Jan. 20, 1925. 1,523,831

F. KARPINSKI

AUTOMATIC PISTOL

Filed Jan. 5, 1923

Fig.1.

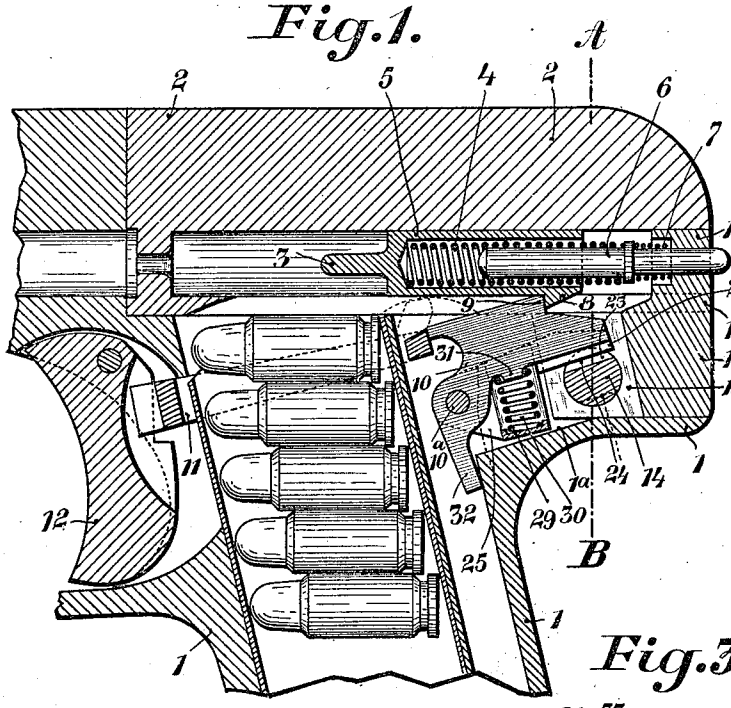


Fig.2.

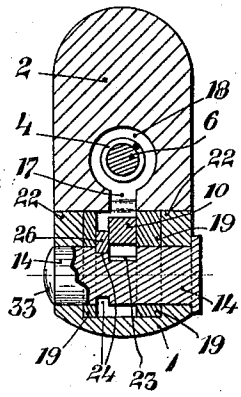


Fig.6.

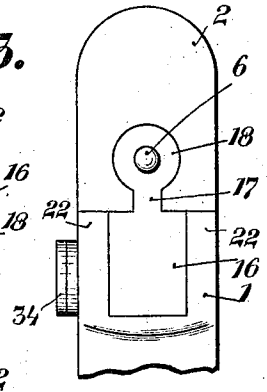


Fig.3.

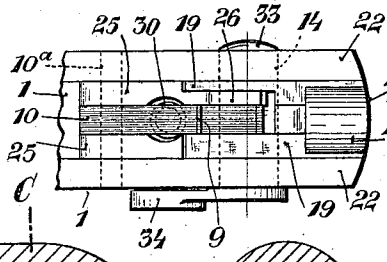
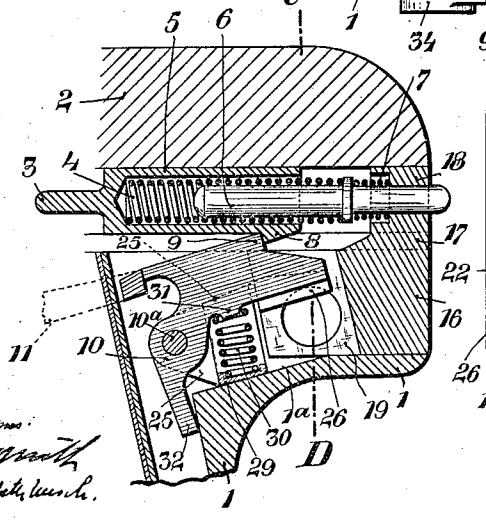


Fig.4.



