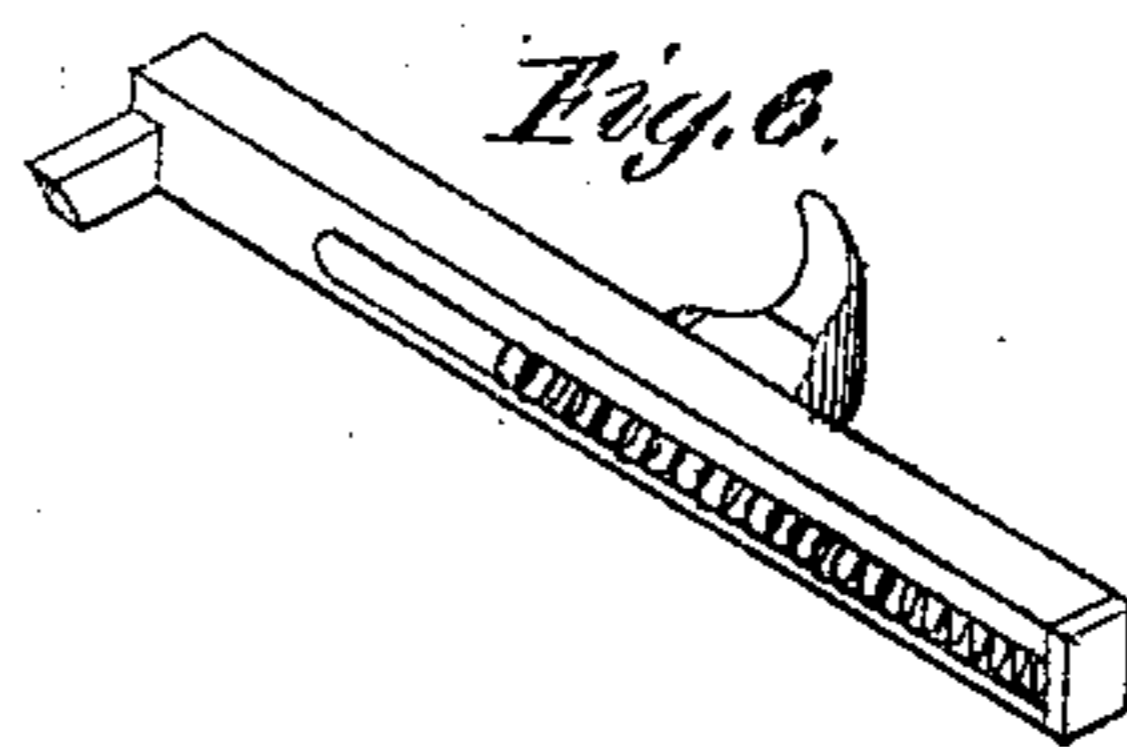
