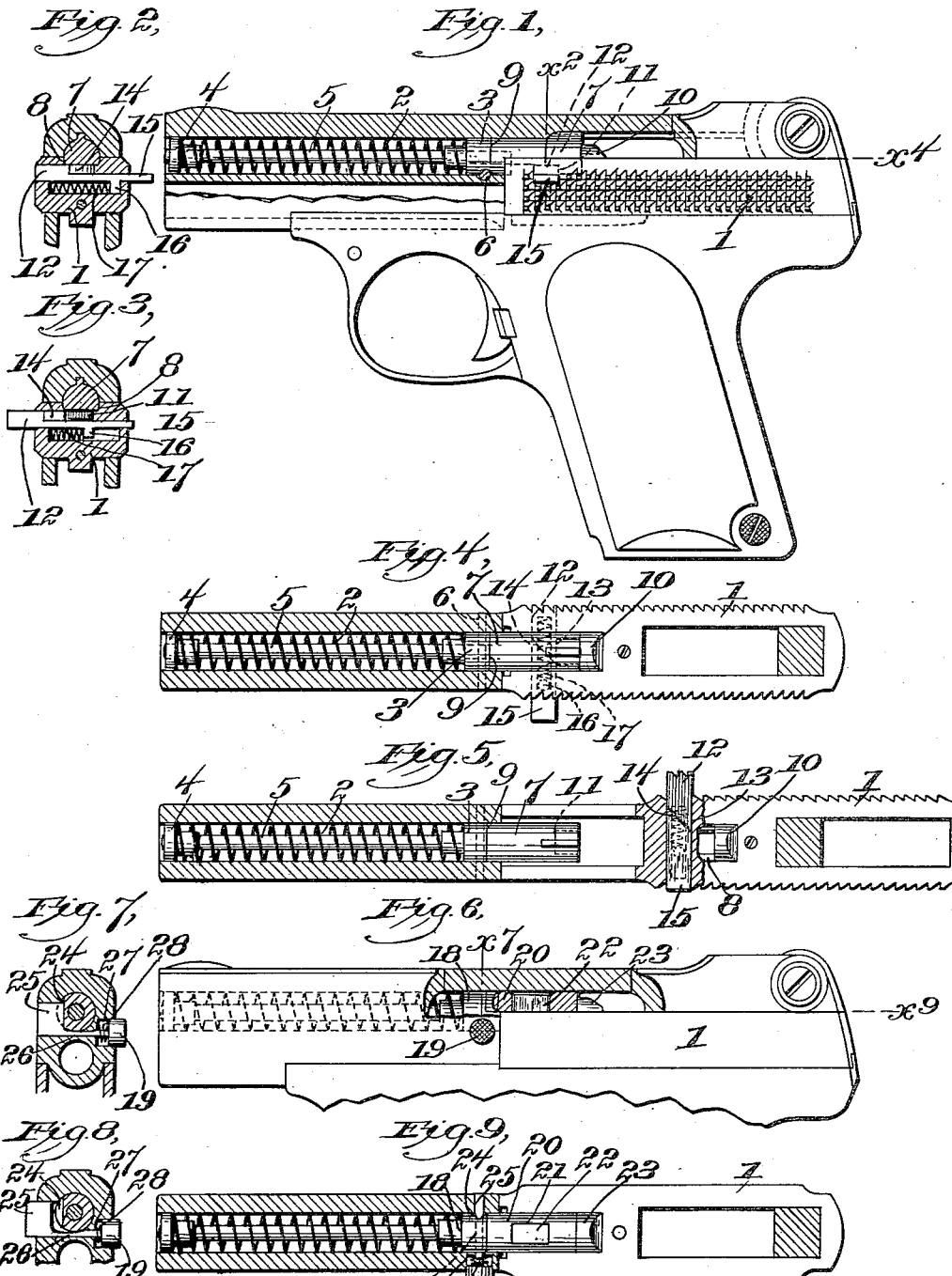


J. H. WESSON.
 AUTOMATIC PISTOL.
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1,033,971.

Patented July 30, 1912.



Witnesses:
 Jas. J. Maloney.
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 by [unclear] Atty.

UNITED STATES PATENT OFFICE.

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AUTOMATIC PISTOL.

1,033,971.

Specification of Letters Patent.

Patented July 30, 1912.

