A. N. NEWTON.

Breech-Loading Fire-Arm.

No. 15,522. Patented Aug. 12, 1856

Fig. 1.

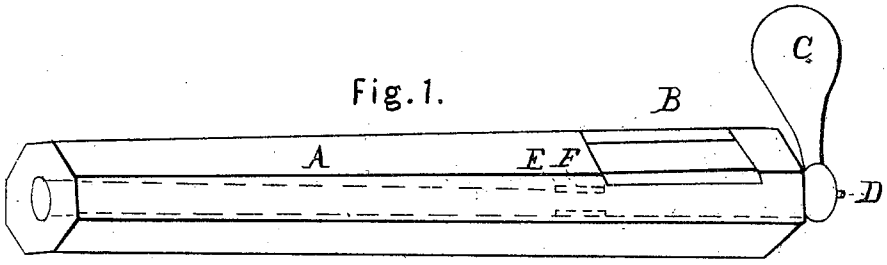


Fig. 2.

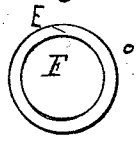


Fig. 3.

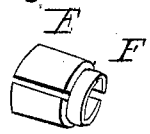
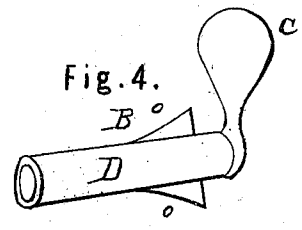


Fig. 4.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ABNER N. NEWTON, OF RICHMOND, INDIANA.

IMPROVEMENT IN FIRE-ARMS.

Specification forming part of Letters Patent No. **15,522**, dated August 12, 1856.

To all whom it may concern:

Be it known that I, ABNER N. NEWTON, of the city of Richmond, in the county of Wayne and State of Indiana, have invented a new and useful Contrivance to Prevent the Escape of Gas in Breech-Loading Fire-Arms; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is a perspective view of my invention. Fig. 2 is an enlarged end view of bands E F. Fig. 3 shows E F partly separated. Fig. 4 shows the form of breech-pin D, with its circular groove to receive bands E F.

The barrel A, Fig. 1, is of the ordinary form, with a mortise, B, in its rear for the reception of the cartridge.

C is a short lever by means of which the breech-pin D receives its rotary and horizontal motions.

D, Fig. 4, is a cylindrical breech-pin. It has lugs *o o*, by means of which it is locked upon inclined planes at the rear of the mortise B. It has also in its front end a circular groove equidistant at all points from the periphery, for the reception of the rear ends of the bands E F.

E F, Figs. 2 and 3, are two expanding bands half an inch (more or less) in length, and slitted their entire length to admit of free lateral expansion. The band F, when in use, is completely within band E, and they are so placed that their slits are on opposite sides to each other, so as to break joints. They are inserted in the rear of the barrel, as indicated by the dotted lines E F, Fig. 1, and are so situated and arranged that their rear ends are received into the circular groove of the breech-pin D when it is forced home in charging the gun. The inner band, F, when in its place, forms a continuous line with the surface of the chamber wherein the cartridge is fired, and hence the barrel or chamber must be enlarged for their reception. These bands E F completely overlap the joint formed by the barrel and breech-pin, and being expanded by the pressure of the gas at the instant of explosion, they preclude the possibility of escape.

This invention, though at first sight apparently similar to Joslyn's expanding rings, is really very different from them, and herein, that he employs rings expanded by a cone-headed pin, thus closing up the rear of the barrel, exposing it to the additional pressure of the backward action of the charge by the pressure laterally of the rings, occasioned by the force upon the pins, while I employ bands expanded by the direct action of the powder, which simply close the joint between the barrel and pin and relieve the barrel really from a slight portion of the lateral pressure.

I do not claim the self-adjusting thimble constructed and operating in the manner set forth in I. D. Green's patent, June 27, 1854; neither do I claim a sliding collar on the breech forced against the end of the barrel by a spring acting on the trigger, as in J. C. Day's patent, December 18, 1855; nor do I claim a cone-headed pin and two or more expanding rings, in combination with a radial breech, as in B. F. Joslyn's patent, August 28, 1855; nor do I claim inserting a metal ring into the slide with a chamber in the rear of said ring, as in H. Conant's patent, April 1, 1856; but

What I do claim as new and useful, and wish to secure by Letters Patent, is—

Two or more expanding bands, as shown and represented, in combination with the chamber and sliding breech-pin, completely overlapping the joint between said breech-pin and chamber, substantially in the manner and for the purpose as herein delineated.

ABNER N. NEWTON.

Attest:

GEO. TAYLOR,
OLIVER BUTLER.