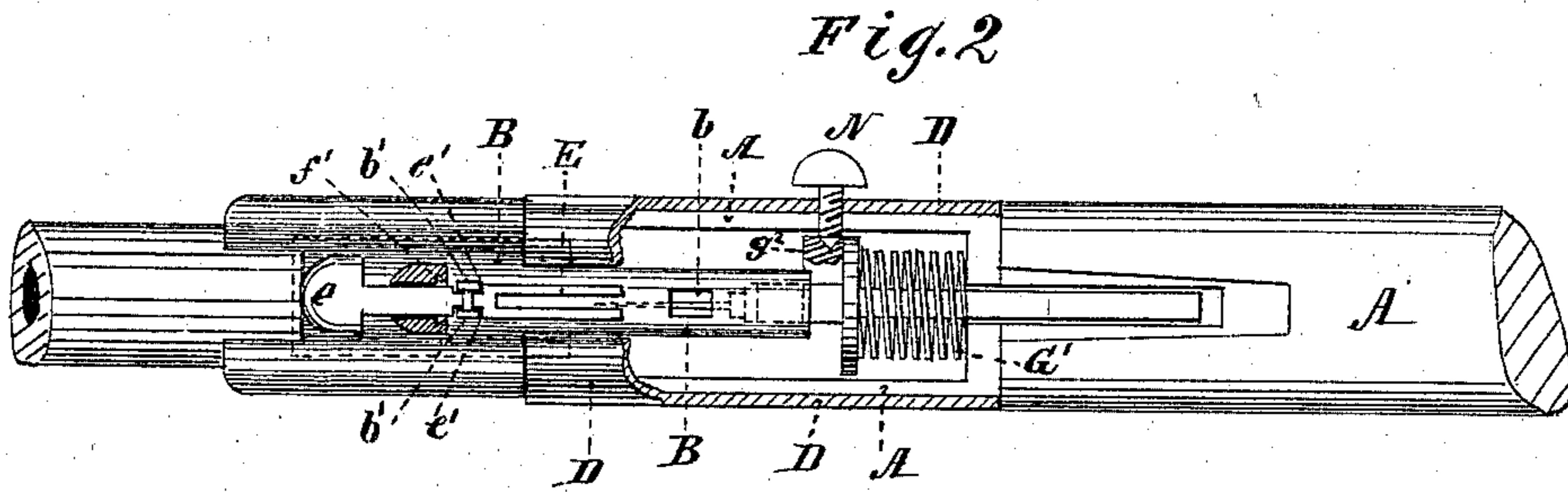
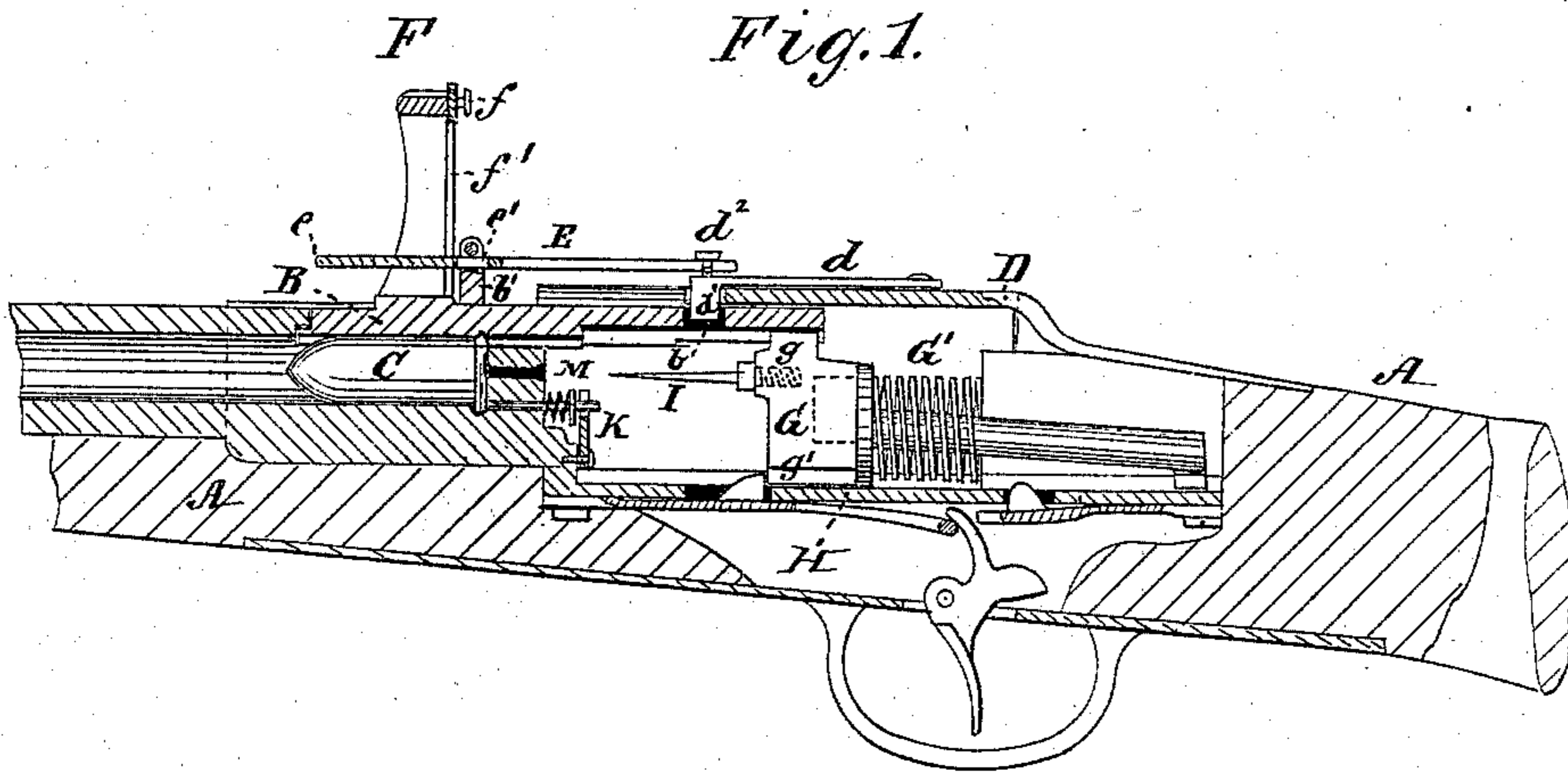


