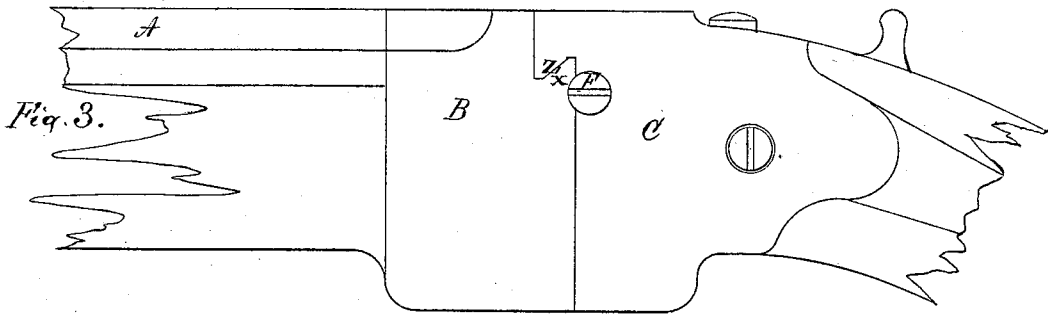
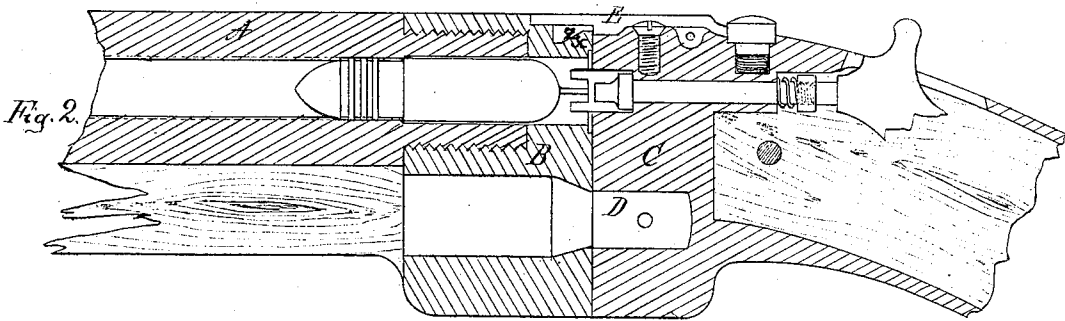
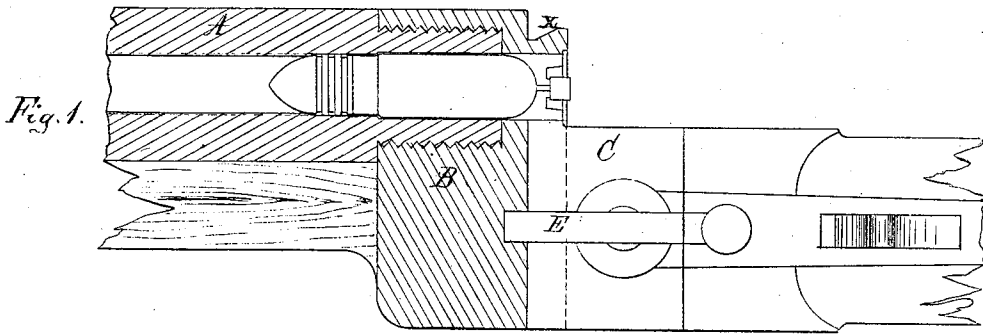


SIMPSON, GRAY & ROMANS.

Breech-Loading Fire-Arm.

No. 106,083.

Patented Aug. 2, 1870.



Witnesses:

*Char. Jacobs*

*J. O. White*

Inventors:

*Thomas D. Simpson*

*G. B. Gray*

*S. H. Romans,*

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*T. H. Alexander*  
*Atty.*

# United States Patent Office.

THOMAS D. SIMPSON, GARDNER B. GRAY, AND JOSEPH H. ROMANS, OF  
MOUNT VERNON, OHIO.

Letters Patent No. 106,083, dated August 2, 1870.

## IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that we, THOMAS D. SIMPSON, GARDNER B. GRAY, and JOSEPH H. ROMANS, of Mount Vernon, in the county of Knox, and State of Ohio, have invented certain new and useful Improvements in Breech-loading Guns; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to that class of breech-loading fire-arms which turns or swivels on a pivot, parallel to the axis of the barrel, to open and close the breech of the same, and consists in an improved coupling or joint between the swiveled barrel and the stationary breech, whereby they are more perfectly and easily joined and held together against the force of the explosion of the charge, and less liable to get out of order than any form of coupling known to us.

Our invention consists, further, in combining with a dovetail-joint or coupling, above referred to, a fixed shoulder or stop and a spring catch, attached to the breech, whereby the barrel is prevented from going past or beyond the breech, and certainty of the catch locking the barrel in place is obtained.

Referring to the drawings—

Figure 1 is a plan of the stock, with the barrel turned to one side, to open the breech, the barrel being in section.

Figure 2 is a longitudinal section of a fire-arm containing our invention, showing the arrangement of the parts.

Figure 3 is a side view of the breech, showing the positive shoulder or stop.

A is the barrel, screwed into the receiver B, which is pivoted or swiveled to the breech C, upon or by means of the bolt D.

The rear upper corner of the barrel is made with a notch or dovetail-groove, as shown at *x*, and at the forward upper corner of the breech is made a corresponding dovetail-catch, Z, projecting over, so as to

lock with and hold the barrel firmly against the face of the breech.

This dovetail-catch or coupling is easier made, more effectual, and less liable to injury than any now known to us.

E is a spring catch to hold the barrel from turning on its pivot, one end thereof catching in a suitable notch in the top of the barrel.

F is a screw in the side of the breech, arranged so that one side of its head projects forward of the face of the breech, so as to form a positive stop to the barrel when the same is swung up to place after loading, and thereby insures the locking of the barrel by the spring catch E.

It will be observed that the receiver B is made with a longitudinal hole through it, parallel with the bore of the barrel, through which the conical-headed pivot-bolt D is inserted, and screwed, or otherwise secured, to the breech C.

By having said bolt D screw into the breech, as shown, the barrel may be tightened at pleasure, to compensate for the natural and inevitable wear of the parts from ordinary use or unusual strain.

Having thus fully described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the receiver B, breech C, and pivot-bolt D, when the parts are constructed and operate substantially as described.

2. In combination with the above, the spring catch E and positive stop F, substantially as described.

In testimony that we claim the foregoing as our own, we affix our signatures in presence of two witnesses:

THOMAS D. SIMPSON.  
G. B. GRAY.  
J. H. ROMANS.

Witnesses:

JOSEPH WATSON,  
W. DUNBAR.