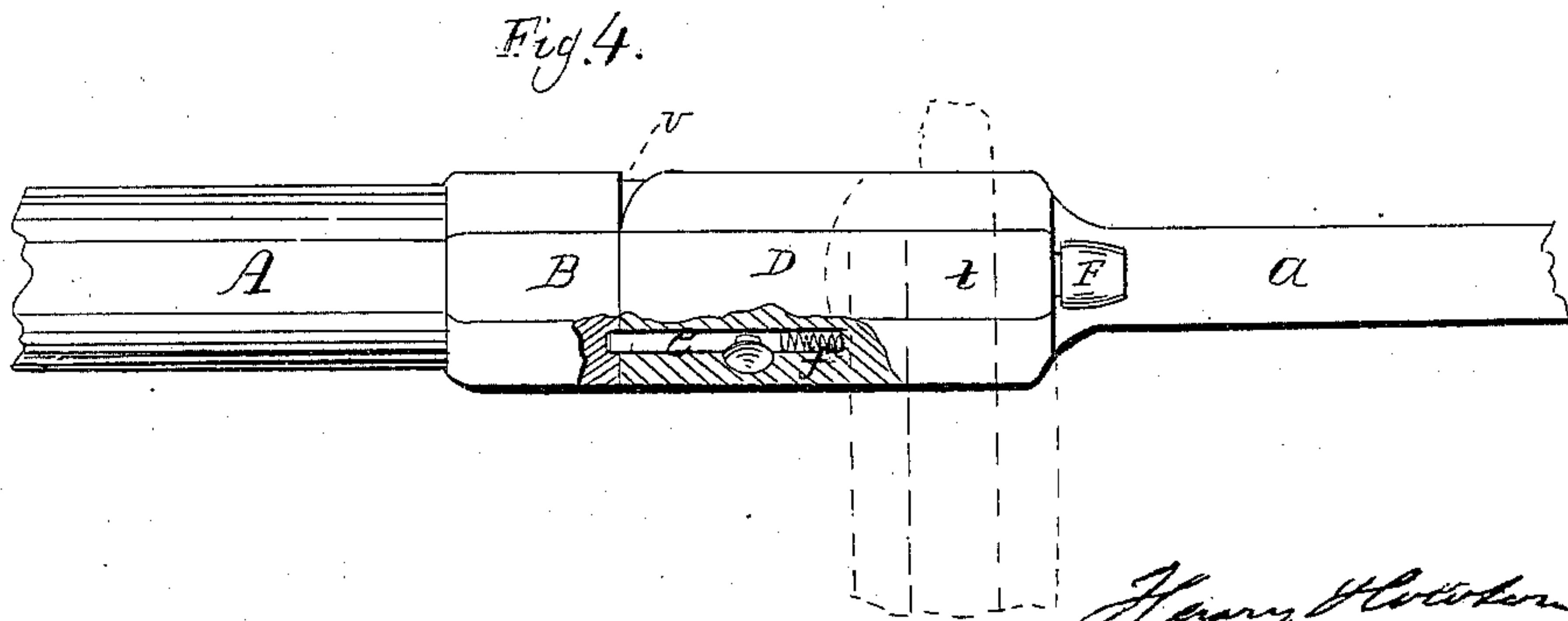
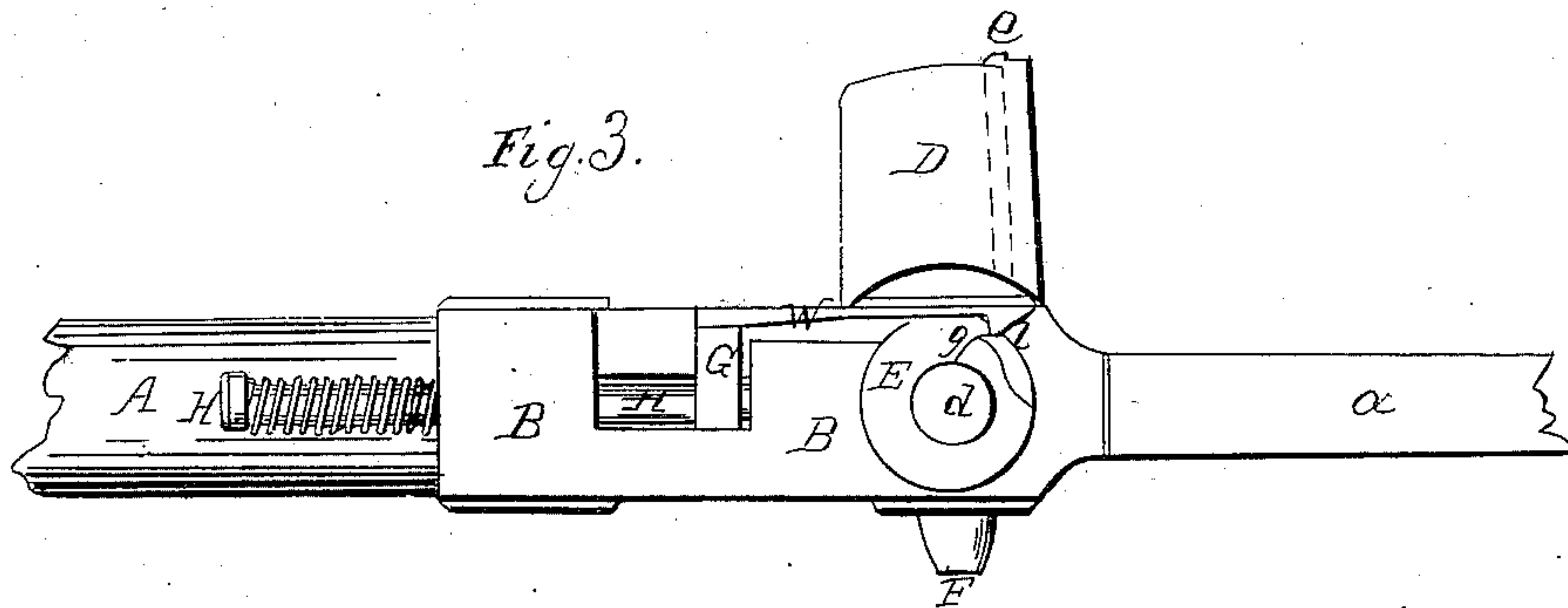
