

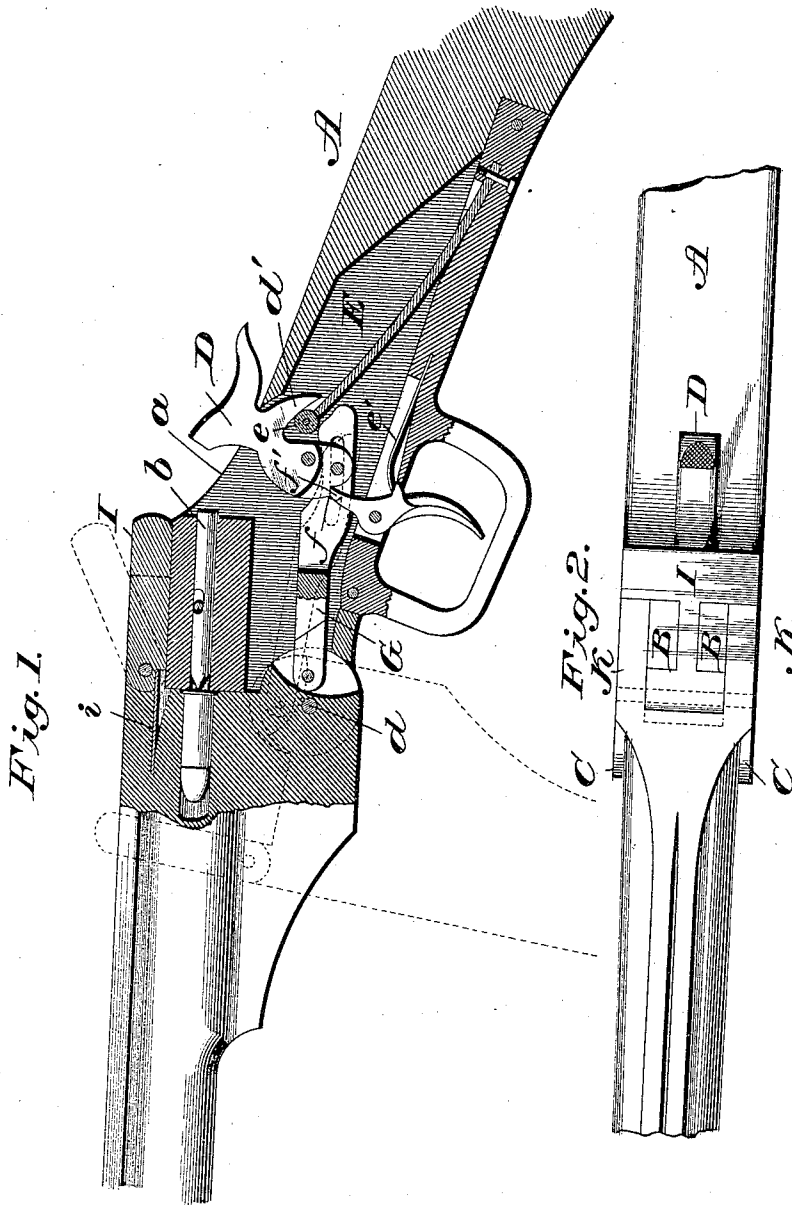
(No Model.)

2 Sheets—Sheet 1.

A. A. HAINES.
BREECH LOADING FIRE ARM.

No. 469,561.

Patented Feb. 23, 1892.



Amos Ashley Haines.

