(No Model.)

J. M. BROWNING.

BREECH LOADING GUN.

No. 513,301. Patented Jan. 23, 1894.

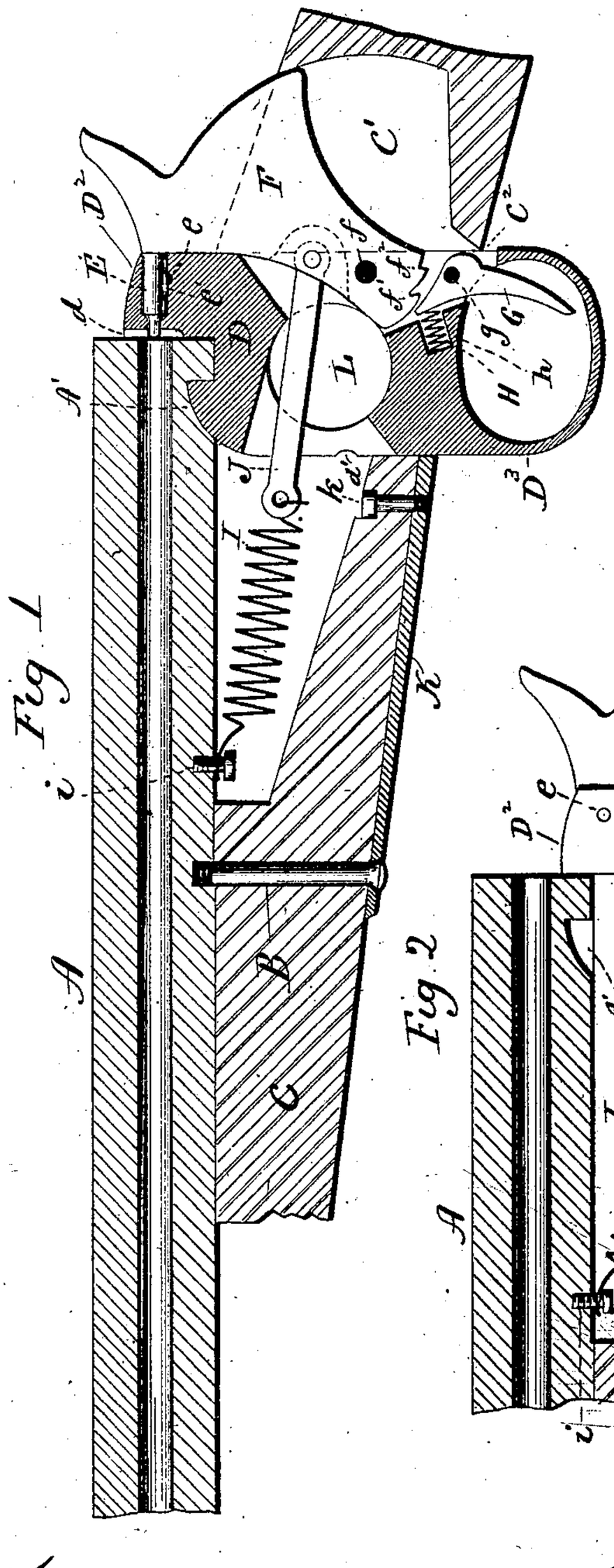

Fig. 1

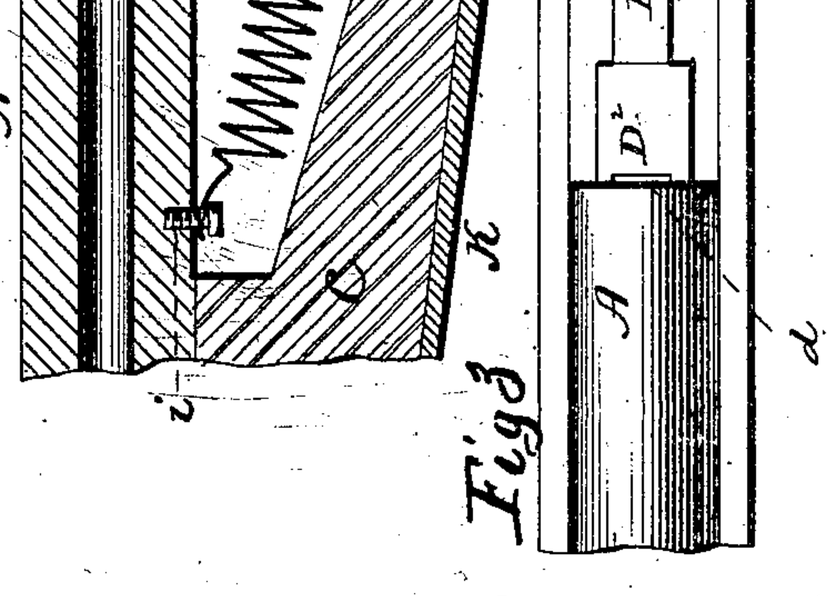

Fig. 2

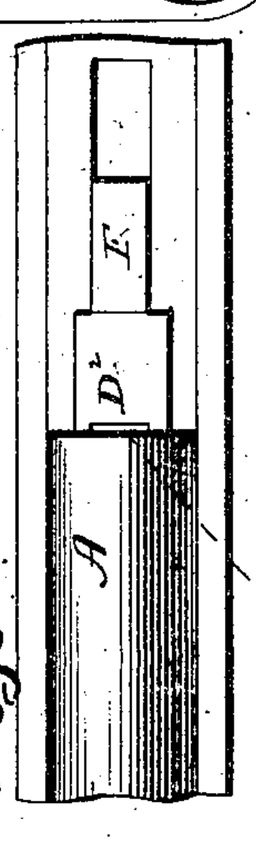

Fig. 3

Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN M. BROWNING, OF OGDEN, UTAH TERRITORY.

BREECH-LOADING GUN.

SPECIFICATION forming part of Letters Patent No. 513,301, dated January 23, 1894.

Application filed March 31, 1893. Serial No. 468,422. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. BROWNING, of Ogden, in the county of Weber and Territory of Utah, have invented a new Improvement in Breech-Loading Firearms; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in vertical longitudinal section of a gun constructed in accordance with my invention, being shown with its combined breech-block and guard in the closed or firing position thereof, and some of its parts being represented in elevation; Fig. 2, a corresponding but less comprehensive view, showing the combined part in its open or loading position; Fig. 3, broken plan view of the arm.

My invention relates to an improvement in breech-loading fire-arms of the single-shot rifle type, the object being to produce, at a low cost for manufacture, a simple, safe, convenient and effective small caliber arm.

With these ends in view, my invention consists in a breech-loading, single-shot fire-arm, having a combined breech-block and guard, arranged to move at a right angle to the gun-barrel, and to interlock with the same when closed to resist the explosion of the cartridge in firing.

My invention further consists in certain details of construction and combinations of parts as will be hereinafter described and pointed out in the claims.

As herein shown, the barrel A, of the arm is secured by a screw-bolt B, to the stock C, thereof, in the usual manner the barrel being constructed with a notch A′, formed in its lower face just within its butt-end. A combined breech-block and guard D, oblong in its general form, and having flat sides, is located in the stock, so as to reciprocate at a right angle to the plane of the barrel, the stock being thereto constructed with a chamber C′, which extends forward and to the rear of the said combined guard and breech-block, and is cut through the stock for the passage of the lower end