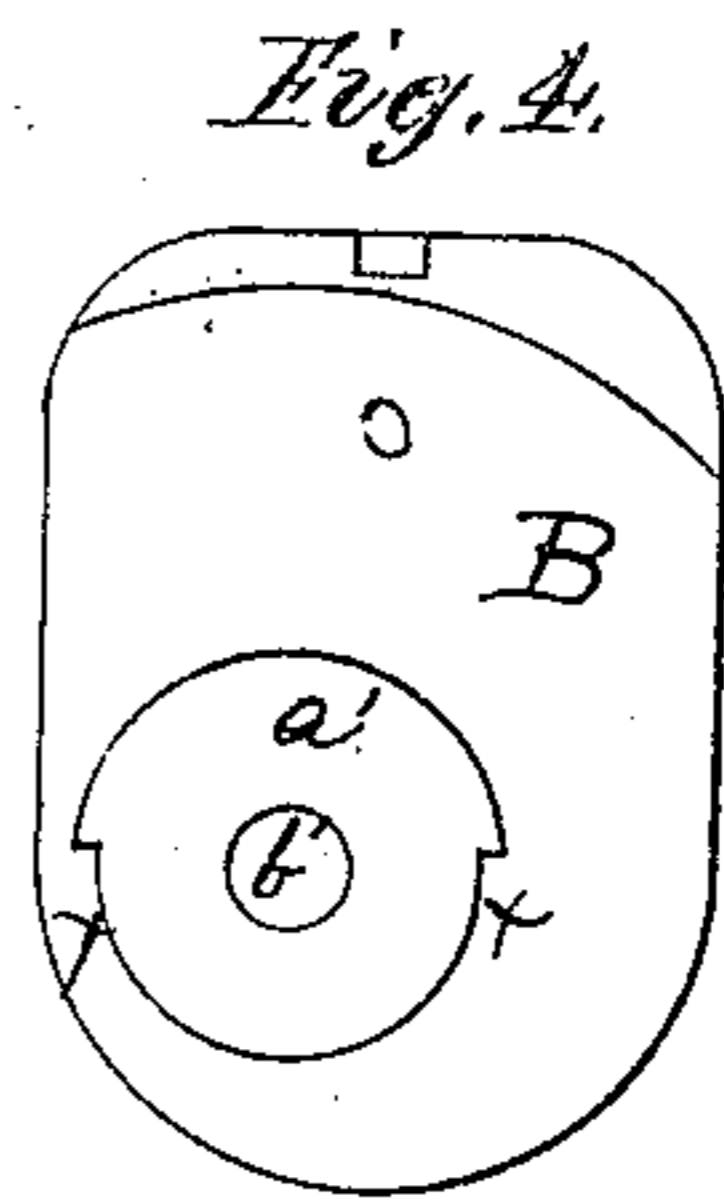
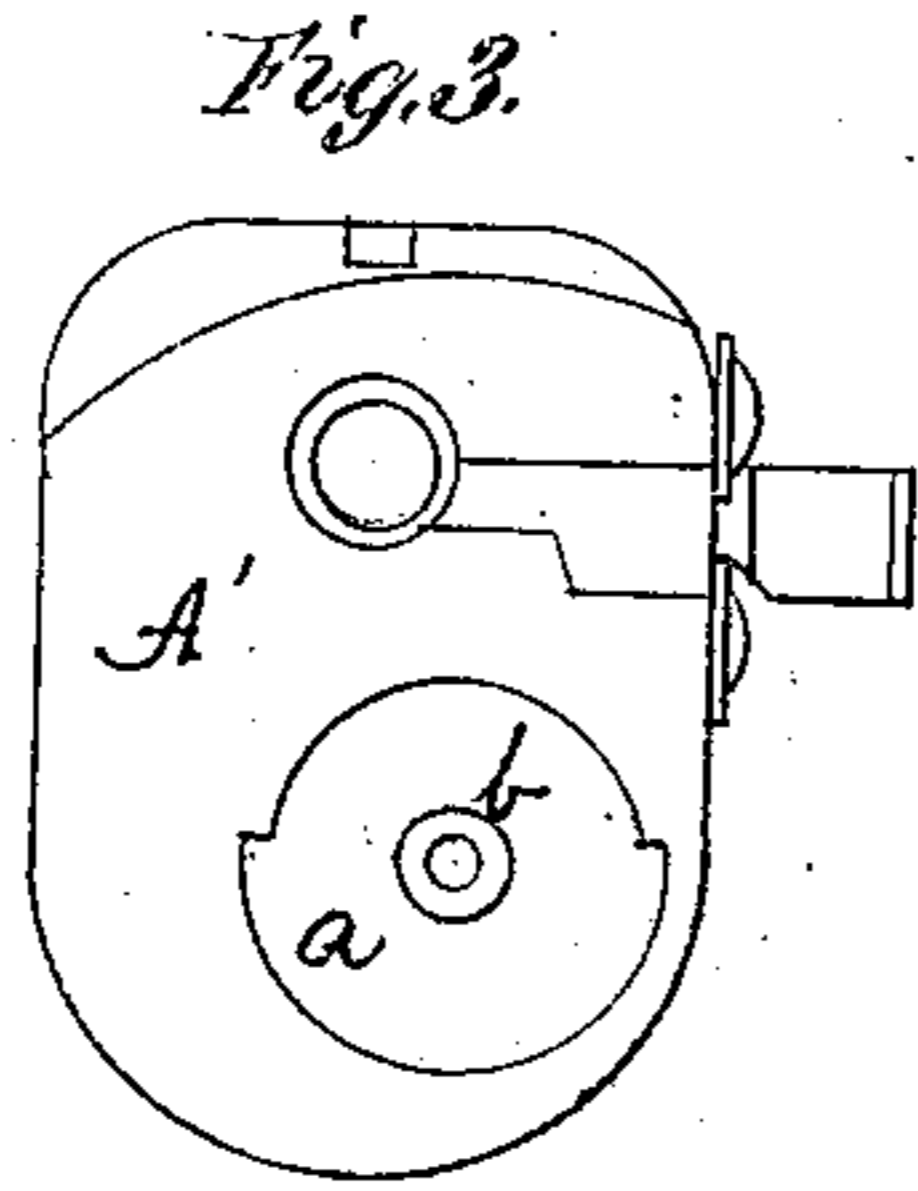
