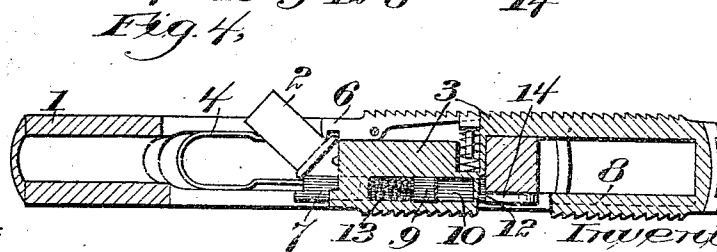
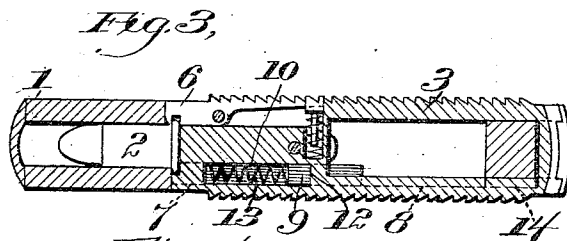
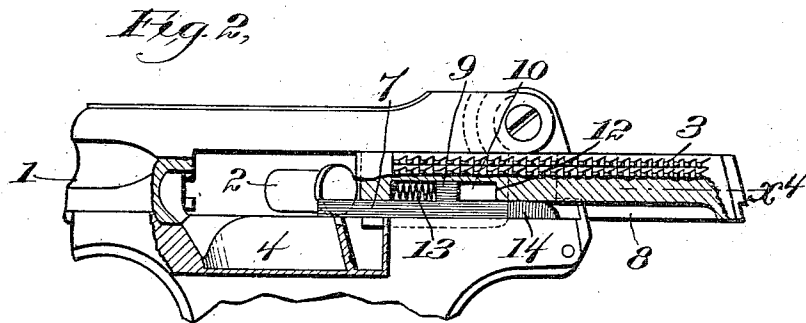
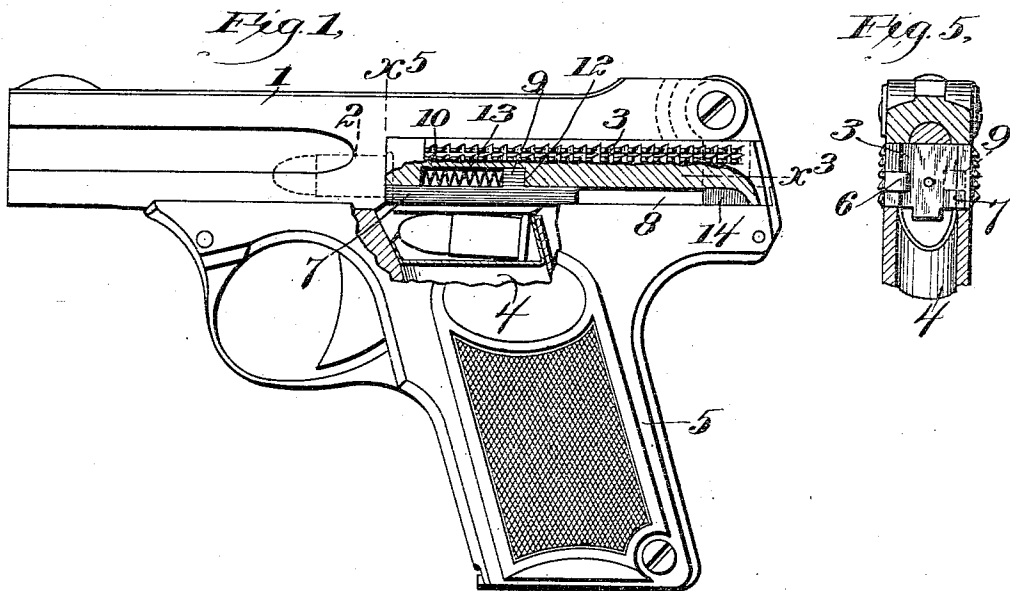


J. H. WESSON.
AUTOMATIC PISTOL.
APPLICATION FILED DEC. 14, 1910.

1,039,232.

Patented Sept. 24, 1912.



witnesses:
for attorney.
W. J. Lawrence

Inventor:
Joseph H. Wesson,
by Henry J. Lawrence
Att'y.

UNITED STATES PATENT OFFICE.

JOSEPH H. WESSON, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR TO SMITH & WESSON, INCORPORATED, A CORPORATION OF MASSACHUSETTS.

AUTOMATIC PISTOL.

1,039,232.

Specification of Letters Patent. Patented Sept. 24, 1912.

Application filed December 14, 1910. Serial No. 597,241.

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 letter on the drawings representing like parts.

