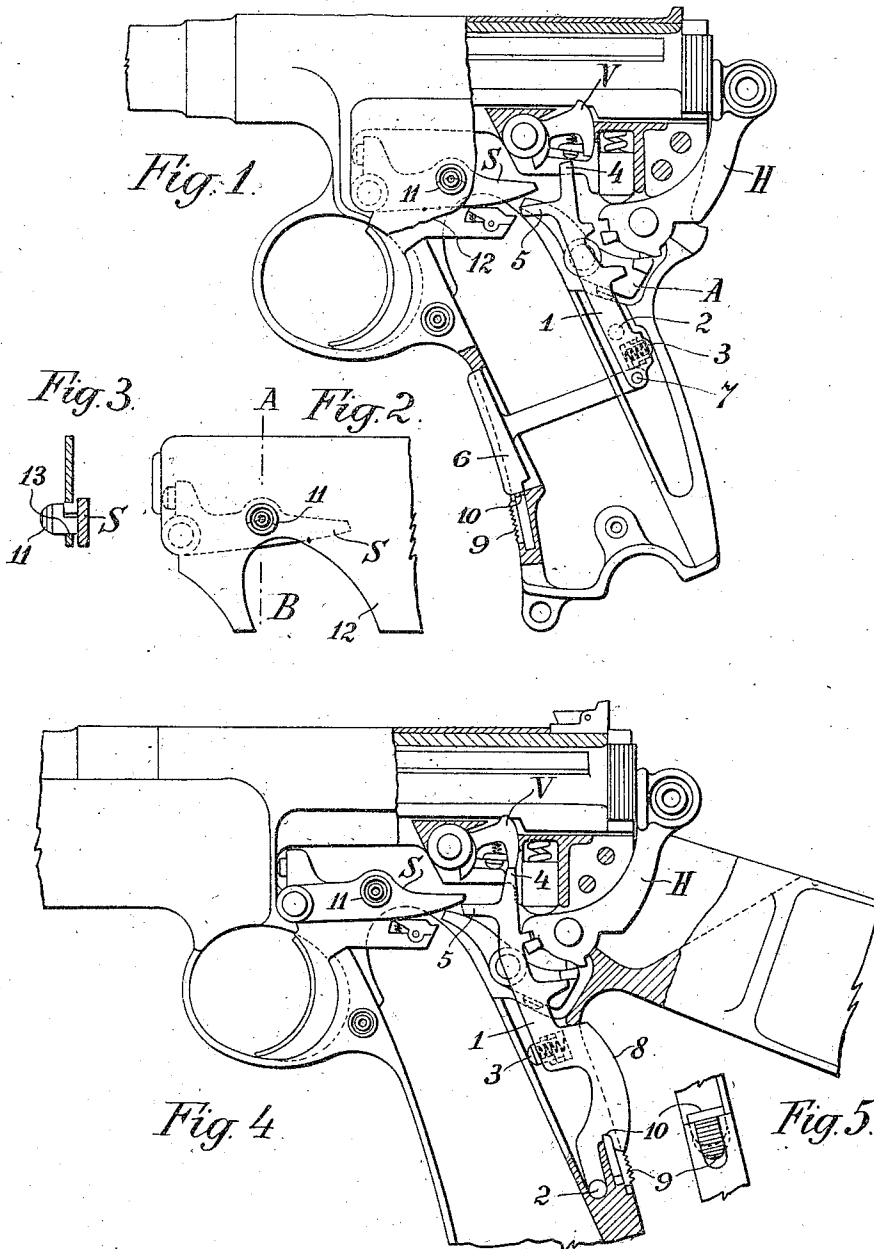


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 AUTOMATIC SAFETY DEVICE FOR FIREARMS.
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Patented Dec. 28, 1909



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UNITED STATES PATENT OFFICE.

RUDOLF FROMMER, OF BUDAPEST, AUSTRIA-HUNGARY.

AUTOMATIC SAFETY DEVICE FOR FIREARMS.

914,606.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, RUDOLF FROMMER, of 18 Külső Soroksári ut, Budapest, Austria-Hungary, manager, subject of the King of Hungary, have invented certain new and useful Improvements in Automatic Safety Devices for Firearms, of which the following is a specification.

My invention relates to automatic firearms and has for its object to provide a safety device for firearms of this character, and more particularly for those of the Frommer type, in which, as is known, the breech-block is rigidly coupled with the barrel, and when recoiling is checked by stop pieces, and the feeder, after the shooting off of the last cartridge in the magazine, operates a catch lever which holds the breech-block in the open position.

