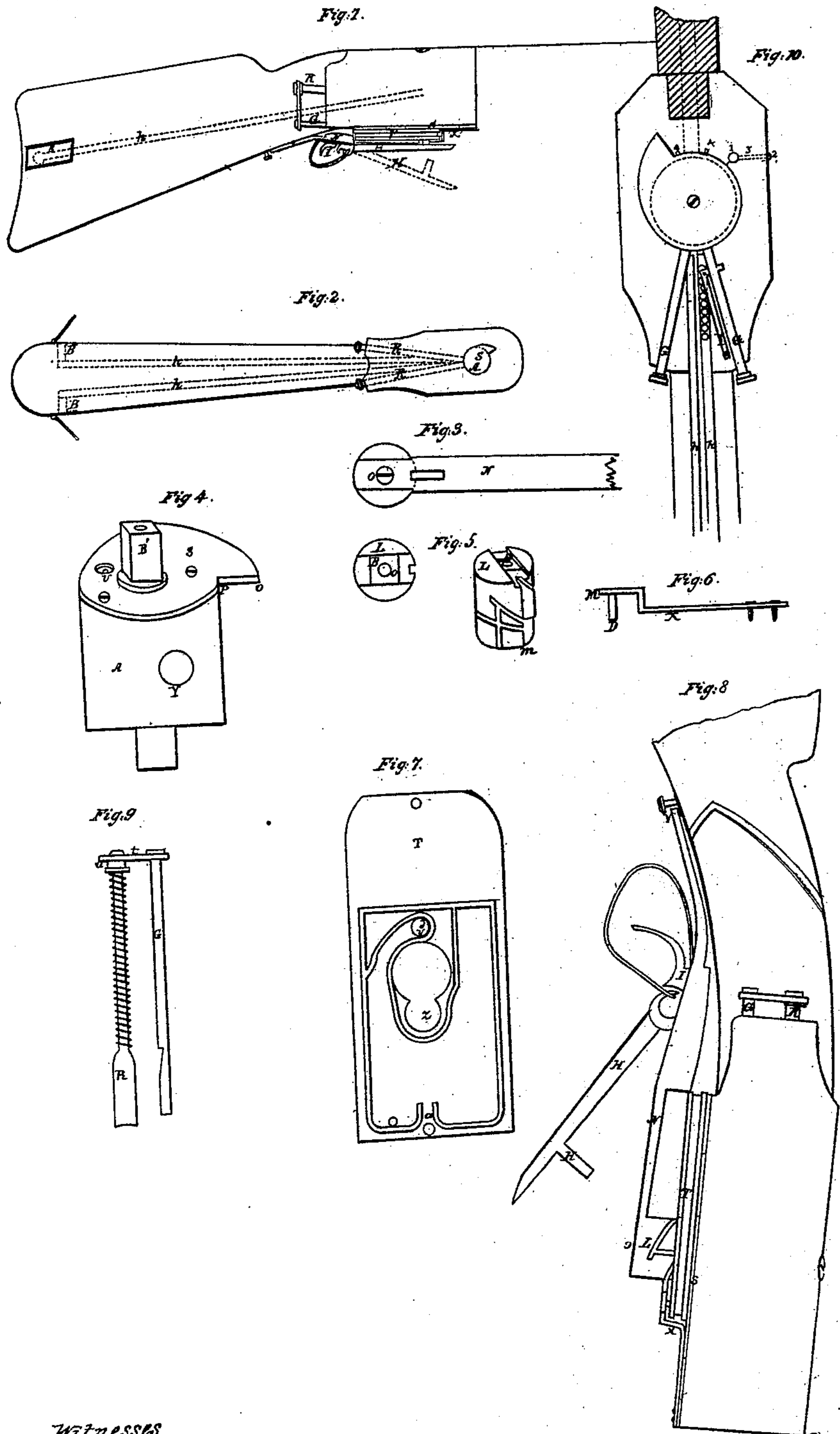


N. W. BREWER.  
Magazine Fire-arm.

No. 28,646.

Patented June 12, 1860.



Witnesses  
*J. J. Albright*

Inventor  
*Nelson W. Brewer*  
 by *Thos. Frank's atty*

# UNITED STATES PATENT OFFICE.

NELSON W. BREWER, OF WILLIAMSPORT, PENNSYLVANIA.

## IMPROVEMENT IN SELF-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 28,646, dated June 12, 1860.

*To all whom it may concern:*

Be it known that I, NELSON W. BREWER, of Williamsport, Lycoming county, State of Pennsylvania, have invented a new and Improved Breech-Loading Rifle, Gun, and Pistol; and believe the following to be an exact description thereof, reference being had to the accompanying drawings.

The nature of my invention consists in the construction and arrangement of the cylinder A, the spiral plate S, cap L, and cap-box T, together with the manner of capping, as will be hereinafter described.