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To all whom it may concern:

Be it known that I, JOSEPH H. WESSON, a citizen of the United States, residing in Springfield, in the county of Hampden and State of Massachusetts, have invented an Improvement in Automatic Pistols, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

The present invention relates to an automatic fire arm, and is shown as embodied in an automatic pistol of the so-called blow-back type, in which the breech block is forced back by the reaction of the charge in firing the pistol, allowing the spent shell to be ejected and a loaded cartridge to take its place and be forced into the chamber by the return of the breech block through the action of a spring. In a pistol of this class, it is necessary to cock the pistol prior to the first discharge by manually pulling back the breech block which cocks the hammer, and allows a cartridge to come into position to be forced into the chamber, and the purpose of the present invention is to facilitate this preliminary cocking operation by providing the fire arm with means for moving the breech block without bringing the actuating spring into operation. This admits of the use of a much stronger spring and improves the automatic action of the pistol; and in the cocking operation the only resistance to the backward movement of the breech block is that of the hammer spring.

Figure 1 is a side elevation, partly in section, of a pistol embodying the invention; Fig. 2 is a transverse section on the line x^2 of Fig. 1; Fig. 3 is a similar section showing the parts in a different position; Fig. 4 is a horizontal section, on the line x^4 of Fig. 1, showing the breech block in place; Fig. 5 is a similar view showing the breech block pulled back to the cocking position; Fig. 6 is a view similar to Fig. 1 showing a modification; Figs. 7 and 8 are sections, on the line x^7 of Fig. 6, showing the parts in different positions; and Fig. 9 is a horizontal section, on the line x^9 , of Fig. 6.

Referring to Fig. 1, the pistol is provided with the blow back breech block 1 of the usual construction, which is adapted to cock the hammer when it is forced back by the reaction of the fired charge, so that a car-

tridge will be delivered from the magazine into the space in front of the breech block, the said cartridge being inserted in the chamber by the forward movement of the breech block which takes place in response to the action of a spring 2 contained in a chamber or recess above the barrel. The said spring 2 lies between a fixed abutment 3 and a movable abutment 4 which is at the end of a rod 5 normally connected with the breech block 1, so that the backward movement thereof produces a corresponding movement of the abutment 4, compressing the spring 2, whereby the action of the spring restores the breech block to its normal position from which it has been moved either by hand, or by the recoil action, after the pistol has been operated.

As ordinarily constructed, the rod 5 is permanently connected with the breech block so that in the preliminary cocking operation, it is necessary to overcome the stress of the spring 2 as well as that of the hammer spring. In order to facilitate the cocking operation, the pistol constructed in accordance with this invention is provided with means whereby the breech block can be moved without a corresponding movement of one spring abutment with relation to the other, as by disconnecting the breech block from the movable abutment, so that in the preliminary cocking operation the breech block can be drawn back without compressing the spring, and then pushed forward by hand and reconnected with the movable abutment. The same result can obviously be accomplished by disconnecting the stationary abutment from the part to which it is normally connected, as will be more fully described hereinafter.

In the construction shown in Fig. 1, the abutment 3 is permanently fixed in the spring containing chamber by means of a cross pin 6 or equivalent connecting device, and the rod 5 which extends through the abutment 3 is arranged to be disconnected from the breech block through the action of a manually operated catch, thereby admitting of a movement of the breech block without a corresponding movement of one spring abutment relative to the other and consequent compression of the spring. The said rod 5 is shown as provided with an enlarged portion 7 which is contained in a recess 8 in the breech block, and lies between

the back wall 9 of the fixed abutment 3 and a lug 10 on the top of the breech block, a portion of the lower surface of the enlarged portion 7 being flattened, as best shown in Figs. 1, 2 and 3. The unflattened portion of the part 7 thus constitutes a shoulder 11 to cooperate with a transversely movable catch 12 in the breech block. The said catch 12 consists of a sliding member located in a transverse slot cut through the breech block 1; the upper surface of the catch being shaped so as to form an upward projection which has a flat rear surface 13 and a beveled front surface portion 14, as best shown in Figs. 4 and 5. The said member also projects laterally beyond the side of the breech block so as to form a finger piece 15; and a downwardly projecting lug 16 connected with the catch bears against a spring 17 located in a recess below the catch 12 to restore the same to its normal position when released by the finger. In its normal position, shown in Figs. 1, 2 and 4, the flat rear surface 13 of the catch lies in contact with the shoulder 11, formed by the unflattened part of the enlarged portion 7, so that when the breech block 1 moves back, the portion 7 will be carried back with it, pulling back the rod 5 and the abutment 4, and compressing the spring 2. In cocking the pistol by hand, however, if the catch 12 is pressed inward against the stress of the spring 17, the surface 13 on the catch is moved out of the path of the shoulder 11 on the part 7, thus disconnecting said part from the breech-block 1, so that the breech block can be moved back without pulling back the rod 5 and compressing the spring. When the breech block is pushed forward, the rear wall of the unflattened portion of the part 7 will engage the beveled surface 14 of the catch 12, so that the catch will be automatically forced aside until the parts are in normal position, when the catch will snap back to locking position through the action of the spring 17. The catch thus constitutes an automatic latching catch, so that the breech block cannot be accidentally disconnected from the spring.

