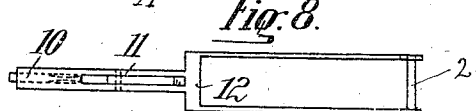
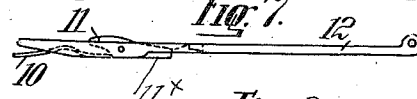
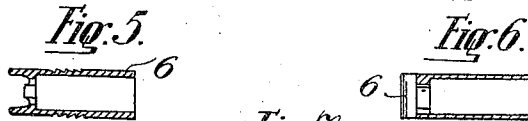
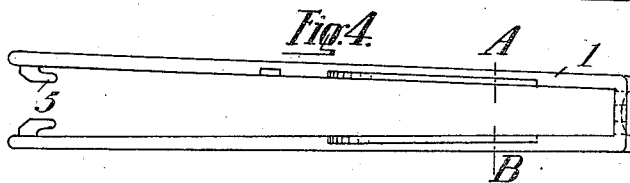
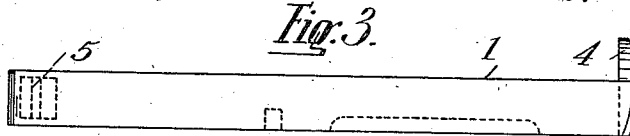
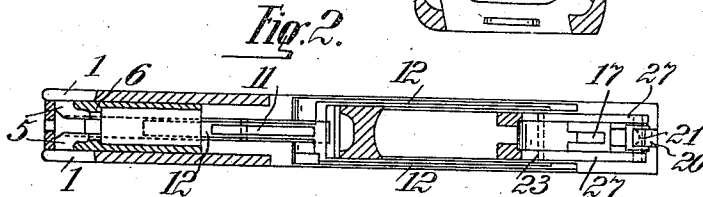
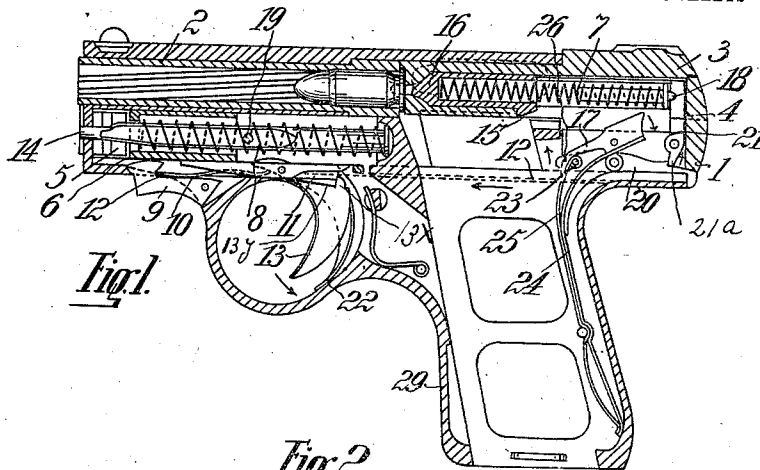


R. BECKER.
SELF LOADING PISTOL.
APPLICATION FILED FEB. 9, 1909.

935,952.

Patented Oct. 5, 1909.
3 SHEETS—SHEET 1.

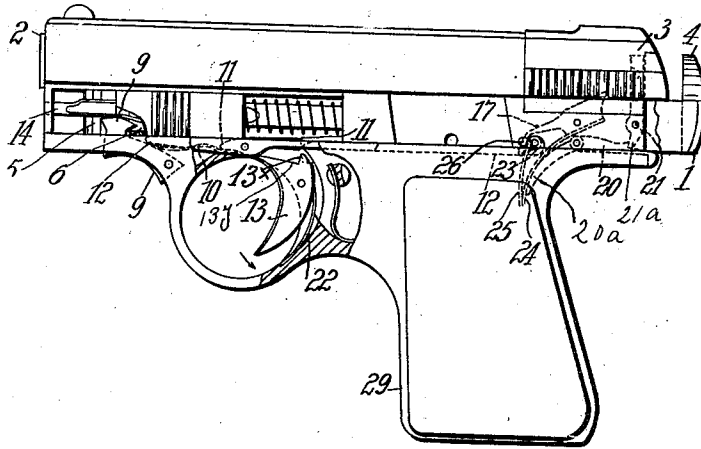


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Fig. 9.



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3 SHEETS—SHEET 3.

Fig. 10.

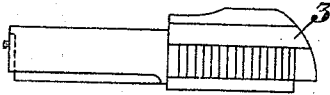


Fig. 16.

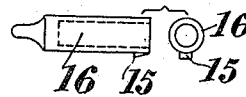


Fig. 13.

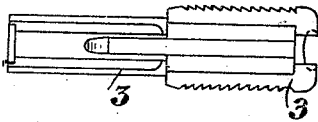


Fig. 11.

