

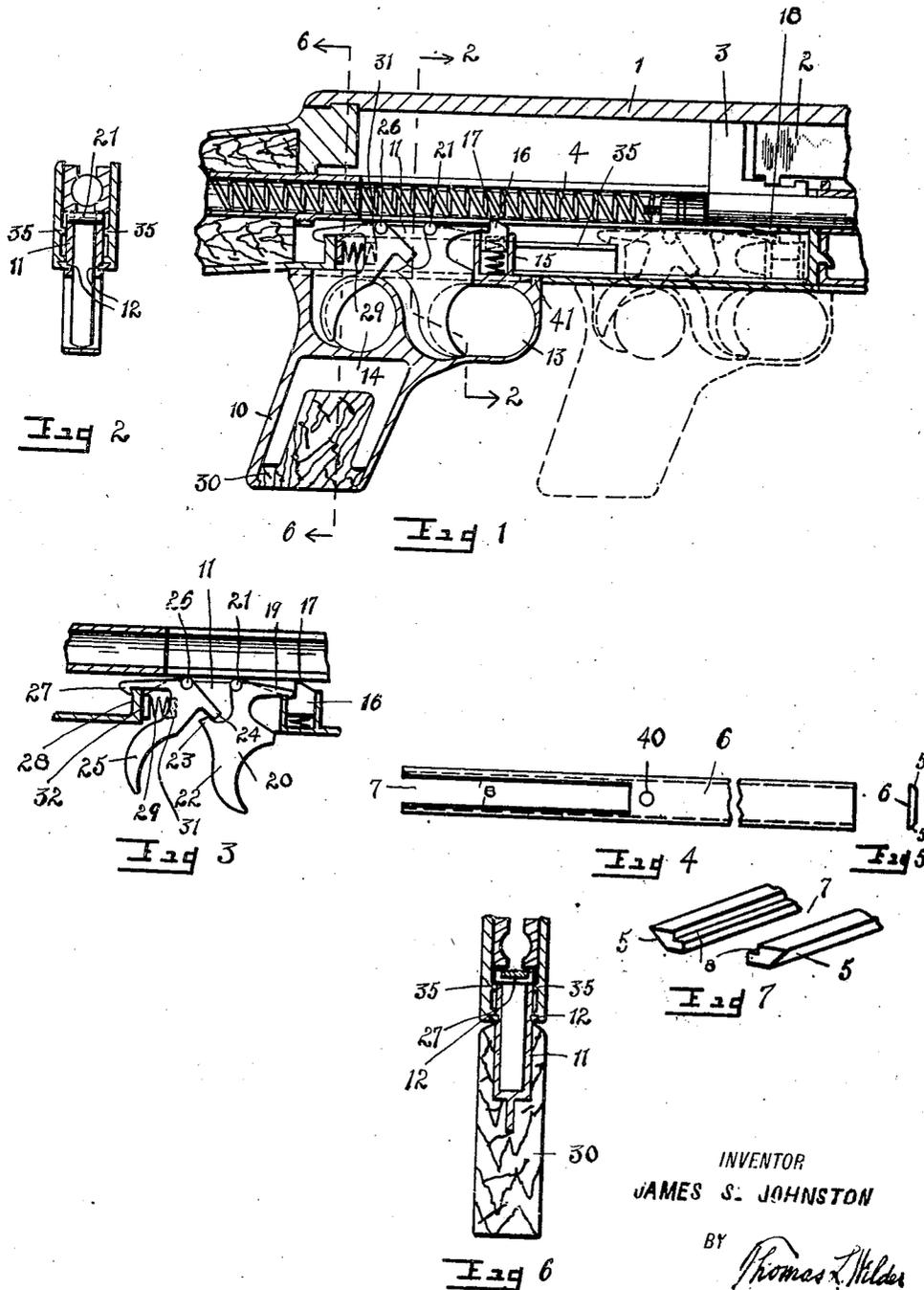
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COCKING MECHANISM FOR AUTOMATIC MACHINE GUNS

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## UNITED STATES PATENT OFFICE.

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COCKING MECHANISM FOR AUTOMATIC MACHINE GUNS.

Application filed August 25, 1917. Serial No. 188,085.

*To all whom it may concern:*

Be it known that I, JAMES S. JOHNSTON, a citizen of the United States, residing at Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Cocking Mechanism for an Automatic Machine Gun, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to a cocking mechanism for an automatic machine gun, and I declare the following to be a full, clear, concise and exact description thereof sufficient to enable anyone skilled in the art to which it appertains to make and use the same reference being had to the accompanying drawings in which like reference characters refer to like parts throughout the specification.

The object of the invention is to provide manual means located adjacent the trigger for cocking the gun, whereby the hand of the operator will not be shifted from one part of the gun to another in this operation with the consequent loss of time and delay in firing. Inasmuch, as all automatic firearms must be cocked before firing the first shot of each string or clip, the invention is intended to apply to all such.

The object will be understood by referring to the drawings in which:

Fig. 1 is a central vertical section of the rear part of an automatic machine gun, showing the cocking mechanism applied thereto;

Fig. 2 is a transverse section of a portion of the gun taken on the line 2—2 of Fig. 1; looking in the direction of the arrows;

Fig. 3 is a transverse section of a portion of the gun and cocking mechanism, showing another position of the trigger and trigger latch;

Fig. 4 is a detail plan view of a plate employed;

Fig. 5 is an end view of the plate shown in Fig. 4;

Fig. 6 is a transverse section of a portion of the gun taken on the line 6—6 of Fig. 1;

Fig. 7 is a detail enlarged view of the ends of the plate shown in Fig. 4.