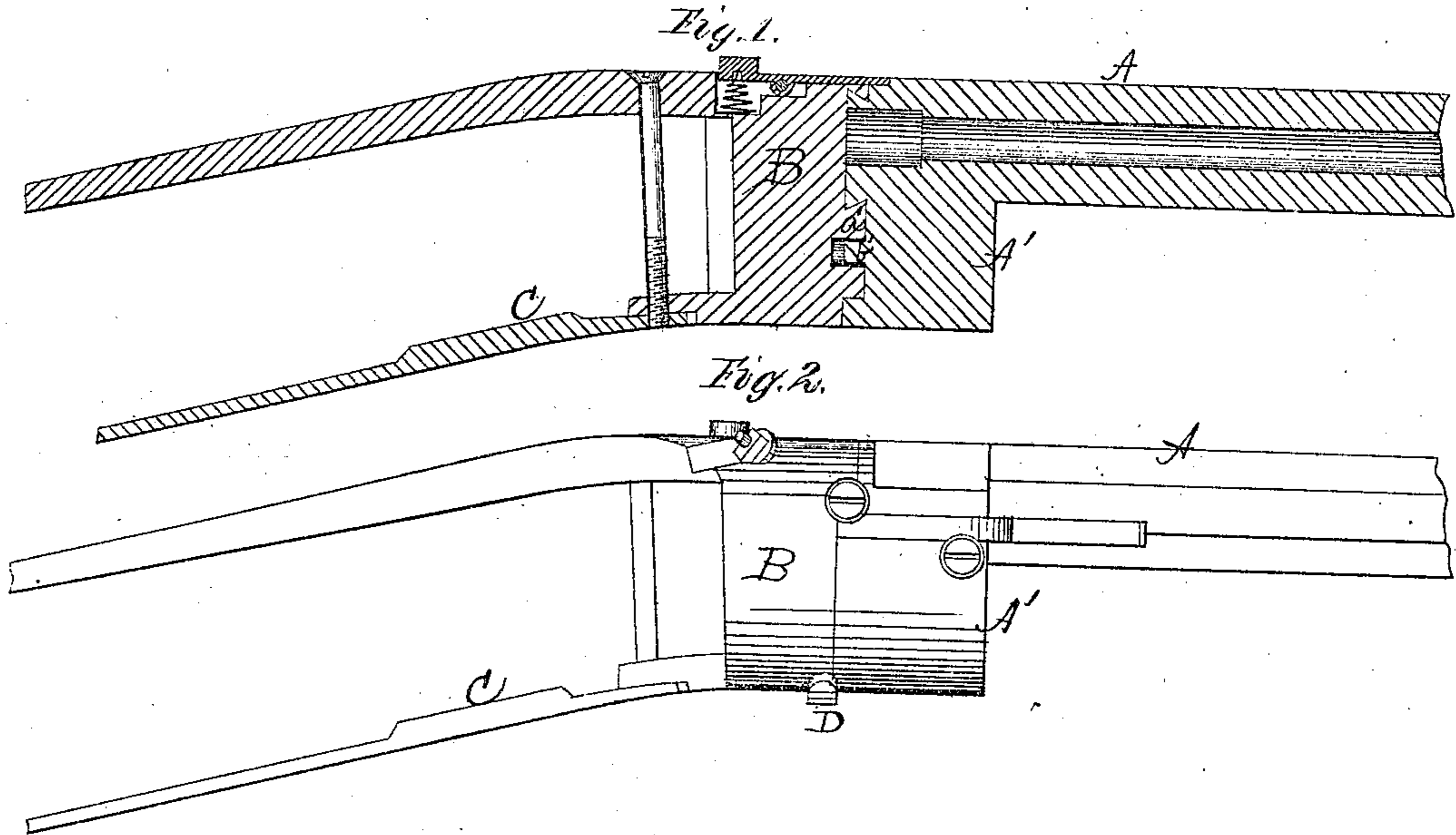