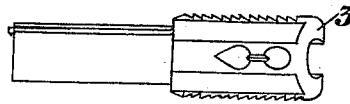


Fig. 12.

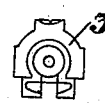


Fig. 14.

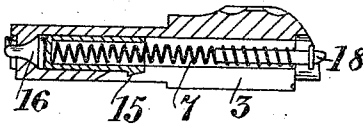


Fig. 15.

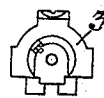


Fig. 18.

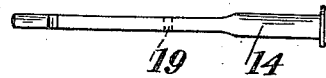


Fig. 17.

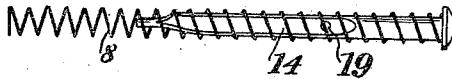


Fig. 19. Fig. 20.

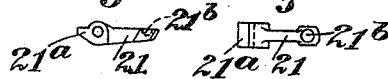


Fig. 21.



Fig. 22.

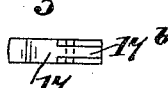


Fig. 23.

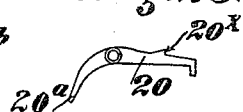
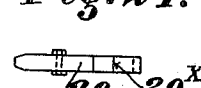


Fig. 24.



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UNITED STATES PATENT OFFICE.

RUDOLF BECKER, OF BERLIN, GERMANY.

SELF-LOADING PISTOL.

935,952.

Specification of Letters Patent.

Patented Oct. 5, 1909.

Application filed February 9, 1909. Serial No. 476,943.

To all whom it may concern:

Be it known that I, RUDOLF BECKER, a subject of the King of Prussia, residing at Berlin, Germany, have invented certain new and useful Improvements in Self-Loading Pistols, of which the following is a specification.

This invention relates to improvements in self-loading pistols whereby the separate constituent elements of the pistol can be easily taken apart and speedily be put together again.

The invention consists in providing in connection with the breech arrangement a fork shaped slide, running the whole length of the pistol and which is so arranged that it can only be drawn backward from the pistol. This slide is fitted under the fixed barrel, on both sides of it, and it is bedded movably under the breech block, in corresponding spaces cut out of the handle. The slide prevents the breech block, which is inserted into the pistol case from the back end, from falling out. It also serves to form a part of the back divisional wall of the pistol. At its front end the slide is attached to a movable abutment for the closing spring, below the barrel, and in such a way that it can easily be detached therefrom and so that when the slide is drawn back the abutment is also drawn back and the closing spring compressed. The spring bolt for the closing spring passes through this abutment, which is retained in its position by a lever when the pistol is being taken to pieces or being put together again. During those operations the closing lever is disconnected from the trigger. Means are also provided for coupling the trigger fork to the trigger so that when the pistol is being dismantled the trigger may be readily detached from the trigger fork.

On the drawings the subject of the invention is shown in one of its embodiments by way of example.

Figure 1 is a longitudinal section through the pistol. Fig. 2 is a horizontal section. Figs. 3 and 4 show the slide in side view and as seen from below. Figs. 5 and 6 show the abutment for the closing spring in horizontal section and vertical section; and Figs. 7 and 8 show the trigger forks, with catch, in side view and as seen from above. Fig. 9 represents a view of the pistol with the slide withdrawn the position of the parts being such as to prevent the cartridge from

being fired. Figs. 10 to 24 are separate detail views of certain parts of the breech and firing mechanism.

The self-loading pistol has a barrel 2 firmly secured to the handle 29. Under the barrel a fork shaped slide 1, which can move along in a straight line is fitted in corresponding rests cut out of the handle. A projection 4 on the back end of the slide fits exactly into a corresponding notch in the breech block 3; consequently when the breech block 3 is drawn back the slide is carried along with it. The slide 1 has hook shaped projections 5 on its front end and on the inner surfaces thereof which form detachable connections for the slide with an abutment 6 for the closing spring 8 lying under the barrel. The slide 1 is taken off or drawn back from the pistol by drawing back the breech block 3 simultaneously with the slide 1 and the abutment 6, and during this backward movement of the breech block, slide and abutment the main spring 7 and the stronger closing spring 8 are compressed. If the breech block etc., are drawn far enough back the abutment 6 will be fixed and retained in position by a catch lever 9 which is fitted in the handle 29.

