(No Model.)

A. H. RUSSELL.

REFLECTOR FOR INSPECTING GUNS.

No. 399,286. Patented Mar. 12, 1889.

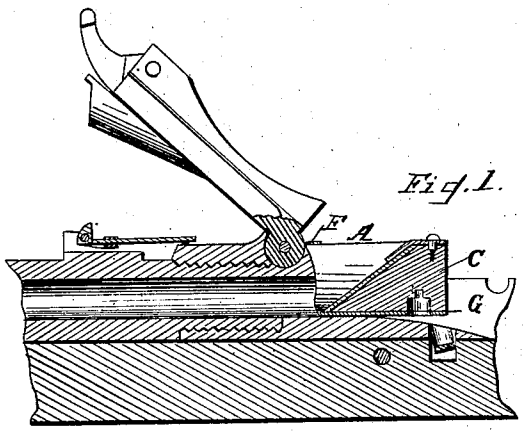


Fig. 1.

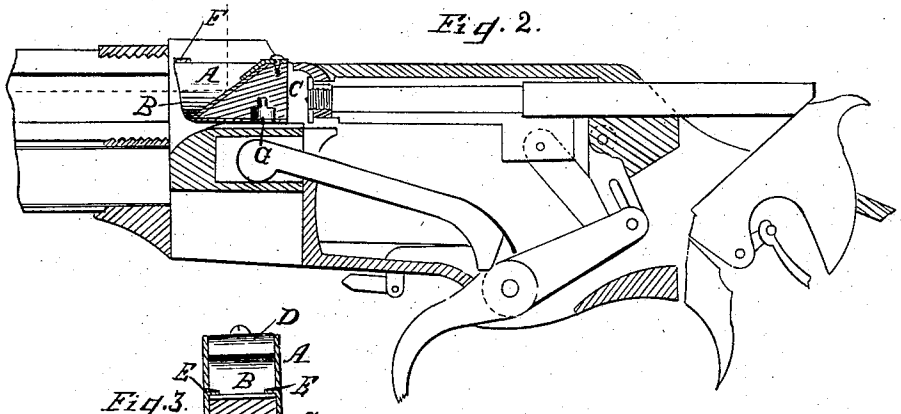


Fig. 2.

Fig. 3.

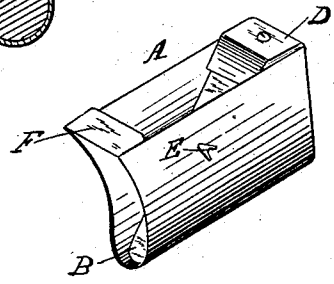


Fig. 4.

Witnesses.
L. M. Bartlett.
A. D. Vandeventer.

Inventor.
Andrew H. Russell
By W. A. Barclett
Atty

UNITED STATES PATENT OFFICE.

ANDREW H. RUSSELL, OF THE UNITED STATES ARMY.

REFLECTOR FOR INSPECTING GUNS.

SPECIFICATION forming part of Letters Patent No. 399,286, dated March 12, 1889.

Application filed August 10, 1888. Serial No. 282,469. (No model.)

To all whom it may concern:

Be it known that I, ANDREW H. RUSSELL, of the United States Army, stationed at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Reflectors for Inspecting Guns, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to implements for inspecting guns, in which a reflector or mirror is used to throw light into the bore of the gun or to direct the angle of vision along the bore.

The invention consists of a reflector or mirror and a support or frame therefor, the frame being of such form as to fit the receiver of a breech-loading gun and maintain the mirror at the proper angle, and also to hold the breech-block open.

In the drawings I show the device applied to two forms of breech-loader.

It will readily be understood that by very slight changes the implement may be used in any common form of breech-loading gun.

Figure 1 is a section through the receiver of a "Springfield" breech-loader, showing a section of the reflector. Fig. 2 is a similar view of the receiver of a "Winchester" magazine-gun, showing reflector in position. Fig. 3 is a central cross-section of the reflector. Fig. 4 is a perspective of same.

The reference-letter A designates the casing of my reflector. This casing is preferably of thin metal struck up or bent to approximate the form and size of the interior of the receiver of the gun. The sides may be slightly flexible, so as to spring against the walls of the receiver and hold the implement in place. The form shown is that preferred for the Springfield gun, and the material may be hard rubber or other substance instead of metal.

B indicates the mirror or reflector, which is secured in the casing A at such an angle (usually forty-five degrees) to the bottom or top of the casing that when the casing is in the receiver the mirror will be at an angle of about forty-five degrees with the axis of the bore. When the casing is rounded at the bottom, as in the drawings, the mirror will be rounded to correspond. The mirror in the illustration is supported by a wooden block, C, and is clamped in the casing by a bent plate, D, secured to said block, and by points E, struck up in or cut through the metal of the casing A. A cross-bar, F, serves to support the upper corners of the casing, and also as a handle or finger-hold to lift the implement from the receiver. The casing and block may be recessed, as at G, to receive a retaining-catch or pass over any projection in the receiver.

For use in inspecting arms the reflector is placed in the open receiver of the gun, and when pressed home in the receiver will maintain the mirror at an angle of about forty-five degrees with the axis of the bore. The casing should fit tightly enough in the receiver to retain the implement in place, and will hold the breech-block open. The gun may be inspected from the breech by looking into the mirror, the line of vision being indicated by the dotted line, Fig. 2, or the gun may be inspected from the muzzle, light being reflected into the bore in the direction indicated by the same dotted line.

The instrument may be made in many forms. The general idea is that the casing shall fit the receiver with sufficient accuracy to maintain the mirror at an angle of about forty-five degrees with the bore, and shall hold the breech open for inspection.

What I claim is—

1. A gun implement consisting of a casing or frame of such shape as to fit the receiver of a gun, and a mirror held by said casing at the proper angle to throw light into the bore when the casing is adjusted in the receiver, substantially as described.

2. A gun implement consisting of a bent casing of such form as to fit the receiver of a gun and inclosing the sides of an inclined mirror, a mirror, inclined as described, and clasps to retain the mirror in position, substantially as set forth.

3. The combination, in a gun implement, of a metallic casing shaped to fit the receiver of a gun, an inclosed mirror in said casing, retaining-catches for the mirror, and a finger-piece or catch for removing the implement from the receiver, all substantially as described.

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

ANDREW H. RUSSELL.

Witnesses:
HENRY L. SMITH,
WM. HANNING.