H. HOPPENAU.

Breech-Loading Fire-Arms.

No. 136,998.

Patented March 18, 1873.



Witnesses:
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UNITED STATES PATENT OFFICE.

HENRY HOPPENAU, OF KANSAS CITY, MISSOURI.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 136,998, dated March 18, 1873.

To all whom it may concern:

Be it known that I, HENRY HOPPENAU, of Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Improvement in Breech-Loading Fire-Arms; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification.

The invention consists in the improvement of breech-loading fire-arms, as hereinafter fully described and pointed out in the claim.

In the drawing, Figure 1 is a longitudinal vertical section, and Fig. 2 is a top view with parts broken off.

A represents the stock of a breech-loading fire-arm, and B the slide, which is drawn back to allow the cartridge to be inserted into its chamber C. D is the casing, which is provided with a superposed spring, d , having on the under side of front end the pendent stud d^1 , which fits into a corresponding hole or notch, b , of the slide, and thus locks the latter after the cartridge has been inserted. The slide is thus precluded any movement until the stud d^1 of spring is lifted to allow it to be moved back from its position over the cartridge-chamber. This spring has also, upon the upper side of its free end, a vertical stud, d^2 , with head on top to enable the bifurcated end of spring-lifter E to elevate it when the thumb-end e is pressed down. This spring-lifter E is recessed on each side at $e' e'$ so as to be held loosely between two uprights, $b' b'$, on the slide B.

By this construction the spring-lifter is held firmly to its place on slide; can vibrate vertically to accommodate itself to changes in the relative position of slide to casing; and is always guided on the stud d^2 in the backward and forward motions of slide.

On the top of slide rises a vertical slotted post, F, through which passes the spring-lifter E, and on which is a sight, f , vertically adjustable on grooves $f' f'$. This post thus serves the double purpose of a handle, by which the slide may be operated, and a guide for an adjustable sight. G is the bolt or needle carrier, provided with a rear-propelling spring, G' , and lugs $g g'$, one of which slides on top in groove of case, and the other on the bottom in a grooved guide-piece, H.

This construction prevents any possible variation of the needle, and causes it always to work freely and easily through the center of rear perforation in cartridge-chamber.

At the end of groove in slide B is a shoulder, which acts against lug g , and enables the slide to carry back the bolt or needle carrier until locked by trigger-catch.

If a primed bullet is employed I use the long sharp-pointed needle I, so as to penetrate and enter thereinto; while, if a metallic cartridge is employed, I use short and comparatively blunt-pointed pin, which merely indents the metal.

Where the central fire is not used I employ a pin or needle, K, supported and sliding in an upright, L, near the rear end of cartridge-chamber.

Between the upright and cartridge-chamber is a spring, M, which retracts and throws out this needle or pin after the bolt has been withdrawn.

On the bolt or needle carrier G is a side piece, g^2 , which is notched to receive the end of a thumb-screw, N, that is operated from the outside. The object of this device is to lock the bolt securely until the operator is ready to fire.

It will be observed that, if a person should fail to carry the slide B forward and allow it to be locked by the spring-catch, the bolt will perform this duty before the explosion takes place.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The sliding cartridge-chamber cover B, having the notch b , in combination with the spring d attached to the rear end to the case, and provided with pendent stud on the front end, as and for the purpose described.

2. The bifurcated lifter E, attached to slide B, and combined with spring having the headed stud d^2 , as and for the purpose set forth.

3. The sight f , combined with and adjustable on the slotted post F of slide, as and for the purpose specified.

HENRY HOPPENAU.

Witnesses:

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