Inventor

Witnesses *L. S. Elliott.*
E. M. Johnson

—by *[Signature]*
Attorney

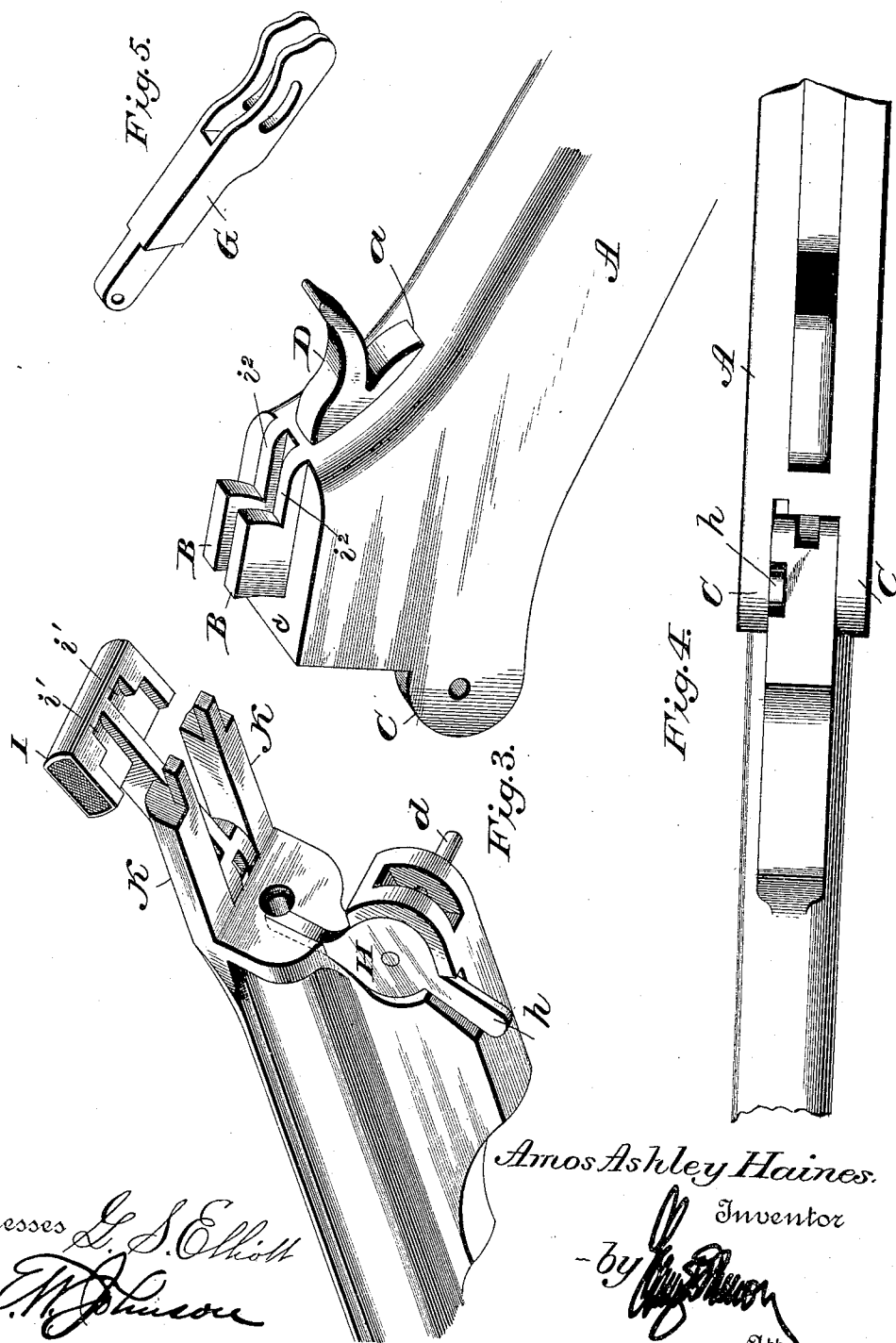
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UNITED STATES PATENT OFFICE.

AMOS ASHLEY HAINES, OF BELGRADE, MONTANA.

BREECH-LOADING FIRE-ARM.

SPECIFICATION forming part of Letters Patent No. 469,561, dated February 23, 1892.

Application filed September 24, 1891. Serial No. 406,718. (No model.)

To all whom it may concern:

Be it known that I, AMOS ASHLEY HAINES, a citizen of the United States of America, residing at Belgrade, in the county of Gallatin and State of Montana, have invented certain new and useful Improvements in Breech-Loading Fire-Arms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in breech-loading fire-arms.