GRAY & ROMANS.  
Breech Loading Fire Arm.

No. 112,803.

Patented March 21, 1871.



Witnesses  
Jno. A. Ellis.  
G. V. White

Inventors  
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Gen.  
J. W. Alexander  
Atty.

# United States Patent Office.

GARDNER B. GRAY AND JOSEPH H. ROMANS, OF MOUNT VERNON, OHIO, ASSIGNORS  
OF ONE-THIRD THEIR INTEREST TO DAVIS T. RUTH, OF SAME PLACE.

Letters Patent No. 112,803, dated March 21, 1871.

## 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, 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 drawing and to the letters of reference marked thereon which form a part of this specification.

Figure 1 is a central longitudinal section, and

Figure 2 is a side view of that portion of a breech-loading fire-arm in which our improvement is embodied.

Figure 3 is a rear view of the barrel and receiver, and

Figure 4 is a view from the front of the breach, when the parts are uncoupled.

Figure 5 is a view of the nipple and firing pin, and

Figure 6 is a perspective of the cartridge retractor with its spring

Our invention relates to that class of fire-arms on which Letters Patent were granted to T. D. Simpson, G. B. Gray, and J. H. Romans, August 2, 1870, and has for its object a more convenient means of coupling the barrel with the breech, and to provide a stop to operate in connection therewith, whereby the barrel may be swung away from the breech to uncover the bore of the barrel and which is regulated so as to hold or check the barrel in a suitable position to be loaded, or, being turned one-quarter around, allows the same to swing indefinitely on its pivot or coupling.

Our invention consists in the novel construction of a dovetail projection on the breech, and a corresponding cavity or seat in the enlarged part of the barrel in connection with a central cavity in the breech and a corresponding projection from the barrel or receiver, and consists in the combination with the above of a button or set-stop of peculiar construction.

A is the barrel of the gun, and A' is an enlargement at the rear end thereof, which may be integral with the barrel or attached thereto in any secure convenient manner.

B is the breech, which has projecting therefrom a curved dovetailed projection, *a*', having the incline or dovetail cut away one-half the way around said projection, as shown at *x*, fig. 4, and also has a cavity, *b*,

bored centrally into said projection corresponding to and into which the stud or part *b* of the barrel fits.

The rear end of the barrel is provided with a cavity, *a*, corresponding in size and form with the dovetail projection *a*'.

It will be observed that, by bringing the barrel and breech together, one right side, and the other bottom side up, the parts of the projection which are cut away come opposite the dovetailed portion of each other, consequently the parts may be brought together, and upon turning slightly the parts are effectually coupled together.

In order to retain the parts in position we arrange, in the side of the breech, a button or set-stud, D, in such position as to form a stop for the swinging or pivoted barrel, when the same is open far enough to uncover the bore for loading.

The button or stop D has one side cut away, so that, by one-quarter turn of the same, the stop is removed, and the barrel may then be turned around entirely or half way, and uncoupled from the breech as may be desired.

The firing-pin is of ordinary construction, and the cartridge-retractor is substantially like that shown and described in our former patent, except, in the present case, it works in a straight-sided groove, and is held in place by screws instead of working in a dovetail groove.

Having thus described our invention,

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

1. The combination of projections and corresponding cavities or seats on and in the breech and barrel of a breech-loading fire-arm, as herein described, whereby the parts may be readily coupled for operation or uncoupled, as set forth.

2. In a breech-loading fire-arm, the combination of the set-stud or button D with the coupling above claimed.

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

GARDNER B. GRAY.  
JOSEPH H. ROMANS.

Witnesses:

ABEL HART,  
JOHN ADAMS.