E. DUFLOT.

TRIGGER FOR FIREARMS.

APPLICATION FILED SEPT. 26, 1916.

1,245,889.

Patented Nov. 6, 1917.

2 SHEETS—SHEET 1.

Fig.1

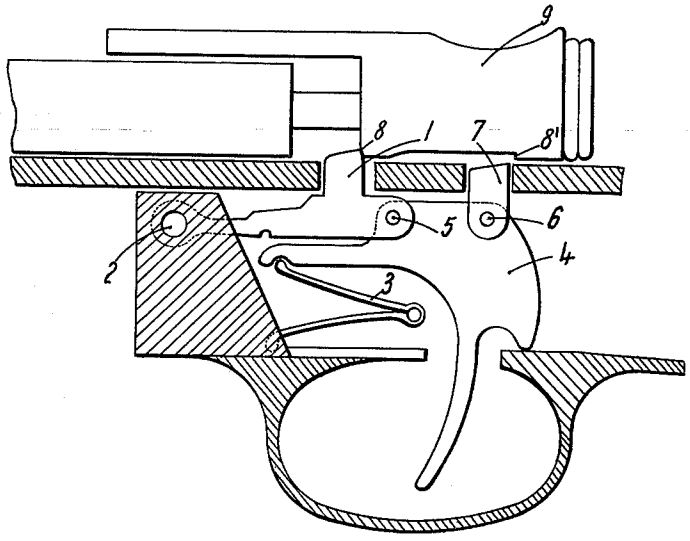


Fig.2

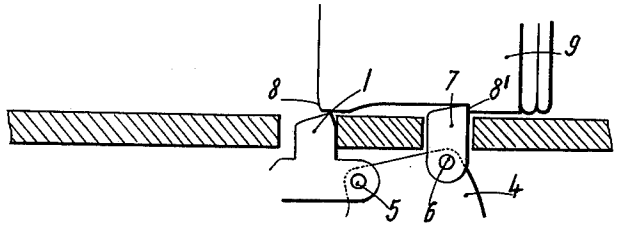
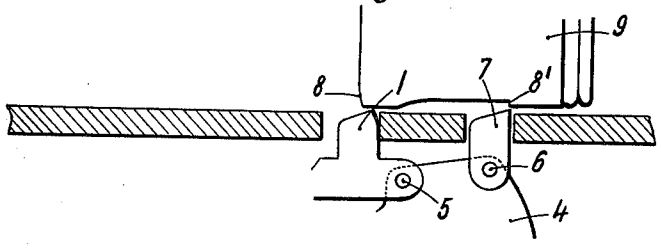


Fig.3



Inventor.

Eugène Duflot

by Fennie Goldsborough & O'Neill

Attys

E. DUFLOT.

TRIGGER FOR FIREARMS

APPLICATION FILED SEPT. 26, 1916.

1,245,889.

Patented Nov. 6, 1917.

