

(No Model.)

2 Sheets—Sheet 1.

J. ROSS.

EJECTOR MECHANISM FOR DROP DOWN GUNS.

No. 491,270.

Patented Feb. 7, 1893.

Fig. 1.

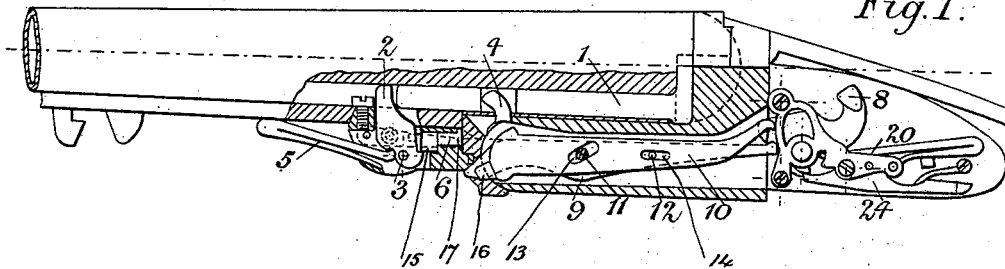


Fig. 2.

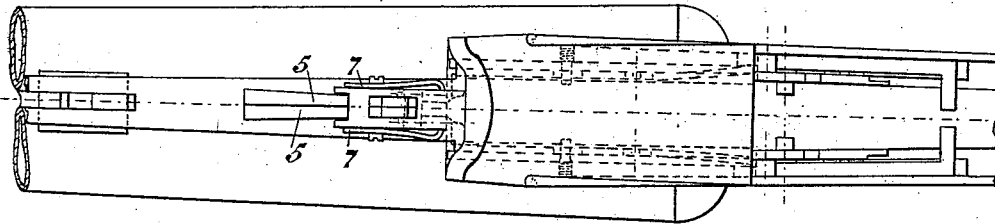
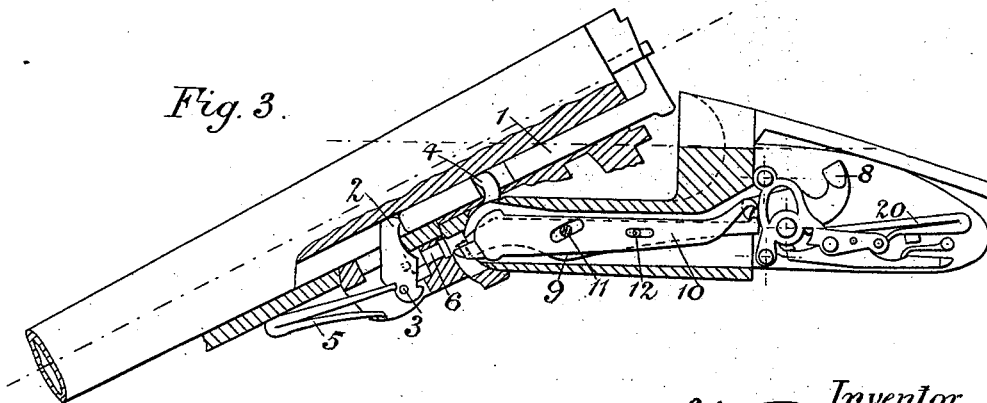


Fig. 3.



Witnesses

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per

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Attorney.

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Fig. 5.

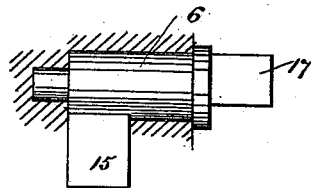


Fig. 6.

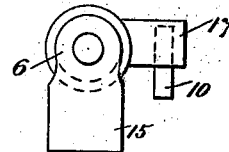
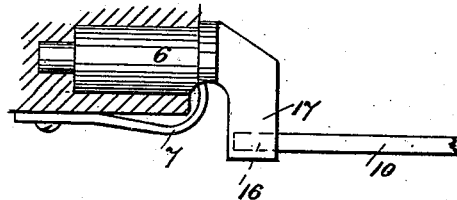


Fig. 4.



Witnesses.

Walter N. Weston

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UNITED STATES PATENT OFFICE.