Fig. 4 shows the breech block 1 locked to the spring rod 5; and Fig. 5 shows the catch 12 pushed aside and the parts disconnected.

In the modified construction shown in Figs. 6 to 9, the spring abutment 18, which is the equivalent of the spring abutment 3, is shown as adapted to be connected with or disconnected from the pistol frame, by means of a catch or finger piece 19. In this construction, the spring rod is provided with a rearwardly projecting portion 20 which is cut away underneath and provided with an opening 21 which fits over a lug 22 formed on the upper surface of the breech block, the rear end of the projecting portion 20 lying in front of a shoulder 23, so that when the

parts are in the position shown in Figs 6 and 9, the breech block 1 is permanently connected with the spring rod. In this construction, the abutment 18 is shown as provided with a lateral slot or recess 24 which is normally engaged by a catch 25, shown as formed at one end of a rod 26 which projects through the frame into a recess 27 containing a spring 28 bearing at one end against the wall of the recess, and at the other end against the finger piece 19. By pressing the finger piece 19, therefore, the spring abutment 18 is released from the frame, and in pulling back the breech block, the said abutment 18 and the spring are drawn back without compressing the spring, thus accomplishing the same result as that accomplished by the construction shown in Figs. 1 to 5. In this construction, both of the spring abutments are moved with the breech-block, but as both are movable together, there is no change in the position of one relative to the position of the other, and, consequently, no compression of the spring. It is obviously immaterial whether the abutments are movable or stationary, so long as the position of one relative to the position of the other remains unchanged.

While the constructions herein shown and described are practical and effectual, it is obvious that further modifications may be made without departing from the invention which is embodied in any practical means whereby the breech block can be moved without causing a corresponding movement of one spring abutment relative to the other, so that the fire arm can be cocked by hand without compressing the spring which normally acts on the breech block.

What I claim is:

1. In an automatic pistol of the blow back type, the combination with a movable breech block; of a spring located in front of the breech block and lying between two abutments, one of which is movable with the breech block, and the other stationary when the pistol is assembled; and an automatic latching catch for releasing one of the said abutments, whereby the breech block can be moved to cock the hammer without compressing the spring.

2. In an automatic pistol, the combination with a breech block adapted to be moved in one direction by the reaction of the exploding charge; of a spring normally adapted to move said breech block in the opposite direction; abutments between which the spring is normally compressed by the movement of one abutment relative to the other, one of said abutments being movable with the breech block, and the other stationary when the pistol is assembled; and an automatic latching catch whereby one of said abutments can be released to admit of the cocking of the hammer without compress-

ing the spring which acts on the breech block when the pistol is in operation.

3. In an automatic pistol, the combination with a breech block; of a spring located in front of the breech block; an abutment for one end of the spring movable with said breech block when the pistol is assembled; a stationary abutment for the opposite end of the spring; and a manually operated device for disconnecting said spring from one of said abutments, whereby the pistol, when assembled, can be cocked without compressing the spring.

4. In an automatic pistol, the combination with the breech block; of a rod connected therewith and provided at one end with a spring abutment, the said rod and abutment being contained in a recess in front of the breech block; a fixed spring abutment at the opposite end of said recess; and an automatic latching catch extending laterally across said breech block and adapted to connect the breech block with, or disconnect it from, said rod.

5. In an automatic pistol, the combina-

tion with the breech block located behind the barrel; of a rod projecting forward from said breech block into a recess above the barrel, said rod being provided at its forward end with a spring-abutment; a second spring abutment normally fixed in the said recess; a spring located between the said abutments; a connecting member at the rear end of said rod provided with a transverse shoulder; and an automatic latching catch located in the breech block, said catch having a shoulder normally lying in front of the transverse shoulder of the connecting member to connect the breech block and the rod, and also having a beveled front shoulder, substantially as and for the purposes described.

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

JOSEPH H. WESSON.

Witnesses:

HAROLD K. SCHOFF,
DOUGLAS B. WESSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."