When the breech block is released it moves forward automatically along with the slide and the abutment 6 is prevented from taking part in the forward movement by the catch lever 9 (see Fig. 9) which is compressed upward and engages the front of the abutment 6. The forward movement of the slide 1 disengages it from the abutment 6, which is held fixed in its position. By slightly pressing apart the ends of the rods of the slide it is easy to draw the slide 1 off the pistol toward the back. The catch lever 9 is under the pressure of the leaf spring 10, the catch 11, and the trigger fork 12 (see Figs. 7, 8 and 9) and it comes into action only when the pistol is being taken apart and put together again. After the slide 1 has been removed from the pistol the abutment 6, which can move in a straight line below the barrel 2, is put out of connection with the catch lever 9 by drawing it back slightly. The lever then at once springs downward into its original position under the action of the spring 10 while the abutment moves quickly forward against the front wall of the handle, under the influence of the closing spring 8. When the abutment is held firmly in position by the catch le-

ver 9, the part 11^x of the catch or finger 11, the front arm of which holds the catch lever down, is out of gear with the recess 13^y of trigger 13 and consequently the pistol cannot be fired. The abutment 6 for the closing spring has notches on both of its outer sides. These are intended to prevent the fingers slipping when catching and drawing back the slide. The bolt 14 for guiding the abutment and carrying and guiding the closing spring 8 must lie in such a way that its longer slope is always directed downward (this position is shown in Fig. 1) so as to prevent any jamming when the catch lever 9 moves upward. The breech block 3 is drawn out backward and then the nose or projection 15 on the firing pin 16 in the breech block 3 slides over the sear 17. The trigger 13 should be pressed during this operation so as to depress the sear 17 in the direction of the upper arrow (Fig. 1) and thus facilitate the sliding passage of the nose or projection 15 on the firing pin 16 over the sear 17. The main spring 7, with the guide pin 18, is fixed in the breech block. The abutment 6 and the bolt 14, with the spring 8 thereon can be easily taken out by means of an auxiliary pin which may be fitted into the hole 19 in the bolt 14; and then after the bolt 14 has been slightly pushed forward to overcome the tension of the spring 8, the bolt, with the abutment and the closing spring 8, can be drawn sideways out of the case.

Before the breech block 3 is removed from the pistol casing the main spring 7, for the sake of safety, must be brought to the position which it takes up immediately after firing a cartridge, and this is accomplished by pressing the trigger 13 so as to lower the back end of the sear 17 in the direction of the upper arrow (Fig. 1) so that the projection 15 on the firing pin 16 is released from engagement with the back end of the sear 17 and it can then be moved forward under the action of the main spring 7 to the position shown in Fig. 1, which is the position of the main spring 7 and firing pin 16 after the firing of a cartridge. In this position the main spring 7 is not compressed and the possibility of its being hurled from the breech block and thereby injuring someone is obviated. The main spring 7 is secured in its position in the firing pin 16 by a holder 21 (Figs. 19 and 20) which is provided with a notch 21^b for holding the end of the guide pin 18. The holder 21 rests with its end 21^a against a shoulder 20^x of the rear arm of a lever 20 whose front arm 20^a is under the pressure of a spring 24 suitably secured in the pistol handle. The rear arm of the lever 20 normally presses upward under the action of the spring 24 against the lower end 21^a of the holder 21 and holds the same by means of the shoulder 20^x, but the rear arm of the lever 20 may be pressed downward after the slide 1 is withdrawn until the holder 21 is released from engagement with the shoulder 20^x of the lever 20. In consequence thereof and by means of the compression of the main spring 7 the holder 21 is turned from the vertical position as drawn, into a horizontal position in which the main spring 7 lies free and the breech block 3 with its contents can be easily removed from the pistol casing. The trigger 13 which is under the pressure of a spring 22 has an upper projection 13^x which is adapted to engage with and act on the rear end 11^x (Fig. 7) of a catch 11 working in a slot in the front of the trigger fork 12. The pin 23 of the trigger fork 12 (see Figs. 1 and 2) is under the action of a spring 25 suitably secured in the pistol handle and it is caused to move in slots 26 (see Fig. 1) provided in both side walls 27 of the pistol casing. The catch 11 of the trigger fork is pressed, by means of the spring 10 secured to the fork into a recess 13^y of the trigger, so that if the trigger is pulled the projection 13^x is pushed against the rear end 11^x of the catch 11 and thereby the trigger fork 12 is pushed forward. The fork 12 is placed in a recess made in the wall of the casing and it is movable longitudinally. In this manner the trigger fork 12 is coupled with the trigger 13 and the spring 25 normally presses the fork 12 backward so that the pin 23 lies at the rear of the slots 26. When it is desired to fire a cartridge the lower end of the trigger 13 is pressed back so that the upper projecting part 13^x is moved forward giving a corresponding forward movement to the trigger fork 12 until the pin 23 lies at the front of the slot 26 so that the pin 23 slides along below the oblique front arm 17^a (see Fig. 21) of the sear 17 and lifts it, causing the rear end 17^b of the sear 17 to drop in the direction shown by the arrow in Fig. 1 and allowing the nose or projection 15 of the firing pin 16 to be released from engagement with the back end of the sear 17 thus causing the main spring 7 and firing pin 16 to spring forward so that the point of the firing pin strikes the percussion cap of the cartridge.