JOHN ROSS, OF LONDON, ENGLAND.

EJECTOR MECHANISM FOR DROP-DOWN GUNS.

SPECIFICATION forming part of Letters Patent No. 7491,270, dated February 7, 1893.

Application filed February 16, 1892. Serial No. 421,701. (No model.) Patented in England November 28, 1890, No. 19,395.

To all whom it may concern:

Be it known that I, JOHN ROSS, a subject of the Queen of Great Britain and Ireland, residing at 26 Stewart's Road, Battersea Park Road, London, England, have invented certain new and useful Improvements in Extractor Mechanism for Drop-Down Small-Arms; 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.

Letters Patent for this invention have been obtained in England No. 19,395, dated November 28, 1890.

My improvements relate to that class of extractor mechanism for drop down small arms in which the cases of exploded cartridges only are automatically ejected from the barrels by the opening of the gun for the purpose of reloading. The usual mechanism for the above purpose consists for each barrel of an extractor rod fitted with a suitable bead for thrusting out the cartridge case. On opening the gun the first part of the movement causes a limb to thrust the ejector rod forward and so push the cartridge case out a short distance and on the further opening of the gun an ejector hammer is released which strikes the ejector rod a smart blow so ejecting the empty cartridge case.

This invention consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings: Figure 1 is a longitudinal section through the ejector mechanism. Fig. 2 is a plan view, from below. Fig. 3 is a longitudinal section similar to Fig. 1, but shows the gun opened. Figs. 4, 5 and 6 are, respectively, a plan, a side view and an end view of the rotary sear, drawn to a larger scale.

The ejector rod 1 is carried by the barrel, and is provided with a cross slot which engages loosely with a limb 4 projecting from the knuckle of the action. The ejector hammer 2 is pivoted to the barrel by the pin 3, and is operated by a spring 5 also carried by the barrel. A rotary sear 6 is journaled parallel with the barrel, and is provided with a projection 15 which normally engages with a

projection on the hammer 2, and holds it clear of the end of the ejector rod as shown in Fig. 1. A spring 7 is provided for holding the sear 6 in place and permitting it to oscillate. The sear 6 is also provided with a lateral extension or projection 17 arranged at substantially a right angle to the projection 15 and at the other end of the sear.

The firing hammer 8 is operated by the spring 20 and sear 24 in the usual approved manner.

The cocking limb 9 slides longitudinally in the usual manner, and is provided with a projecting pin 12 on one side of it. A limb 10 is provided for working the ejector mechanism, and is arranged alongside the limb 9, and is provided with the slot 14 which works upon the said pin 12, and with a slot 13 which works upon a pin 11 projecting from the body of the gun action. The limb 10 is also provided with a projection 16 at its front end.

The operation of the device is as follows: When the sear 24 is lowered, the hammer 8 flies forward under the pressure of the spring 20 and fires the cartridge, and also forces forward the limbs 9 and 10, and thrusts the projection 16, of limb 10, under the projection 17 of the sear 6. The gun is then opened, and during the first part of its opening movement the ejector rod is partially pressed back by the limb 4, the ejector hammer still being held by the sear 6. The continued movement of opening the gun brings the projections 17 and 16 into contact and partially revolves the sear 6. The projection 15 is moved to one side so that the hammer 2 is released and is permitted to complete the forcing back of the ejector rod as shown in Fig. 3, thereby throwing out the empty cartridge. When the hammer 8 has not fallen, as in the act of firing the gun, the projection 16 is not thrust forward under the projection 17 on the sear, and the gun can be opened and closed without throwing out the cartridge.

What I claim is:

The combination, with the ejector rod carried by the barrel and provided with a slot, of the stationary limb 4 engaging with the said slot, the pivoted spring-actuated hammer 2 for striking the end of the ejector rod,

the rotary sear journaled parallel with the barrel and provided with the projection 15 normally holding the hammer 2 and having a lateral projection 17, and the longitudinally-movable limb 10 provided with a projection 16 adapted to be thrust forward under the projection 17 when the gun is fired, whereby the sear is revolved and the hammer 2 released

when the gun is fully opened, substantially as set forth.

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

JOHN ROSS.

Witnesses:

WILLIAM B. CANDY,
CHAS. ROCHE.