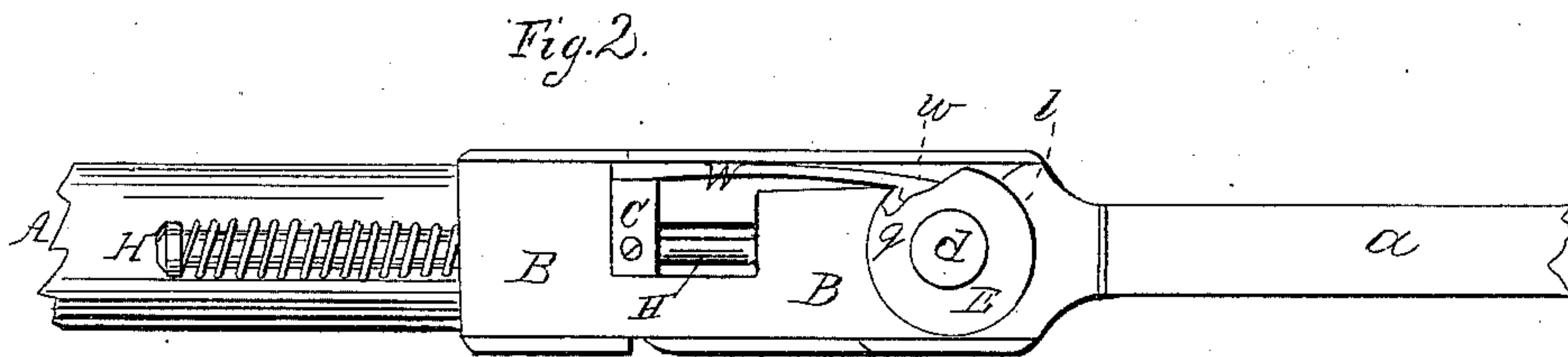
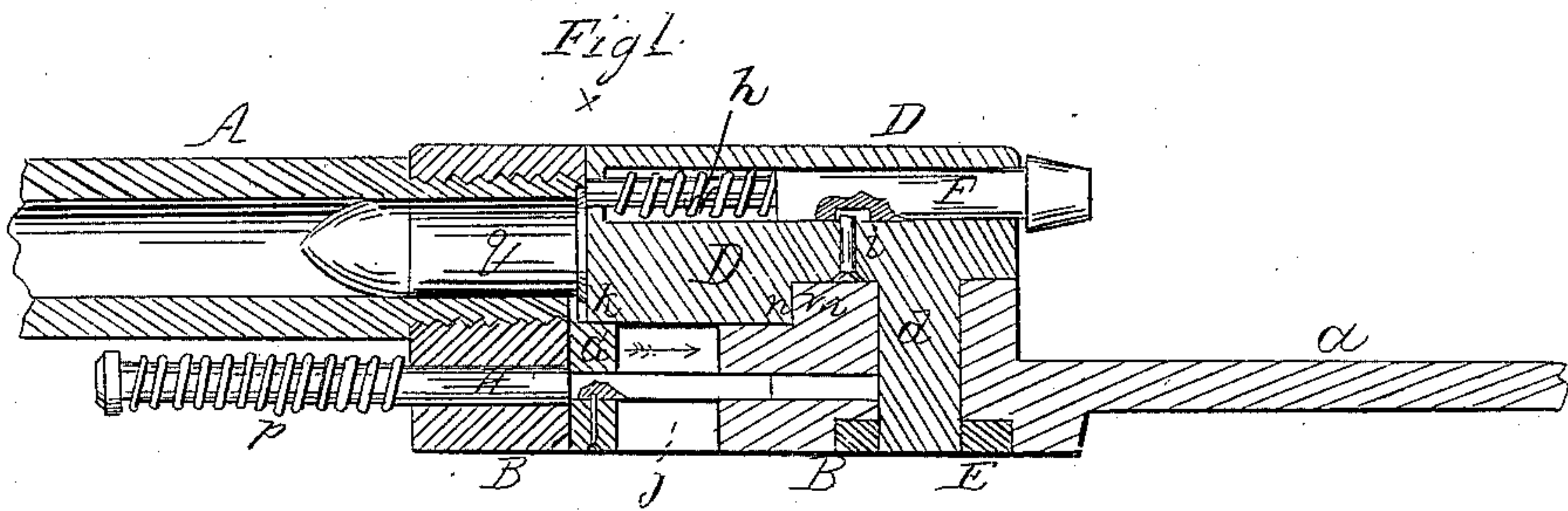