In the drawings, Nos. 1 and 8 represent a rifle with my improvements attached. From the butt of the gun, extending through the "small," two chambers are bored either parallel, as in No. 10, or approaching each other, as in No. 2, and terminated by a cylinder, A. These chambers *h h* are designed to contain the ammunition. On each side of the breech, and communicating with the chambers *h h* or tubes just mentioned, is a spring-opening, B, similar to that on most rifles now in use. The powder can be introduced by means of a small funnel at B, and the balls dropped through a small orifice in the box or pocket of the breech to their respective places. The chamber designed for the powder is represented on the plan by red, that for the balls by blue. Intersecting these chambers and fitting neatly therein are the rammers R R, Figs. 9 and 10, placed in an angular direction, Fig. 10, the ends concave, fitting closely the cylinder A. These rammers are firmly connected to guides G G, Fig. 8. Fig. 9 represents this connection by means of the plate *t* and screw-head *u*. The motions of the guide G are governed by those of the eccentric plate S, against which it rests. Surrounding the rammer is a spiral screw, which causes the rammer to return quickly with force after the guide passes the point Q of the plate S.

The cylinder A, Fig. 4, is secured to its place by screw *r*, and is bored toward the center deep enough to contain the charge. Upon one end is securely fastened an eccentric plate, S, of which P Q measures the load and shows the distance the guides G G and rammers R R, Figs. 8 and 10, are removed from the cylinder A. The rammers R R moving with them a space in the tubes equal to P Q, will now re-

ceive the load, Fig. 10. The plate S has an opening for the nipple U. Upon this plate the cap-box T is placed, to secure which to its place the cylinder L, Fig. 5, with a square opening to fit projection of cylinder B, Fig. 4, is placed above it. The lever N, Fig. 3, is then fastened to L and B by a screw, O, thus firmly attaching the parts mentioned.

The cap-box is of brass, iron, or any suitable metal, the distance between the top and bottom being governed by the height of cap used. Fig. 7 represents the inner arrangement of this box. The caps are introduced at opening *a*, either on the side or end. The space being occupied by the caps in their upright position effectually prevents them from turning in any position of the gun from the opening *a* until they arrive at the opening J, over the nipple U, where the point D, Fig. 6, of the spring X descends and attaches the cap to the nipple. The continued revolution of the cylinder A brings the capped nipple to Z, and the orifice Y of cylinder A opposite the orifice of the barrel.

The cap L is placed upon B', Fig. 4, with vertical and spiral grooves for the admission of the end M of the cap-adjuster, Fig. 6. This end is elevated or depressed, according to the position of the plate S, Fig. 4. At a certain point in the revolution of the cylinder the end M arrives at the vertical groove *m*, when the point D passes through the cap-box and attaches the cap under it to the nipple upon cylinder A. A further motion of the cylinder causes the end to ascend by the spiral groove, and thus free D from contact with the cap.

The lever is represented by N in Figs. 1, 3, and 8. One end is secured, as before stated, by a screw at O. The opposite end is stayed by a projection operated on by a spring at V, Fig. 8. The hammer H is connected with the trigger I by a hook and spring, *e*, which forms the guard in ordinary use, and this forms the entire lock of the piece.

The mode of operating with the gun is: After filling the tubes *h h* with powder and balls, and storing the cap-box T to its capacity, raise the hammer H and depress the muzzle, in order that the ammunition may rest upon the rammers R R. A pressure of the finger upon V will release the end of the lever N; then turn it from left to right, which gives a corre-

sponding motion to the cylinder A. The ends of the guides G G will be operated on by eccentric plate S, and thus the rammers R R be pressed beyond the chambers *h h*, and the space they occupied be supplied with ammunition. After the first guide G passes the point Q, the spiral spring surrounding rammer R causes its quick return and presses the powder (now in the space it previously occupied) against the cylinder A until the orifice Y arrives opposite and receives the charge. The point Q next arrives at the tube containing the bullets, which are acted upon similarly by its guide and rammer. The gun is then turned on its side to assist the motion of the caps and complete the revolution of the lever N. The cap L, revolving with the cylinder A, by means of its grooves, regulates the motion of the cap X, and after the end of the revolution of the lever N the gun is loaded and ready to be fired, Fig. 8. After each discharge a similar revolution of the lever renews the load.

To avoid possibility to accident from any powder, fire, or smoke about cylinder, two small holes or vents, No. 4, Fig. 10, are made, which affords a means of escape after explosion, effectually securing the person holding the gun from danger.

The separation of the balls is effected by a spring, Z, parallel to guide E, Fig. 10, which

is operated by notch in guide shown in Fig. 9. A projection is attached to Z. When the guide moves back the spring is pressed down, and the projection separates the first and second balls, the first occupying the space vacated by rammer, which on its return is pressed against the cylinder until the orifice Y, now containing the charge of powder, arrives opposite, when it is lodged in front of the powder.

The cylinder A is oiled by means of a hole, No. 1, Fig. 10, drilled from the top of the gun. The upper part of this opening is closed, and another hole is then made laterally intersecting it. In this lateral hole, No. 3, Fig. 10, the oil is placed, and secured from leakage by a screw, No. 2, Fig. 10. Two small holes drilled laterally from No. 1, Fig. 10, conduct the oil to the cylinder.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The arrangement of the cylinder A, with spiral plate S and cap L.
2. The cap-box T and manner of capping herein described.

NELSON W. BREWER.

Witnesses:

DAVID TRAINER,  
FRANK TRAINER.