

UNITED STATES PATENT OFFICE.

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FIREARM.

1,041,928.

Specification of Letters Patent.

Patented Oct. 22, 1912.

Application filed February 21, 1912. Serial No. 679,117.

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 Firearms, 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 magazine fire arm of the so-called blow back type, and is mainly embodied in novel features of construction and arrangement, whereby the taking apart of the fire arm is facilitated, the construction also being such that a heavy breech bolt can be employed.

The structural features which embody this invention are especially useful in connection with a pistol such as is shown and described in a prior application filed by me Apr. 3, 1911, Serial No. 618,521, in which the breech bolt is connected with the reaction spring by means of a latching catch, so that the bolt can be drawn back to cock the hammer without compressing the reaction spring. This admits of the use of a powerful reaction spring and heavy breech bolt, which results in increased efficiency.

The present invention relates mainly to the means for securing the barrel and breech bolt to the pistol frame, at the same time arranging the breech bolt so that it constitutes nearly the entire rear portion of the upper part of the pistol.

In accordance with the invention, the barrel portion, which also contains the reaction spring, is provided with a rearward extension which is adapted to enter a recess in the upper part of the breech bolt which wholly covers and incloses the said extension. This extension is adapted to engage at the rear end with a post formed on the frame, the said post having a recess to receive a suitable projection on the extension, thereby locking that end of the barrel portion firmly in position. The said barrel portion is also provided in front of the breech bolt with a locking lug which projects downward into a suitable recess in the frame, the said recess having an undercut portion to receive a projection from the lug when the barrel is in place. In assembling the pistol, the barrel with the breech bolt

supported on the rearward projection is placed in position on the frame and locked by a longitudinal movement which brings the locking projections above described into the locking recesses, the barrel portion then being held in its locked position by a transverse bolt adapted to be operated by a lever outside.

Figure 1 is a side elevation of a fire arm embodying the invention; Fig. 2 is a top plan view of the pistol with the barrel in locked position, with the breech block removed; Fig. 3 is a longitudinal vertical section showing the pistol assembled; and Fig. 4 is a similar view showing the barrel portion unlocked and ready to be removed from the frame.

In the construction shown, the barrel portion contains the barrel 1 and the recess 2 for the reaction spring 3 which is located between a fixed abutment 4 at the inner end of the recess 2 and a movable abutment 5 at the outer end of said recess. The barrel portion is provided with a rearward extension 6 which constitutes a guideway for a connecting member 7 at the end of the spring rod 8, the said connecting member being shown as arranged to be connected with or disconnected from the breech bolt 9. The rearward projection 6 extends back to the end of the frame 10 which is provided with a post 12 having an undercut recess 13 adapted to receive a projection 14 formed on the extension 6. The said extension is provided with an opening to fit over the post 12, so that said extension can be dropped over the top of the post and locked thereto by a forward longitudinal movement which carries the projection 14 into the recess 13. To complete the locking of the barrel portion, the said portion is provided below the barrel with a locking projection or lug 15 which is adapted to enter a recess formed in the front of the frame, herein shown as just above the trigger guard, the said recess having an undercut portion 16 to receive the front part of the lug 15, as clearly shown in Figs. 3 and 4. It will be seen from the foregoing description that, when the parts are put together, as shown in Fig. 4, a slight forward movement of the entire barrel portion will lock the said portion firmly to the frame, it being necessary only to provide means for holding the said parts in this position.

In the construction shown, the holding device consists of a rotatable transverse locking member 17 which extends through the frame behind the lug 15, and is provided with a lever or handle 18 by which it may be turned from its locking to its unlocking position. Said member 17 consists of a bolt provided with a recess 19 so shaped as to receive the rear end of the lug 15 when the bolt is turned to the position shown in Fig. 4. As clearly shown in Fig. 3, the turning of the bolt 17 by means of the handle 18 brings the unrecessed surface of the bolt behind the lug 15, thus holding the same firmly in its forward position.

The upper part of the breech bolt 9 is so shaped as to form a recess or chamber surrounding the projection 6, so that the breech bolt, while free to move longitudinally, is otherwise locked in its relation to the frame, being held by the aforesaid projection 6. The connecting piece 7 at the rear of the spring rod 8 is herein shown as provided with a downwardly projecting lug 20 which passes longitudinally into a channel or recess 21 formed in the upper part of the breech block part 22 of the bolt, which part 22 contains the firing pin 23, and constitutes the abutment for the cartridge. The said breech block portion is shown as provided with a transversely movable latch 24 which normally lies in front of the lug 20, but which is capable of being pushed out of contact with said lug by means of a finger piece 25. This construction is similar to that shown and described in my prior application above referred to, and performs the same functions as described therein, and, therefore, requires no further detailed description. While, however, it is not essential to this invention, the unlocking feature above described facilitates the taking down of the pistol, since the breech-bolt, after it has been removed from the frame with the barrel, can be disconnected from the spring-rod, and slipped endwise off the projection 6.

What I claim is:

1. In an automatic pistol, the combination with the frame provided at the rear with a post; of a barrel having a rearward extension and a lug below the barrel; a recess in

the frame to receive said lug; and means whereby said rearward extension and said lug are locked, respectively, on said post and in said recess in response to a longitudinal movement of the barrel.

2. In an automatic pistol, the combination with the frame provided at the rear with a post; of a barrel having a rearward extension and a lug below the barrel; a recess in the frame to receive said lug; means whereby said rearward extension and said lug are locked, respectively, on said post and in said recess in response to a longitudinal movement of the barrel; and a locking device to hold said barrel in locked position.

3. In an automatic pistol, the combination with the frame provided at the rear with a post; of a barrel having a rearward extension and a lug below the barrel; a recess in the frame to receive said lug; means whereby said rearward extension and said lug are locked, respectively, on said post and in said recess in response to a longitudinal movement of the barrel; and a breech bolt held and guided by said rearward extension.

4. In an automatic pistol, the combination with the barrel provided with a rearward extension; of a breech bolt sleeved on said extension; a frame; means for detachably connecting the barrel and extension with portions of the frame; a reaction spring located in the barrel portion; a movable abutment acted on by said spring; and means for connecting said breech-block with said movable abutment.

5. In an automatic pistol, the combination with a barrel; of a recess located over the barrel; a spring actuated rod in said recess; a rearward extension constituting a guide for the rear side of said rod; a breech bolt sleeved on said extension; a latching catch for connecting said breech-bolt with said rod; and means for detachably securing said barrel and extension to the frame near the front and rear thereof, respectively.

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

JOSEPH H. WESSON.

Witnesses:

GEORGE P. CHAPIN,
H. LESLIE POMEROY.