

R. FROMMER.  
AUTOMATIC FIREARM.  
APPLICATION FILED NOV. 5, 1907.

960,880.

Patented June 7, 1910.

Fig. 1.

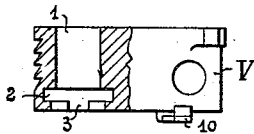


Fig. 2.

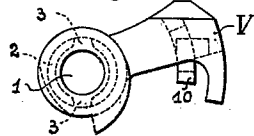


Fig. 5.

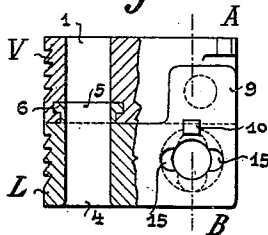


Fig. 6.

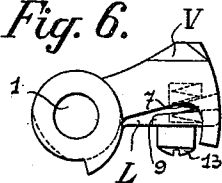


Fig. 3.

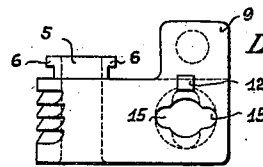


Fig. 4.

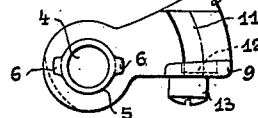


Fig. 7.

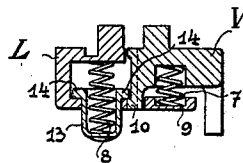
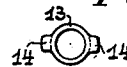


Fig. 8.



Witnesses:  
L. H. Staaden,  
Jawright

Inventor:  
Rudolf Frommer,  
by Alfred Müller,  
Att'y.

# UNITED STATES PATENT OFFICE.

RUDOLF FROMMER, OF BUDAPEST, AUSTRIA-HUNGARY.

## AUTOMATIC FIREARM.

960,880.

Specification of Letters Patent.

Patented June 7, 1910.

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*To all whom it may concern:*

Be it known that I, RUDOLF FROMMER, manager, subject of the King of Hungary, residing at Budapest, in the Empire of Austria-Hungary, have invented certain new and useful Improvements in Automatic Firearms, of which the following is a specification.

This invention relates to a development of the automatic fire arm according to my earlier Patent No. 802,279 in which the barrel and the breech-block slide back in a closed condition on the recoil, and then the breech-block is held in the backward position by two catches while the barrel moves forward again, automatically opening the breech-bolt. As soon as the barrel has attained its normal position it releases one of the catches of the breech-block whereupon this latter moves forward under the action of a spring, while the second catch is released by the action of the breech-block itself. The second catch is locked in the engaging position when the magazine is empty by a pivoted locking lever, which is thrown into action by the carrier so that the breech-bolt remains open when the magazine is empty.

As will be seen from the above, satisfactory operation of the two catches is of the greatest importance; it is the need for this satisfactory operation which has been taken into account in the fullest possible manner in developing the present invention, in that the assembling and separation of the parts of the fire-arm is considerably facilitated whereby the good working order of the parts is more easily insured. According to this invention the two catches are so connected with one another and with their controlling springs outside the fire-arm that they can be inserted with ease into the fire-arm in this connected condition and can be removed therefrom, so that the correct setting of the springs etc. can always be insured.

The constructional form of the invention is illustrated in the accompanying drawing.

Figure 1 shows one of the catches which is released by the breech-block, this catch being shown in a lower plan partly in section and being indicated by the letter V. Fig. 2 shows the same catch in side elevation. Fig. 3 shows the catch L which is released by the action of the barrel, this being shown in a lower plan. Fig. 4 shows the same in side elevation. Fig. 5 shows the two catches

coupled together in a lower plan partly in section. Fig. 6 shows a side elevation thereof; and Fig. 7 shows a section taken on the line A—B of Fig. 5. Fig. 8 shows a detail.

In the catch V, Figs. 1 and 2, an annular groove 2 is formed in the boring 1, this groove being provided with two insertion openings 3. The catch L, Figs. 3 and 4, has an annular projection 5 forming an extension of the boring 4 and provided with two lugs 6. The lugs 6 can pass into the openings 3 of the catch V and can be turned so as to engage in the annular groove 2 by which means the two catches are coupled together.

As can be seen in Figs. 6 and 7 the catch pieces are controlled by the action of springs 7 and 8; the spring 7 presses upon the projection 9 of the catch L and consequently tends to raise the catch V. In order to limit this raising action the catch V is provided with a hook 10 which lies in a groove 11 formed in the catch L and which enters by an opening 12. The spring 8 is arranged in a casing 13 provided with two lugs 14. One of these lugs lies over the hook 10, Fig. 7, and as the spring 8 is stronger than the spring 7, the raising of the catch V relative to the catch L is thus limited. In choosing the strengths of the springs care is to be taken that the spring 8 is so much stronger than the spring 7 that the lugs 14 of the casing 13 are pressed right down to the bottom in the catch piece L (Fig. 7). In order to allow for the insertion of the spring casing 13 in the catch L the latter is provided at the bottom with two openings 15, Fig. 5, through which the lugs 14 can be inserted, whereupon the casing is turned through 90 degrees.

By the arrangement above described the two catches can be coupled together and adjusted with their respective springs outside the weapon, and as the borings 1 and 4 fit together the two catches can be placed as one piece upon the corresponding shaft or stud in the breech of the weapon or can be removed together therefrom. The two catches can be moved independently of one another against their springs 7 and 8 about the shaft on which they are fitted.

I claim—

1. Catch-mechanism for the breech-block of automatic fire-arms, comprising a pair of catches and a controlling spring for each of said catches, means on said catches to con-

nect the same with each other and with their controlling springs respectively, for the purpose described and set forth.

2. Catch-mechanism for the breech-block of automatic fire-arms comprising a pair of catches and a controlling spring for each of said catches, the latter being provided with grooves and corresponding projections respectively, adapted to engage with each other, thereby coupling the said catches together.

3. Catch-mechanism for the breech-block of automatic fire-arms comprising a pair of catches, and a controlling spring for each of said catches, each provided with a bore, one of said catches having an annular groove in its bore, an annular projection on the other catch provided with lugs adapted to engage said annular groove, thereby coupling the two catches together.

4. Catch-mechanism for the breech-block of automatic fire arms comprising a pair of catches, and a controlling spring for each of said catches, the latter being provided with grooves and corresponding projections respectively, adapted to engage with each other, thereby coupling the said catches together, a projection on one of said catches supporting the controlling spring of the other catch, and a casing having lugs in said first catch having the projection to sup-

port its controlling spring, and a hook on the other catch adapted to pass through an opening in said first catch to support one of the lugs of the said casing.

5. Catch-mechanism for the breech-block of automatic fire-arms comprising a pair of catches, and a controlling spring for each of said catches, the latter being provided with grooves and corresponding projections respectively, adapted to engage with each other, thereby coupling the said catches together, a projection on one of said catches supporting the controlling spring of the other catch, and a casing having lugs in said first catch having the projection to support its controlling spring, and a hook on the other catch adapted to pass through an opening in said first catch to support one of the lugs of said casing, the spring supported by the said casing being stronger than the spring supported by the said projection, thus holding the lugs of said casing in engagement with the said catch and the said hook.

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

RUDOLF FROMMER.

Witnesses:

PHILIP SCHON,  
LESTER OSASZ.