of the same, at a point directly below the butt-end of the barrel as at C^2. The upper end of the said combined part D, has a notch formed in it corresponding to the notch A′, formed in the butt end of the barrel, whereby when the said part is in its raised or closed position, it interlocks with the barrel, as illustrated in Fig. 1 of the drawings. The adaptation of the barrel and combined part to be interlocked when the latter is in its closed position, is not limited to notching the said parts in the manner shown, but may be made in some other way. The upper end of the said part has an extension D^2, which, when the said part is in its raised position, closes the bore of the barrel, the said extension having a horizontal opening formed in it to receive the firing-pin E, which is held against displacement by a pin *e*, entering a notch *e′* formed in its lower edge. The inner edge of the said extension D^2 has a shallow recess *d* formed in it (Figs. 1 and 3), to receive the head of the cartridge. The outer edge of the part D, has a central recess formed in it to receive the hammer F, which is hung on a horizontal pin *f*, the hammer being mainly accommodated in the rear portion of the chamber C′ in the stock. The lower end of the hammer is constructed with a half cock-notch *f′* and a cock-notch f^2, respectively provided for engagement with the upper end of the trigger G, which is pivotally mounted in the part D, on a horizontal pin *g*, its lower end projecting into the rear portion of the guard-opening D^3, which occupies the lower end of the combined part D. A spring H, for the actuation of the trigger, is located in a small chamber *h*, formed to receive it, in the part D, at a point directly above the guard-opening D^3. A spiral spring I, located within the forward end of the chamber C′ in the stock C, is attached at its forward end to a screw-stud *i*, located in the gun barrel, and connected at its rear end to the forward end of a link J, which extends transversely through the part D, and has its rear end pivotally connected with the hammer F, at a point above the pivot *f* thereof. This spring has the two-fold function of actuating the hammer, and of controlling the position of the part D combining the breech-block and guard, for it constantly tends to pull the hammer forward, and in so doing draws the ex-