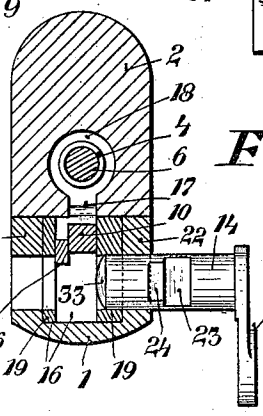


Fig.5.

Witness:

Inventor:
Franz Karpinski

Patented Jan. 20, 1925. 1,523,831

UNITED STATES PATENT OFFICE.

FRANZ KARPINSKI, OF CHARLOTTENBURG, GERMANY.

AUTOMATIC PISTOL.

Application filed January 5, 1923. Serial No. 610,895.

To all whom it may concern:

Be it known that I, FRANZ KARPINSKI, citizen of the German Republic, residing at Charlottenburg, Germany, have invented certain new and useful Improvements in Automatic Pistols (for which I have filed an application for patent in Germany on the 13th of October, 1922), of which the following is a specification.

My invention relates to automatic pistols with fixed barrel in which the breech block is coupled with the handle by means of the abutment for the striker spring and adapted to be relieved from the handle along a straight path parallel to the path of the breech block. The novelty of the invention consists in using as coupling for the abutment with the handle the shaft of the hand-operated stop of the automatic pistol, said shaft being held by an extension of the stop lever submitted to the pressure of a spring which bears against the trigger in such a manner that no separate trigger spring is required for producing the engagement of the trigger with the nose of the lock-casing. From this construction of the automatic pistol result the following advantages.

As the abutment for the striker spring is movable upon the handle in straight direction this abutment provides a perfect and large guide for the rear part of the breech block. The abutment adapted to be displaced in a straight line intercepts further the pressure in a perfect manner by its large guide head. As the abutment for the striker pin and the guide piece for the breech block are both secured in position by the shaft of the hand-operated stop a very good contact surface is provided for the abutment. The handle has only one boring for the reception of the shaft of the stop so that it is not necessary to provide a boring for fixing the abutment, the handle being consequently not weakened by such a second boring. The shaft of the stop is securely held in the handle by the spring-controlled stop lever so that said shaft cannot drop off the handle. The spring which acts upon the stop lever acts also upon the trigger body whereby a separate trigger spring is avoided, the construction of the automatic pistol becoming thus very simple.

The invention is illustrated by way of example on the accompanying drawing, wherein:

Fig. 1 shows in longitudinal section the rear end of the automatic pistol, the trigger being released.

Fig. 2 is a vertical section on line A—B of Fig. 1.

Fig. 3 shows in plan view the handle, the breech block being removed. This view is seen in the direction of the sear.

Fig. 4 shows in longitudinal section the same device which is shown in Fig. 1, the shaft of the hand-operated stop being partly pulled out.

Fig. 5 is a cross section on line C—D of Fig. 4.

Fig. 6 is a rear view of the arm.

1 designates the handle, 2 the breech block guided in any convenient manner in grooves of the handle and designed to receive the striker 3 with the striker spring 4. The striker spring is guided partly by the casing 5 of the striker and at the rear end by a guide pin 6 controlled by spring 7. If the striker is pushed back at the receding of the breech block 2 its nose 8 is caught by the edge 9 of the sear 10 pivotally mounted upon bolt 10^a and operated from the trigger 12 by the trigger rod 11. The sear 10 is controlled from shaft 14 of the hand-operated stop in the manner which will be hereafter described.

The abutment 16 for the striker spring engages with an extension 17 with enlarged head 18 into a corresponding boring and slit of the breech block 2 to which thus a very good and large guide is offered (compare Figs. 1, 2, 4, 6).

This abutment 16 has at its front end forwardly projecting walls 19 the borings of which are traversed by shaft 14 of the hand-operated stop whereby the position of the abutment 16 and consequently the guiding of the breech block 2 in handle 1 is ensured. In order to secure the shaft 14 against axial displacement a separate stop lever 25 is provided which, same as the sear 10, is pivotally mounted upon the pivot bolt 10^a and which has an extension 26 overlapping said shaft 14 and adapted to engage with one of the grooves 24 of said shaft 14. The shaft 14 of the hand-operated stop is flattened at 23 so that the sear 10 can engage with this flattened part in order to release the edge 9

from nose 8 of the casing 5 of the striker when the trigger 12 is being operated. If said shaft 14 is turned so that its circular surface faces the sear 10 the trigger 12 cannot be operated and the edge 9 of the sear cannot be disengaged from nose 8 of the casing 5 of the striker. The pistol is thus locked.