Referring more particularly to the drawings, a portion of the receiver of the firearm is represented by 1—1, the rear part of the breech bolt by 2, the actuator by 3, and the actuating spring therefor by 4. The lower surface of the receiver 1—1 is open and has formed on either side thereof bev-

eled recesses for the insertion of the correspondingly shaped sides 5—5 of the movable retainer plate 6, whereby said plate is held slidingly in assembled position. The movable retainer plate 6 is recessed at 7 and provided with shoulders 8—8 on either side along the edges of the recess 7. The shoulders 8 support the cocking handle 10 whose upper portion 11 is recessed at 12—12 to form corresponding apertures adapted to receive the shoulders 8 of the retainer plate 6. The plate 6 has an aperture 40 for the reception of a projection 41 of the handle 10, whereby to move therewith.

The cocking handle 10 embodies besides the upper part 11, a grip 30, the finger recesses 13 and 14 and the tubular casing 15 for the reception of the spring pressed sear 16. The sear 16 has a tooth 17 adapted to engage the detent 18 projecting downward from the actuator 3. The tooth 17 of the sear 16 is disengaged at the proper time from the detent 18 by the end 19 of the trigger 20 which can be turned upon its trunnions 21 as a fulcrum. The trunnions 21 are formed integral with the trigger 20 and project from opposite sides thereof. They have bearings in the open slots made in the upper edge of the part 11 of the cocking handle 10. The finger piece 22 of the trigger 20 is located in the end of the recess 13. The rear side of the finger piece 22 has a shoulder 23 which is adapted to be engaged by the projecting end 24 of the trigger latch 25. The trigger latch 25 is provided with the trunnions 26 extending from opposite sides thereof and having bearings in the open slots made in the top edge of the upper part 11 of the cocking handle 10. The trunnions 26 form a fulcrum upon which the trigger latch 25 may be turned or rocked.

The trigger latch 25 is provided with a rearwardly extending end having a hook 27 that is adapted to engage the edge of a shoulder 28 formed in the gun. A coiled spring 29 resting at one end in a recess 31 of the trigger latch 25 and at the other fastened to a cross bar 32 secured to the upper part 11 of the cocking handle 10, normally holds the hook 27 down, whereby it will engage the shoulder 28 of the gun. The hook 27 extends across the interior of the gun and is adapted to rest, when the trigger latch 25 rocks upon its fulcrum to given a position upon the shoulders 35—35 made upon either side of the interior of the gun. In this lat-

ter position the projection 24 of the trigger latch 25 will engage the shoulder 23 of the trigger 20 and lock said trigger in given position.

5 In operation, the gun can be cocked by grasping manually the grip 30, inserting a finger in the recess 14 to manipulate the latch 25, and then pushing the cocking handle 10 forward from the full line to the dotted line position illustrated in Fig. 1. 10 As the cocking handle 10 goes forward, the sear 16 will ride under and engage the detent 18 of the actuator 3. The grip 30 will be drawn backward then into the full line 15 position illustrated in Fig. 1 to move the actuator 4 and the bolt 2 into cocked position. During the movement of the grip 30, the trigger 20 will be held in locked position to prevent the end 19 thereof from disengaging the sear 16 from the detent 18. 20 When the cocking handle 10 has reached its rearmost position, the pressure of the finger on the trigger latch 25 being released, the hook 27 will under the influence of the spring 29 reengage the shoulder 28 to lock the parts in cocked position. The trigger 20 can be pulled now to actuate the sear 16 in order to release the actuator 3 to fire the gun. In this latter movement of the trigger 20, the shoulder 23 thereof will slip by 10 the projection 24 of the trigger latch 25, as illustrated in Figs. 1 and 3. In this instance, the hook 27 will be locked against the shoulder 28, to thereby prevent the cocking 15 handle 10 from going forward.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. In a cocking mechanism for an automatic machine gun, a cocking handle carrying a demountable trigger, a plate having shoulders for supporting said cocking handle, a projection on said handle adapted to engage an aperture in said plate, whereby 5 said handle will move with said plate, beveled sides on said plate for holding said cocking handle in position, and means per-

mitting the reciprocation of said cocking handle, whereby to cock the gun.

2. In a cocking mechanism for an automatic machine gun, a demountable cocking handle carrying a trigger, a receiver having beveled recesses, a plate having beveled sides adapted to move in said beveled recesses of the receiver, shoulders on said plate, said 55 cocking handle having apertures for the reception of said shoulders of the plate, and a projection on said cocking handle adapted to engage an aperture in said plate, whereby to hold said cocking handle in assembled 60 position.

3. In a cocking mechanism for an automatic machine gun, a grip comprising the trigger guard, a trigger mounted in said guard, means for holding said trigger in 65 locked position while said grip is being moved, and means for permitting said grip to move horizontally, whereby to cock the gun.

4. In a cocking mechanism for an automatic machine gun, a grip comprising the trigger guard, a trigger mounted in said guard, an auxiliary trigger adapted to lock 70 said first named trigger while the grip is being moved, and beveled recesses for permitting said grip to move, whereby to cock the gun. 75

5. In a cocking mechanism for an automatic machine gun having a breech bolt, a cocking handle having a demountable trigger 80 mounted therein, a plate having shoulders for supporting the demountable cocking handle, a projection on said handle adapted to engage an aperture in said plate, whereby said handle will move with said plate, 85 a receiver having beveled recesses, and beveled sides on said plate adapted to slide in the beveled recesses of the receiver, whereby the cocking handle may be moved to cock the gun. 90

In testimony whereof I have affixed my signature.

JAMES S. JOHNSTON.