tension D^2 of the part D, against the end of the barrel, and its forward edge against a guide or wearing plate K, secured to the stock in front of the said part by means of the screw-bolt B, before mentioned, and a screw *k*. The friction thus developed will always be sufficient to maintain the said part in its elevated or closed position. For maintaining the said part in its depressed or open position, the action of the spring is assisted by means of a small notch *d'*, formed in the forward edge of the part D, and coacting with the rear edge of the wearing-plate K. It may here be observed that the wear of the said part D, falls upon the barrel and plate, the sides of the stock merely serving to prevent the part from side-wise displacement. The spring I, does not, however, draw forward on the combined part so hard but what the same may be depressed or thrown into its open position without difficulty, by the sportsman. To raise it into its elevated or closed position, it must be started by a sufficient upward pressure to jump the rear edge of the wearing-plate K, out of the notch *d'*. When the gun is fired, the recoil from the explosion of the cartridge is taken by the combined breech-block and guard, by the barrel with which the same is interlocked at its upper end, and by the wearing-plate with which the forward edge of the lower end of the said part is engaged.

As herein shown, the combined part D, has a circular transverse opening L, formed above its center; this is done to lighten it, and it also serves to give additional clearance to the link J.

My improved arm as thus constructed has comparatively few parts, which are of simple and durable construction, and is both safe and convenient in use.

I would have it understood that I do not limit myself to the exact construction herein shown and described, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. In a breech-loading fire-arm, the combination with the barrel and stock thereof, of a combined breech-block and guard made integral with each other, arranged to move at a right angle to the gun barrel, and constructed at its upper end to interlock with the same, when closed, to resist the explosion of the cartridge in firing, and a hammer and a trigger mounted in the said combined part, substantially as described.

2. In a breech-loading single-shot fire-arm, the combination with the stock thereof, of a barrel having the lower face of its butt-end notched, a combined breech-block and guard arranged to move at a right angle to the gun-barrel, and having the forward portion of its upper end notched to interlock with the butt-end of the same, and the rear portion of its upper end constructed with an upward extension to close the bore of the barrel when it is in its closed position, and a hammer and a trigger mounted in the said part, substantially as described.

3. In a breech-loading, single-shot fire-arm, the combination with the barrel and stock thereof, of a combined breech-block and guard arranged to reciprocate at a right angle to the plane of the barrel, and furnished with a firing-pin, a hammer and a trigger; and a spring located in front of the said combined part in the stock of the arm, and connected at its rear end with the hammer, whereby it operates to pull the same and the said combined part forward, substantially as described.

4. In a breech-loading fire-arm, the combination with the barrel and stock thereof, of a combined breech-block and guard arranged to reciprocate in the stock at a right angle to the barrel, and adapted to engage at its upper end with the rear end of the latter, a wearing-plate rigidly secured to the lower edge of the stock in front of the said combined part in position to be engaged by the forward edge of the lower end thereof, and a spring located in front of the said combined part and connected therewith, and exerting a constant effort to draw it forward against the gun barrel and the said plate substantially as described.

5. In a breech-loading single-shot fire-arm, the combination with the barrel and the stock thereof, of a combined breech-block and guard arranged to reciprocate at a right angle to the plane of the barrel, and constructed at its upper end to interlock with the same, when closed, to resist the explosion of the cartridge in firing, and a spring located in front of the said combined part and connected with the same, and exerting a constant effort to draw it forward, substantially as described.

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

JOHN M. BROWNING.

Witnesses:
KATE LINEHAN,
JOHN E. RAMSDEN.