The stop lever 25 embraces with its flaps the sear 10 (Fig. 3); it has at its lower end a cup 29 upon which rests the lower end of spring 30. The spring 30 bears with its upper end against a stud 31 of the sear 10. In this manner the edge 9 of the sear 10 is pressed against the casing 5 of the striker or, if said striker is pulled back, caught behind the nose 8 of the casing of the striker. This arrangement permits further that the extension 26 of the stop lever 25 is brought in engagement with the flattened parts 24 of the stop shaft 14, whereby said shaft is secured against being pulled out. A similar flattening 24 is provided upon the opposite side of the stop shaft 14 so that this shaft cannot be pulled out if the trigger is locked.

The tail 32 of the sear 10 serves to prevent that this sear be raised excessively by the compressed spring 30. The top shaft 14 can be pulled out of the handle when its part of circular cross section stands over the extension 26 of the stop lever 25, this position being shown in Fig. 5. If in this case the stop shaft 14 is released from the stop lever after having been partly pulled out the cup 29 of the stop lever bears against the surface 1^a of the handle 1 (Fig. 4) so that it is merely necessary to raise the extension 26 of the stop lever 25 for a short distance to re-insert the stop shaft 14 into the handle and to make the same traverse the walls 19 of the abutment 16 to be journalled in the walls 22 of the handle 1.

In order to facilitate the insertion of the stop shaft or to slightly raise the extension 26 of the stop lever 25 the free head 33 of the stop shaft is slightly rounded so that at the insertion of the stop shaft the extension 26 of the stop lever is lifted by the rounded head 33. 34 is the lever or handle for revolving the stop shaft.

What I claim is:—

1. An automatic pistol with fixed barrel of the type in which the breech block is guided upon the handle by the abutment for the striker spring comprising in combination with the handle, the breech block, the trigger, the sear, the striker casing and the striker spring, a nose on said striker casing against which the edge of the sear bears, an abutment of the striker spring mounted in said handle so that it can be pulled out on a straight path in rearward direction, a hand-operated stop, a shaft of said stop mounted in said handle holding said abutment and having grooves, a stop lever securing said stop shaft in position and engaging with said grooves of the stop shaft, and a spring for loading said stop lever, said spring pressing at the same time upon the sear for pressing the edge of said sear against said nose of the striker casing without the aid of the separate trigger spring.

2. An automatic pistol with fixed barrel of the type described comprising in combination with the handle, the breech block, the trigger, the sear, the striker spring and the striker casing, a nose on said striker casing, an abutment for the striker spring mounted in said handle so that it can be pulled out on a straight path in rearward direction, a pivot bolt for said sear mounted in said handle, a stop lever mounted upon said pivot bolt, flanges extending from said stop lever embracing said sear, a cup at the lower end of said stop lever, and a spring inserted between said cup and said sear for pressing the edge of said sear against said nose of the striker casing and for pressing said stop lever in downward direction.

3. An automatic pistol of the type described comprising in combination with the handle, a hand-operated stop lever, and the sear, a spring-acting at the same time upon said sear and upon said stop lever, a cup on said stop lever serving as support for said spring, a stop shaft, a surface with which said cup of the stop lever comes in contact if said stop shaft is pulled out, an extension of said stop lever extending into said handle, and a rounded head on said stop shaft designed to raise said extension of the stop lever if said stop shaft is being inserted into the handle.

4. An automatic pistol of the type described comprising in combination with the handle, the breech block and the abutment for the same, a head on said abutment for guiding said breech block, lateral walls of said abutment having each a boring, a hand-operated stop, a shaft for said stop mounted in the handle and traversing the borings of said walls of the abutment for locking said abutment and its guiding head upon the handle.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANZ KARPINSKI.

Witnesses:
E. Holtzerman,
Oskar Heimann.