The present invention relates to an automatic pistol, and is embodied in a novel construction and arrangement of the ejector mechanism whereby the end of the breech block constitutes a continuous plane surface throughout, so that it presents no indentation which might tend to catch the flange of the new cartridge coming from the magazine in the loading operation. In pistols of this class, the extracting and ejecting mechanism consist, respectively, of a hook which travels with the breech block and engages the flange of the shell in the rearward movement of the breech block to pull the shell from the chamber, and an ejecting projection which is stationary at the time the shell is ejected, and stands forward of the breech block when the latter is in its extreme rear position, so as to engage the back of the shell at the side opposite that which is engaged by the extractor. The shell, therefore, in being rapidly pulled back is tipped sidewise, and thrown out of the orifice in the frame at the rear of the chamber. It has been customary, heretofore, to connect the ejector rod with the frame, or make the said rod a part thereof, the breech block having an open groove or channel at one side to fit over the stationary ejector. At the front of the breech block, the end of this groove leaves an opening in the breech block face, which is detrimental, in that the flange of the cartridge may be caught by the edges of the said opening as it enters the frame from the magazine.

In accordance with the invention, the ejector rod is connected with the breech block, the end of the rod lying flush with the breech block face, provision being made, however, for an independent movement of the breech block beyond that of the ejector near the end of the rearward movement of the breech block after firing.

Figure 1 is a side elevation of the pistol embodying the invention, with parts broken

away to show the ejector rod; Fig. 2 is a partial view, similar to Fig. 1, but showing the breech block back and the empty shell being ejected; Fig. 3 is a horizontal section, on line x^3 of Fig. 1; Fig. 4 is a horizontal section, on line x^4 of Fig. 2; and Fig. 5 is a vertical section, on line x^5 of Fig. 1, looking toward the right.

The invention is shown as embodied in a pistol of the so-called "blow-back" type, having the barrel 1 and the chamber to receive a cartridge 2, shown in dotted lines, Fig. 1; and a spring-actuated breech-block 3, which is adapted to be blown back by the recoil when the pistol is fired, to open the space behind the chamber and receive a new cartridge from the magazine 4, which is located in the pistol grip 5. The empty shell is extracted and ejected in the rearward movement of the breech block 3, the extracting being provided for by an extractor hook 6 of the usual construction, the said hook engaging the flange of the shell so as to pull the same out of the chamber as the breech block moves back. In order to throw the shell out of the frame and leave the space back of the chamber free to receive the next cartridge from the magazine, the said shell is acted upon by an ejector rod 7 at the side opposite the extractor hook 6, the said ejector rod being adapted to stand in front of the breech block 3, as best shown in Fig. 2, so that the shell, when rapidly pulled back by the extractor, is thrown sharply against the ejector rod at the side opposite the extractor, and turned aside, as shown in Figs. 2 and 4. This gives the shell a sudden twisting movement, which throws it laterally through the opening in the frame, so that it flies clear from the pistol.

In accordance with the invention, the ejector rod 7 is connected with and carried by the breech block 3, the said ejector rod being shown as located in a channel 8 in said breech block, and provided with a vertical projecting portion 9 which enters a supplemental channel 10 formed above the channel 8. In the ready-to-fire position shown in Fig. 1, the projecting portion 9 lies against the rear wall 12 of the channel 10 where it is held by means of a spring 13, the parts being so proportioned that in this position the end of the ejector rod lies flush with the end of the breech block, so as to form an unbroken face behind the cartridge.

The breech block and the ejector rod remain in these relative positions during the greater part of the rearward movement of the breech block, and are restored to such relative positions prior to engaging the rear end of the loaded shell delivered from the magazine. During the last part of the rearward movement of the breech block, however, the ejector rod is held stationary so as to project in front of the breech block and engage the empty shell, as above described. For this purpose, a shoulder 14 is formed in the rear of the frame, projecting into the channel 8 of the breech block so as to lie in the path of the rear end of the ejector rod, as shown in Figs. 2 and 4. The engagement of the ejector rod with this shoulder stops the rod in the proper position to engage the empty shell, while the spring 13 admits of the further independent movement of the breech block itself. In the construction shown, the shoulder 14 is adjacent to the hinge lug on which the barrel is hinged, and is integral with the lug and that part of the frame on which the lug is formed.

Claims:

1. In an ejector mechanism for automatic pistols, the combination with a stationary frame and barrel; of a blow back breech block; an ejector rod located in a recess formed in the lower corner of said breech block, and having a projection extending into a secondary recess in the breech block;

a spring located in said secondary recess between the end thereof and the projection from the ejector rod; and a stop on the stationary frame at the rear of the breech block to engage the ejector rod during the rearward movement of the breech block.

2. The combination with a stationary frame and barrel; of a blow back breech block; an ejector rod located in a recess formed along the lower corner of said breech block, said ejector rod having a projection extending into a supplemental recess, and normally bearing against one end thereof; a spring located in said recess and bearing at one end against said projection, and at the opposite end against the other end of the recess, the end of the ejector rod, in this position, being flush with the end of the breech block; and a stop behind said ejector rod, said stop being formed integral with the stationary frame and the hinge lug, and lying in the path of the ejector rod so as to engage and hold the same stationary during the last part of the rearward movement of the breech block.

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

JOSEPH H. WESSON.

Witnesses:

GEO. P. CHAPIN,
FRANK H. WESSON.

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