B. F. JOSLYN.
Breech-Loading Fire-Arm.

No. 48,073

Patented June 6, 1865.



Witnesses: H. Abbott Steel,
Charles Houston

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UNITED STATES PATENT OFFICE.

BENJ. F. JOSLYN, OF STONINGTON, CONNECTICUT.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 48,073, dated June 6, 1865.

To all whom it may concern:

Be it known that I, BENJAMIN F. JOSLYN, of Stonington, Connecticut, have invented an Improved Breech-Loading Fire-Arm; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists of a breech-loading fire-arm having a breech adapted to the breech-block, and arranged to turn thereon in the peculiar manner described hereinafter, so as to effectually resist the reacting force of the cartridge, and so as to afford every facility for the ready insertion of the cartridge into the bore of the barrel, and its ready withdrawal from the same, the extraction of the spent cartridge being effected by the peculiar mechanism described hereinafter.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 represents a vertical section of part of a breech-loading fire-arm constructed according to my improvements; Fig. 2, an inverted plan view; Fig. 3, the same, with the breech-piece moved out; Fig. 4, a top view, partly in section.

Similar letters refer to similar parts throughout the several views.

A represents a portion of the barrel, and B the breech-block, of my improved fire-arm, the barrel being screwed into the breech-block, as usual, and the latter having a tongue, *a*, for attachment to the stock.

D is the movable breech, one end of which is arranged to bear against a shoulder formed at *x* on the breech-block B, thereby inclosing the metallic cartridge *y*, as seen in Fig. 1. Near the opposite end of the movable breech, and forming part of the same, is a pin, *d*, which passes through and fits snugly, but so as to turn freely, in the breech-block, to which the breech is securely held by a nut or collar, E, attached to the end of the pin *d*, and arranged to turn with the same. It will be observed that a shoulder, *n*, is formed on the breech, and that this shoulder bears against

a similar shoulder, *m*, formed on the breech-block. The shoulder *m*, as seen in Fig. 4, and there represented by dotted lines, forms part of the circumference of a circle described from the center, *t*, of the pin *d*, and one corner, *v*, of the breech is so rounded that when the bore of the barrel has to be exposed for the admission or extraction of the cartridge the breech may be turned laterally and assume the position shown by red lines, Fig. 4.

