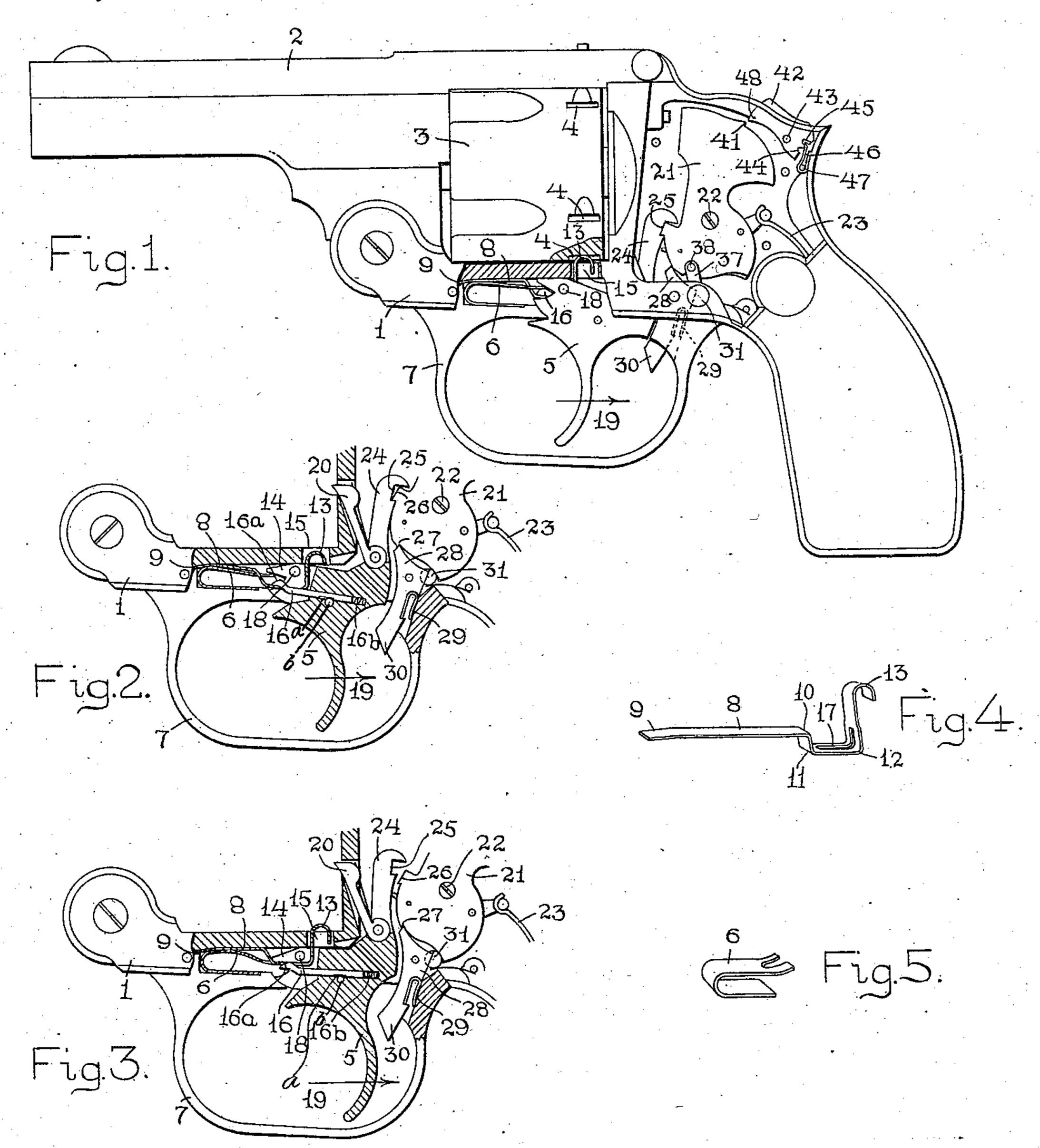
O. W. RINGQVIST. REVOLVING FIREARM. APPLICATION FILED OCT. 15, 1904.

931,146.

Patented Aug. 17, 1909.



Vitnesses

Roy D. Tolman. Penelsperbomberbach Inventor

Otto W. Ringquist.

By Rugues Berweler

Attorney

UNITED STATES PATENT OFFICE.

OTTO W. RINGQVIST, OF FITCHBURG, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO MARY ELIZABETH JOHNSON, TRUSTEE, OF FITCHBURG, MASSACHUSETTS.

REVOLVING FIREARM.

No. 931,146.

Specification of Letters Patent.

Patented Aug. 17, 1909.

Application filed October 15, 1904. Serial No. 228,586.

To all whom it may concern:

Be it known that I, Otto W. Ringqvist, a citizen of the United States, residing at Fitchburg, in the county of Worcester and Commonwealth of Massachusetts, have invented a new and useful Improvement in Revolving Firearms, of which the following is a specification, accompanied by drawings forming a part of the same, in which—

Figure 1 represents a side view of a revolving fire arm embodying my invention, the side plate having been removed to disclose the lock mechanism. Figs. 2 and 3 are side views, partly in section, of the lock mechanism and the cylinder latch mechanism. Fig. 4 is a detached perspective view of the cylinder latch. Fig. 5 is a detached perspective view of the trigger spring.

Similar reference letters and figures refer

20 to similar parts in the different views.

My present invention relates to a latching mechanism for locking the cylinder of a revolving fire arm in position during the operation of firing; and it consists in the construction and arrangement of parts as hereinafter described and pointed out in the annexed claims.