2 SHEETS—SHEET 2.

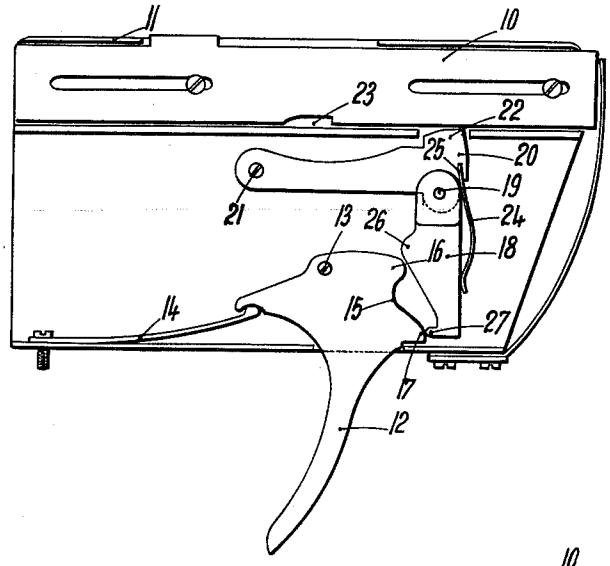


Fig.4

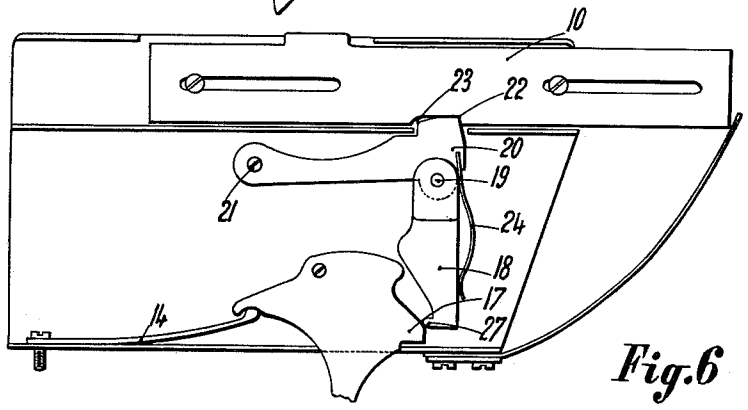


Fig.5

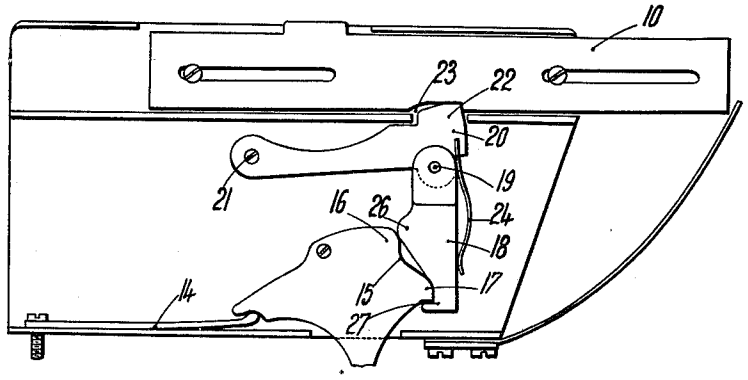


Fig.6

Inventor.

Eugene Duflot

By Lemmie Goldstrough & Mills

Attys.

UNITED STATES PATENT OFFICE.

EUGÈNE DUFLOT, OF PARIS, FRANCE.

TRIGGER FOR FIREARMS.

1,245,889. Specification of Letters Patent. Patented Nov. 6, 1917.

Application filed September 26, 1916. Serial No. 122,249.

To all whom it may concern:

Be it known that I, EUGÈNE DUFLOT, engineer, of 5 Rue Debrousse, at Paris, Department of the Seine, France, citizen of the French Republic, have invented certain new and useful Improvements in Triggers for Firearms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention consists in an improvement in the present trigger system of fire-arms insuring the maintenance of correct aiming by the suppression of the contraction of the hand and arm when operating the sear.

With the old trigger system, the operator, in order to shoot, is obliged to contract the hand. The contraction of the hand also causes the contraction of the arm and the movement of the shoulder of the operator.

With the new system, the operator first of all pulls the trigger as far as it will go, and, in order that the shot may be fired, the operator must release the trigger, thus removing all contraction of the muscles of the finger and of the arm. Thus the "finger deal," which is so detrimental to correct shooting, is done away with.

Because of this improved construction, the instruction of the operator, who is very often a recruit, will be greatly simplified.

It is to be understood that the new trigger system may be applied at very small cost and the expenditure of a short amount of time, to existing guns.

In the drawing:—

Figure 1 is a sectional view disclosing the trigger system at the time when the gun is blocked;

Fig. 2 is a fragmental sectional view showing the relative positions of the parts when the operator has pulled back the trigger to its greatest extent;

Fig. 3 is a similar fragmental sectional view showing the relative positions of the parts when the operator has released the trigger, the percussor being freed and the shot fired;

Fig. 4 is a view of a modification of the device, the parts being shown in the various positions they will assume immediately after the shot has been fired;

Fig. 5 is a view showing the positions of the parts as illustrated in Fig. 4, but in the positions that they will assume at the time the percussor is cocked; and

Fig. 6 is a view of the parts illustrated in Figs. 4 and 5 with the parts in the positions they will assume after the operator has completely retracted the trigger, but before he has removed his finger to provoke the percussion.

