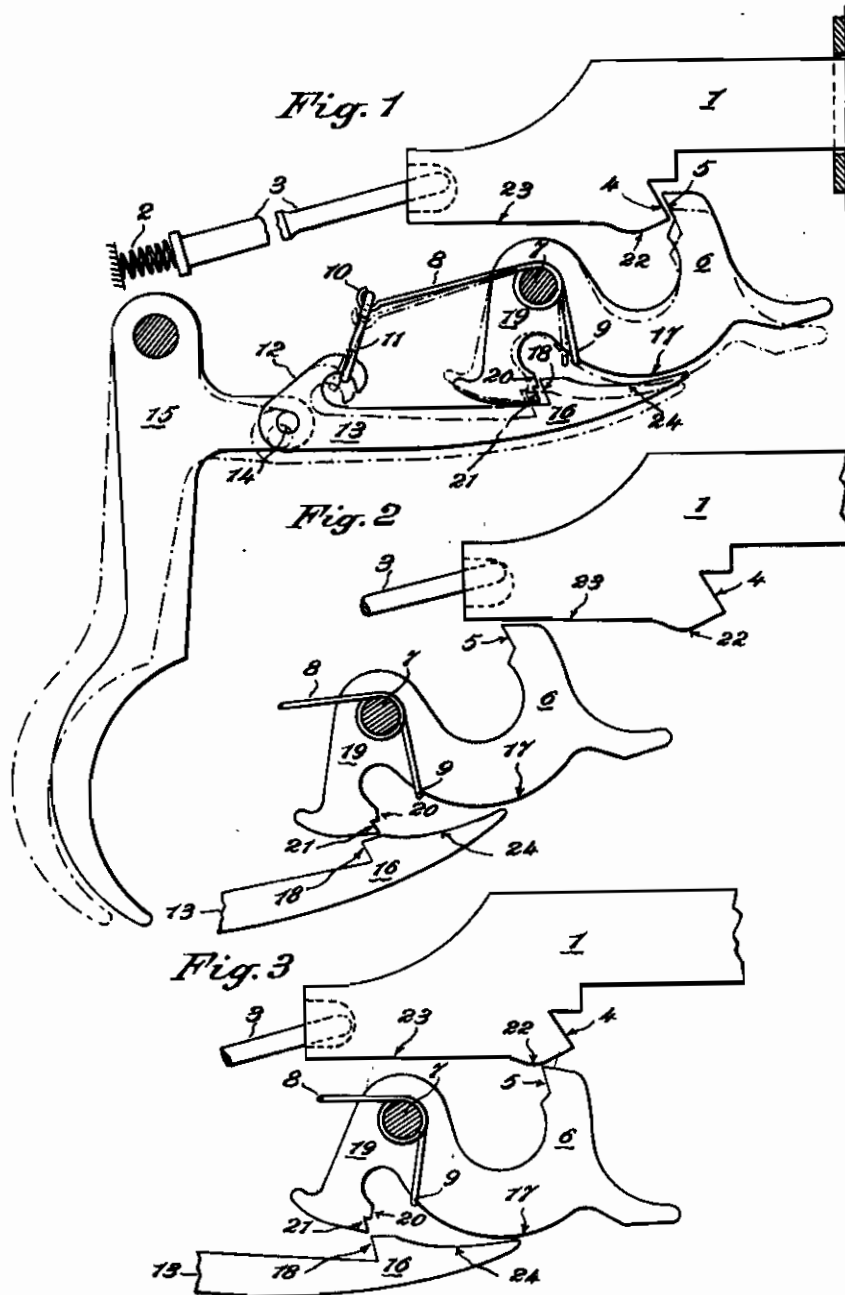


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FIRING MECHANISM FOR AUTOMATIC ARMS
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ALIEN PROPERTY CUSTODIAN

FIRING MECHANISM FOR AUTOMATIC ARMS

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The present invention relates to a firing mechanism for automatic arms.

According to the invention a firing mechanism with double release is provided, surely and smoothly functioning, so that it is not possible to execute the so called "rafale firing" comprising a series of very rapid consecutive shots obtained with other firing mechanisms when the trigger is kept down in a certain measure.

It is well known that in the automatic arms as rifles and the like a shot at a time is wanted to be fired at command and the "rafale firing" is to be avoided.

The invention is illustrated in the accompanying drawing in a schematic form of realisation alone, but it is understood that constructive changes may be practically introduced therein without surpassing the limits of protection of the present industrial patent.

Fig. 1 of the drawing shows in full lines the parts of the firing mechanism in cocked position and in dash and dot lines the parts after the first release of the mechanism.

Fig. 2 shows the position of the parts after the shot has been fired.

Fig. 3 shows a position of the parts during the movement of the striker.

With reference to said figures the striker 1 is driven forward by the spring 2 through the rod 3. The striker 1 is provided inferiorly with a tooth 4 destined to engage the notch 5 of the pawl 6. This latter is pivoted in 7 and solicited to rotate to the left hand by the needle spring 8, an end of which 9 engages on said pawl 6 and the other end 10 acts by means of the small connecting rod 11 on the arm 12 of the angle lever 13. This lever 13 is pivoted in 14 on the firing trigger 15. The arm 16 of the angle lever 13 is anteriorly shaped like a finger in order to bear against the lower part 17 of the pawl 6. Further the arm 16 is provided with a tooth 18 destined to cooperate with the lug 19 of the pawl 6. The lug 19 is provided with two supporting surfaces 20 and 21 placed in different planes destined to

cooperate successively with the tooth 18 of the said arm 16. The parts are kept in the position illustrated by full lines in Fig. 1, when the striker is cocked, by the needle spring 8. In such a position the finger 16 bears against the lower part 17 of the pawl 6 and the tooth 4 of the striker is engaged with the notch 5 of the pawl 6.

By exercising a traction on the trigger 15 (Fig. 1, dash and dot lines) this trigger, against the action of the spring 8 exercises a traction on the angle lever 13 and conveys the tooth 16 of the arm 16 in contact with the supporting surface 20 of the lug 19 of the pawl 6, while the arm 16 slides bearing against the surface 17 of the pawl 6. The pawl 6 is displaced into the position illustrated with dash and dot lines and the tooth 16 is released from the supporting surface 20 to the supporting surface 21. The finger actioning the trigger 15 perceives this first release of the firing mechanism.

By further actioning the trigger 15 (Fig. 2) in the direction indicated by the arrow, the tooth 4 abandons the notch 5 of the pawl 6 and the striker is pushed forward by the action of its own spring 2 hitting downwards the pawl 6 (Fig. 3) by means of its own lower tappet 22 and thus determining the sure disengagement of the tooth 16 from the supporting plane 21 so that the pawl 6 free of ever engagement with the angle lever 13 may be taken back with a left-hand motion to bear against the lower plane surface 23 of the striker ready to engage the tooth 4 as soon as this tooth has fallen back in consequence of the firing of a cartridge and has advanced again owing to the action of the spring 2. Yet if the trigger 15 is kept in a retreated position, a free movement up and down of the striker is not possible, consequently the so called "rafale firing" is absolutely excluded. Said disengagement between the tooth 16 and the supporting surface 21 occurs owing to the action of the lower surface 17 of the pawl 6 against the upper surface 24 of the arm 16.

GINO REVELLI.