Referring to the accompanying drawings, 1 denotes the framework of a revolving fire arm, 2 the barrel, 3 the revolving cylinder provided with notches 4 by which it is engaged by a cylinder latch for the purpose of holding the cylinder from rotating.

5 denotes a pivoted trigger which is actuated by a U-shaped trigger spring 6 held in a recess between the trigger guard 7 and

the frame of the fire arm.

Pinched between the frame of the fire arm and the trigger spring 6 is a cylinder latch 8 40 consisting of a narrow elastic strip of steel, shown in perspective view in Fig. 4. The end 9 of the cylinder latch is slightly crimped and adapted to be inserted between the frame of the fire arm and the trigger guard, 45 as shown in Figs. 1, 2 and 3, thereby holding the latch 8 from longitudinal movement. The latch 8 is bent downwardly at 10 and rearwardly at 11, and again upwardly at 12, with its upper end curved into a semi-circular ⁵⁰ hook 13. The downwardly bent portion of the latch between 10 and 13 is extended into a recess 14 of the trigger, as shown in Figs. 2 and 3, and the hook portion 13 is inserted in a mortise 15 in the framework, and is ar-⁵⁵ ranged to pass through the mortise 15 and 1 enter one of the notches 4 of the revolving fire arm.

The trigger 5 carries a spring actuated dog 16 having its exposed end turned upwardly and provided on its upper side with 60 a rounded or cam shaped surface 16a. That portion of the cylinder latch inclosed in the recess 14 of the trigger is provided with a mortise 17, through which the exposed end of the dog 16 enters, as shown in Fig. 2, 65 with the tip of the dog 16 resting upon the upper surface of the cylinder latch at the forward end of the mortise 17. In the normal position of the trigger, as shown in Fig. 1, the hook shaped end 13 of the cylinder 70 latch extends through the mortise 15 and enters one of the notches 4 of the revolving cylinder, thereby holding the cylinder from rotation. As the trigger is pulled back on its pivot 18 in the direction of the arrow 19, 75 the engagement of the spring actuated dog 16 with the upper surface of the cylinder latch, will cause the latch to be depressed until the hook shaped end 13 is withdrawn into the mortise 15, thereby releasing the 80 cylinder as shown in Fig. 2. The continued rocking movement of the trigger 5 in the direction of the arrow 19 will draw the dog 16 back until its tip passes through the mortise 17, allowing the elasticity of the cylin- 85 der latch 8 to again carry its hooked end 13 through the mortise 15 of the frame, as shown in Fig. 3, and into the position to again engage one of the notches 4 of the cylinder, and allow the cylinder latch to 90 again hold the cylinder from rotating, at the time when the trigger has reached its rearward position to release the hammer in the act of firing. The hooked end of the cylinder latch therefore engages the cylin- 95 der when the lock mechanism is in its normal position or before the trigger is drawn back, as represented in Fig. 1, and it again engages the cylinder when the trigger has reached its rearward position or at the pe- 100 riod of firing, releasing the cylinder during the intermediate movement of the trigger to allow the cylinder to be rotated in the usual manner in arms of this class by means of the actuating cylinder pawls 20. When the trig- 105 ger is released its rocking motion is reversed by the action of the trigger spring 6 restoring the trigger to the position shown in Fig. 1. During the forward movement of the trigger the rounded surface 16a of the spring 110 actuated dog is carried against the under side of the cylinder latch 8 at the forward end of the mortise 17, and the pressure of the rounded surface 16^a against the cylinder 1 latch will cause the dog 16 to be forced into the trigger against the tension of the spiral spring 16^b, thereby allowing the tip of the dog to pass through the mortise 17 when the spring 16^b will force the dog forward and cause its tip to overlap the upper surface of the cylinder latch in the position shown in Fig. 1.

The dog 16 is provided with a recess a which is engaged by a pin b in the trigger, shown in Figs. 2 and 3, and thus the longitudinal movement of the dog 16 by the

spring 16^b is limited.

What I claim as my invention and desire

to secure by Letters Patent is:-

1. In a revolving fire arm, the combination with a rotatable cylinder and a pivoted trigger, of an elastic cylinder latch attached at its forward end to the frame and having downward, rearward and upward bends, with its upper rearward end arranged to engage the cylinder and with the downwardly bent portion extending through a recess in the trigger below the pivot, and yielding means carried by said trigger arranged to engage said cylinder latch in said recess below said pivot.

2. In a revolving fire arm, the combina-

tion with a rotatable cylinder and a pivoted trigger, of an elastic cylinder latch attached at its forward end to the frame and having 35 downward, rearward and upward bends, with its upper rearward end arranged to engage the cylinder, with the downwardly bent portion extending through a recess in the trigger below the pivot and provided 40 with a longitudinal opening, and yielding means carried by said trigger arranged to engage said cylinder latch at the forward end of said opening.

3. In a revolving fire arm, the combination with a rotatable cylinder and a pivoted trigger, of an elastic cylinder latch attached at its forward end to the frame and extending rearwardly parallel with the frame, bent downward, rearward and upward with its 50 upper rearward end arranged to engage the cylinder, and a slidable spring actuated dog carried in said trigger and arranged substantially in the line of the downwardly bent portion of said cylinder latch, whereby said 55 dog is moved longitudinally by contact with said downwardly bent portion during the forward movement of the trigger.

Dated this tenth day of October 1904.

OTTO W. RINGQVIST.

Witnesses:

CHAS. E. WARE,
GUSTAF ELLSTROM.