In the form of the invention illustrated in Figs. 1 to 3, inclusive, the percussion member 9 is held in a retracted position by a sear 1, which is adapted to oscillate about an axis 2 under the action of a spring 3, which spring normally urges the sear into its operative position through a trigger 4, which is connected to the sear by a pivot 5. The trigger 4 carries at its rear portion, a sear 7, the latter being pivoted at 6 to the trigger. Thus the front sear is normally maintained in its operative position, so that an accidental shot will be impossible. When the operator moves the trigger backwardly, it revolves first about the pivot 5 and causes the downward movement of the forward sear 1. It also causes the upward movement of the rear sear 7, so that the latter will strike against the lower part of the hammer at a predetermined point, one millimeter, for instance, in front of a shoulder 8′. Upon the arrival of the sear 7 in this position, the front sear 1 moves downwardly. Thus the engagement of this sear with the shoulder 8 is removed and the percussion member 9, which is no longer retained by the sear 1, moves forwardly so that the rear sear 7 engages the shoulder 8′. When this operation has taken place, the parts are in the position illustrated in Fig. 2. When the operator relieves the pressure of his finger on the trigger 4, the spring 3 moves the trigger 4 forwardly and the latter first revolves about the pivot 6 and causes the forward sear to move upwardly and strike against the lower part of the hammer which has moved forward to effect the engagement between the rear sear 7 and the shoulder 8′. From the moment of this engagement, the trigger 4 revolves about its movable pivot 5, thus causing the rear sear 7 to move downwardly and release the percussion member 9. The shot is thus fired.

In the form of the invention illustrated in Figs. 4, 5 and 6, the percussion member is represented by the character 10 and is slidable on pins which extend through slots

formed therein, the latter being formed in a framework 11. The trigger 12 is pivoted at 13 and is normally maintained in the position illustrated in Fig. 4, by a spring 14. This trigger 12 carries a block 15, which is provided with two projections 16 and 17. These projections coöperate with corresponding portions of a member 18 which is pivoted at 19 to a member 20, the latter being pivoted at 21 and having a sear 22 thereon, which is adapted to penetrate a corresponding notch 23 of the percussion member 10 to hold said member in its rearmost position after the recoil. Secured to this member 20 is a spring 24, which is fixed at 25 and the free end of which bears against the member 18, so as to maintain the parts 26 and 27 thereof against the respective projections 16 and 17 on the trigger.

The members 18 and 20 form between themselves, a determined angle, when the spring 24 forces the projection 27 of the member 18 against the projection 17 of the trigger. When the percussion member 10 is pushed to its rear position to load, the sear 22 moves into the notch 23 and maintains the member 10 in such position. This position is illustrated in Fig. 5 of the drawing. When the trigger is moved to its rearmost position, as represented in Fig. 6, the projection 17 of the block 15 outreaches the projection 27, as will be clear. If the trigger is released, this projection 27 being hooked on the projection 17, will cause the sear 22 to move out of the recess 23 of the percussion member 10 and the percussion will thus take place. If the trigger is permitted to move forwardly farther, the projection 16 will engage the projection 26 of the member 18, and thus raise the latter, unhooking the projections 17 and 27 to permit the parts to move to the position illustrated in Fig. 4.

I claim:

1. In a device of the class described, the combination with a trigger, of sears carried thereby arranged to alternately engage the percussor, and means for freeing the latter immediately upon the release of pressure from the trigger.

2. The combination with a trigger, of a pair of spaced sears carried thereby and arranged to alternately engage the percussor, the rear sear being arranged to engage upon the rearward movement of the trigger and to disengage immediately upon the release of pressure from the trigger.

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

EUGÈNE DUFLOT.

Witnesses:
HENRI COHEN,
TRACY LAY.