In order to lock the breech to the breech-block, I use a rod, *e*, which is arranged to slide to and fro in an orifice in the breech, a spiral spring, *f*, intervening between the end of the orifice and the end of the rod, and tending to force the latter outward and to project its outer end into a hole in the breech-block.

The hammer, which is of the usual construction, and which it has not been deemed necessary to illustrate in the drawings, is arranged to strike against the end of a rod, F, which fits snugly, but so as to slide freely, in the breech, as seen in Fig. 1, a portion of the rod being reduced in diameter, and being surrounded by a spiral spring, *h*, which tends to force the rod back after it has been struck by and released from the pressure of the hammer. It will be observed that the front end of the rod is so situated as to strike the edge of the flange of the metallic cartridge *y*.

A set-screw, *i*, passing through and screwing into the movable breech, projects into a slot in the rod F, so that the horizontal movement of the latter may be limited.

In an opening, *j*, in the breech-block B a block, G, is arranged to fit snugly, but slide freely, this block being secured to a rod, H, which is arranged to slide horizontally in the breech-block and to project from the same, the projecting portion of the rod being surrounded by a spiral spring, *p*, which tends to force the rod outward, and to maintain the block G in contact with the front end of the opening *j* of the breech-block. It will be observed, on reference to Fig. 1, that on the top of the block G there is a projection, *k*, which occupies a position in front of the flange of the metallic cartridge *y*.

On referring to the inverted plan views, Figs. 2 and 3, it will be seen that the nut or collar E, previously alluded to as being secured to the pin *d* of the breech-piece, has a notch on

the edge forming a projection, *q*, which is arranged to catch against a projection, *w*, on the end of a spring, *W*, the latter being secured to the block *G*. The extreme end of the spring is inclined, and is, under circumstances described hereinafter, arranged to come in contact with an inclined shoulder, *l*, on the breech-block. When the several parts occupy the relative positions shown in Fig. 1, the cartridge *y* is inclosed by the breech *D*, and is ready to be discharged by causing the hammer to come in contact with one end of the rod *F*; while the other end strikes the flange of the cartridge and insures the explosion of the same.

When it is desirable to withdraw the spent cartridge and to insert a new one, the rod or latch *e* is moved back, thereby releasing the breech from the breech-block. The breech, turning on the pin *d*, is now moved laterally toward the position illustrated by red lines, Fig. 4. Before the breech has assumed this position, however, the projection *q* on the nut or collar *E* had caught the projection *w* on the spring *W*, so that as the breech is moved laterally the block *G* must be moved in the direction of the arrow, Fig. 1, and must, through the projection *k*, be the cause of withdrawing the spent cartridge from the bore of the barrel. As the breech approaches the position indicated by red lines, Fig. 4, the inclined end of the spring comes in contact with the inclination *l* on the breech-block, and the spring is thus released from the projection *q* of the nut *E*, when, through the action of the spring *p*, the rod *H* is projected forward, and the block *G*, with its projection *k*, assumes its former position. When the breech has arrived at the position indicated in red lines, Fig. 4, the spent cartridge is so far withdrawn that it can be readily removed and a new cartridge

inserted in its place, after which the breech may be moved back to its former position and locked to the breech-block by the rod or bolt *e*.

It will be seen without further description that every facility is afforded in my improved fire-arm for the insertion of the cartridge and withdrawal of the same.

One of the most important features of my improvements, however, is the resistance which the breech presents to the reacting force exerted on it when the cartridge is exploded. The pin *d*, of itself, affords a formidable resisting medium, and to this is added the resistance presented by the shoulder *m*.

It will be observed that although my improved fire-arm possesses these important advantages, it is simple in construction and free from enlargements and protuberances, which are objectionable features in many breech-loading fire-arms.

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

1. The breech-block *D*, with its pin *d* and concave shoulder *n*, in combination with a convex shoulder, *m*, on the stock or frame, adapted to the said shoulder *n*, all substantially as set forth.

2. The block *G*, with its projection *k*, spring-catch *W*, and spring-rod *H*, in combination with the breech-piece *D*, pin *d*, and notched disk *E*, the whole being arranged for joint action, substantially as and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

B. F. JOSLYN.

Witnesses:

JOHN WHITE,
H. HOWSON.