The working of the pistol is as follows:— To discharge the pistol seven times, a cartridge is placed in the barrel, and the magazine is filled with six cartridges and placed into and secured in the hollow handle of the pistol. Thereafter, the breech block 3 together with the slide 1 and abutment 6 are drawn back a certain distance against the action of the main spring 7 and the closing spring 8 until the nose 15 of the firing pin 16 has passed the sear 17 which is accomplished as soon as a soft noise or click is heard. Then the breech block 3 together with the slide 1 and abutment 6 are allowed to spring forward, while the firing pin 16

is kept back by means of the nose 15 of the sear 17. The trigger 13 is then pressed, and the main spring 7 forces the freed firing pin 16 forward against the percussion cap of the cartridge, and the projectile is forced out of the barrel by the pressure of the powder gases. The force of the powder gases causes the breech block 3 to be pushed back a certain distance until the empty cartridge case is thrown out from the discharge opening on the top, while at the same time the next cartridge from the magazine takes the place of the discharged cartridge. At the same time the firing pin passes over the sear in consequence of the drawing back of the breech block 3 obtained by the action of the gas-pressure until the projection 15 engages the back end of the sear 17 as before and in this manner the firing pin 16 is again kept back by the sear 17, under compression of the main spring 7, while the breech block 3 moves forward automatically under the action of the closing spring 8. It is only necessary to press the trigger again to fire the next shot.

In order that the fork or sear, or both, may be released from the influence of the trigger during the rearward movement of the breech block, the forward end of the catch 11 is arranged to come in contact with the abutment 6 when the latter is retracted by the recoil of the breech block, whereby the catch 11 is tilted on its pivot and the hole or portion 11* thereof is raised out of engagement with the part 13*, so as to allow the fork 12 to flip back and the sear nose to rise under the influence of the spring 25 and catch the firing pin in its rearward position even though the trigger be still held back.

Each time the breech block 3 together with the slide 1 and abutment 6 are drawn back after the firing of a shot, an empty cartridge case is thrown out of the pistol and the discharged cartridge is replaced by a new one from the magazine. The cartridge is moved forward into the barrel during the forward movement of the breech block which movement leaves the main spring 7 compressed in readiness for the forward driving of the firing pin 16. The pistol is therefore ready for firing again, immediately after every shot, the mechanism working very accurately and safely.

When the pistol is taken to pieces, accidental discharge must be prevented. This can be provided against by pushing back the abutment 6 and securing it in the rear position by means of the catch lever 9, as shown in Fig. 9. In this position the abutment 6 presses the catch 11 out of the recess 13* of the trigger 13 and consequently uncouples the trigger 13 from its trigger fork 12, so that even if the trigger 13 be pressed the trigger fork 12 and sear 17 cannot be

operated and the main spring 7 and firing pin 16 cannot therefore be released to fire a cartridge.

When the pistol is being taken to pieces, after the slide 1 has been removed from the pistol, and when the breech block 3 and its contents, the closing spring abutment 6, with the spring bolt 14 and the closing spring 8, have all been removed, the trigger fork 12 with its catch 11 may be raised out of their depressed seat in the casing by pushing out the trigger fork pin 23 by aid of a suitable pressing pin; then the sear 17 and the catch lever 21 for the main spring, and finally the supporting lever 20 can be easily removed after the pins which carry or hold them have been pressed out. The two leaf springs 24, 25, also the trigger 13 and the catch lever 9, may easily be taken out, if necessary, after their pins have been pressed out. The pistol is fitted together again by going through the same operations as are necessary for taking it to pieces, but in the reverse order.

Having now fully described my invention what I claim and desire to secure by Letters Patent is:—

1. In a self loading pistol the combination of a removable breech block, a fork shaped slide for supporting the breech block when drawn back, a closing spring under the barrel for automatically closing the breech block, a movable abutment in connection therewith, and catches on the slide adapted to engage said abutment so that when the slide is drawn back the abutment is also drawn back and the closing spring compressed.

2. In a self loading pistol the combination of a removable breech block, a fork shaped slide for supporting the breech block when drawn back, a closing spring under the barrel for automatically closing the breech block, an abutment in connection therewith, and a catch lever for holding the abutment back to allow of the fork shaped slide being withdrawn.

3. In a self loading pistol the combination of a removable breech block, a fork shaped slide for supporting the breech block when drawn back, a closing spring for automatically closing the breech block, a movable abutment in connection therewith, a trigger, a trigger fork connected therewith, a spring catch for coupling the trigger to the trigger fork said catch being pressed out of engagement with the trigger when the pistol is being taken to pieces to prevent accidental discharge at such times.

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

RUDOLF BECKER.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.