My automatic safety device is distinguished from those previously known by the fact that in the safety position it supports not only the firing devices but also the stop piece for the breech-block and the releasing lever. The support of the stop piece for the breech-block has for its object to hold the breech-block and consequently also the barrel in the safety condition of the weapon. This holding of the breech-block and barrel is of importance with automatic firearms provided with percussion locks and having a sliding barrel, because it prevents the accidental firing off of a weapon when the same is knocked or falls down and in other kinds of accidents. For instance, if the hammer is in the normal position and there is a cartridge in the chamber of the weapon, the sliding backward of the barrel and of the breech-block (for example if the weapon should fall down) might cause the striking pin to strike against the hammer and fire a shot; this, however, is entirely prevented if the breech-block and barrel are both locked. The supporting of the catch lever has for its object to facilitate the assembling of the parts of the weapon, which will be further explained in the following.

Two methods of carrying out my invention are illustrated in the accompanying drawing in which—

Figure 1 shows partially in section an automatic firearm of the Frommer type with my new automatic safety device (the latter in the released condition), which is moved by a special press-piece located on the front side of the grip. Fig. 2 shows a portion of the

cover plate. Fig. 3 is a section on the line A—B of Fig. 2. Fig. 4 shows a similar weapon in which the press-piece is made integral with the automatic safety device and is arranged on the rear side of the grip; the safety device is shown in the engaging position. Fig. 5 is a plan view of a stop with which the safety device can be locked.

In the arrangement shown in Fig. 1 the automatic safety device is formed by a two-armed lever 1, oscillating around the pin 2, and controlled by the action of the spring 3; this lever in its normal position supports in a known manner the sear A and the hammer H. According to the invention this safety lever 1 is so arranged that the same in its operating position supports with a nose 4 the stop-piece V for the breech-block and with a nose 5 the catch lever S of the weapon (Fig. 4). The lever 1 is swung out by means of a press-piece 6 arranged on the front of the grip and pivotally connected with the safety lever 1 by the pin 7. If the grip of the weapon is seized with the hand, the press-piece 6 is pressed inward toward the grip and oscillates the safety lever 1, in opposition to the action of the spring 3, around the pin 2, whereby the noses 4 and 5 disengage from the portions V and S of the weapon, so that these can operate freely and the weapon is therefore rendered unsafe.

In Fig. 4 the press-piece 8 is made in one piece with the safety lever 1, which is here shown as a single-arm lever, and is located at the rear side of the grip; it is therefore released by the palm of the hand which holds the weapon. The nature of the actuation and the manner of operation of this construction is the same as that for the construction shown in Fig. 1.

My invention also makes possible a more convenient adjustment of the cover plate than heretofore, owing to the simpler arrangement of the respective parts of the weapon, as will be seen from the following. The button 11 of the catch lever S which holds the breech-block in the open position after the last cartridge has been fired, extends, as is known, beyond the cover plate 12 through the opening 13 in the same. If the cover plate 12 is adjusted on the weapon, the downward movement of the catch lever, operated in a known manner by a spring, is limited by the cover plate itself (see Fig. 3). But if the cover plate is not yet adjusted, then the catch lever S is pressed considerably

deeper down by its spring, as in this case it experiences no limitation by the cover plate. In order to mount the cover plate on the weapon it is now necessary to fix the releasing lever 8 exactly in the position in which the button registers with the opening 13. With my arrangement this is effected in the most simple manner by the arm 5 of the automatic safety device, so that the cover plate 12 can be easily and quickly adjusted and secured without further trouble.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. In automatic firearms a breech-block, means to check the same, a safety lever, means to operate this lever when the grip is seized, means on the safety lever for securing the firing devices as the sear, and the hammer, and means on the safety lever for se-

curing the check-means of the breech-block substantially as and for the purpose described.

2. In automatic firearms a breech-block, means to check the same, a catch lever for holding the check-means of the breech-block when the magazine is empty, a safety lever, means to operate the same when the grip is seized, means on the safety lever for securing the firing devices, means on the safety lever for securing the check-means of the breech-block and means on the safety lever for securing the catch lever substantially as and for the purpose described.

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

RUDOLF FROMMER.

Witnesses:

FRIEDRICH SEHÖN,
MICHAEL TOMAR.