The object of the invention is to provide a cheap, simple, and efficient lock for single-shot rifles, the device being so constructed that when the breech is broken the cartridge will be automatically ejected and the trigger set; and the invention consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a side view, partly in section. Fig. 2 is a top or plan view. Fig. 3 is a perspective view showing the parts detached. Fig. 4 is a view of the under side of the gun. Fig. 5 is a detail perspective view of the bar for automatically setting the trigger.

A refers to the stock, which is apertured at *a* for the passage of the hammer which strikes against the firing-pin *b*. The stock is provided above the firing-pin with two parallel and similarly-shaped lugs B, which project above the forward upper end *c* thereof. The lower forward end of the stock is provided with lugs C C, which are apertured for the reception of a pivot-pin *d*, upon which the forward portion of the fire-arm turns when broken.

The lock mechanism is extremely simple, and consists of a hammer D, provided with a rearwardly-projecting tongue *d'*, with the under surface of which engages a roller *e*, carried by the free end of the mainspring E. The hammer is pivoted to the stock, and the lower portion below the pivot is reduced in thickness or width and provided with a notch

f, with which the upper end *f'* of the trigger engages when the hammer is raised. The trigger is pivoted to the plate of the trigger-guard in the usual manner, and is thrown into engagement with the notch in the hammer by a spring *e'*, as shown. The lower end of the hammer, beneath its pivot-pin and in rear of the notch *f*, has a transverse pin, the ends of which engage with slots in the bifurcated end of the bar G, the forward end of which is pivoted in a recess therefor in the forward portion of the fire-arm adjacent to its pivot.

It will be obvious that when the parts are organized as shown in full lines, Fig. 1, and the trigger is pulled the hammer will be forced upon the firing-pin and the cartridge exploded, and that when the arm is broken, as will be hereinafter set forth, said action moves the lock mechanism, so that the weight of the forward portion of the fire-arm serves to cock or set the hammer by drawing upon the bar G, the rear end of which acts upon the lower end of said hammer to cock the same.

The cartridge-ejecting mechanism consists of a single piece H, which is pivoted in a suitable recess in the side adjacent to the rear end of the forward portion of the arm, and when the arm is broken or placed in the position shown in dotted lines, Fig. 1, the projecting end *h* of the cartridge-ejector will be brought in contact with the lower portion of the stock and moved upon its pivot, so that the upper end, which engages with the rim of the cartridge in the usual manner, will eject the same.

The breech-locking mechanism consists of a T-shaped block I, which is pivoted between the rear projections K K, and the ends of these projections and the under side of the block I are shaped so that they will interlock when brought on a line with each other. The T-shaped block is held normally depressed by a spring *i*. This block is also provided with recesses *i'* *i'*, in which lie the raised portions *i''*, located in rear of the lugs B B. The front edges of these lugs are slightly concave, while the rear edges above the raised portions *i''* are convex, thus giving to these parts slightly undercut or curved edges, which will make a secure lock between the T-shaped block and the lugs when pressed in position. When the parts are placed in a position for

firing, they will be securely and rigidly locked to each other by the block I, and when it is desired to break the arm it is only necessary to raise the rear end of the T-shaped block, which movement will allow the forward portion of the arm to move at an angle with the stock and by said movement eject the cartridge and set the trigger. When the barrels are returned to their normal position, they will be automatically locked.

The fire-arm herein described is simple and can be cheaply made, and is useful either as a sporting arm or one for target practice.

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

1. In combination with the stock A, having projections or lugs B, a T-shaped block pivoted to the forward portion of the fire-arm and adapted to engage and be held in engagement with the lugs, substantially as set forth.

2. In combination with a stock A, having the forward portion of the fire-arm pivoted thereto, upwardly-projecting lugs B, and rearward extensions ², of less height, the forward portion of the fire-arm having rearwardly-extending parallel members with reduced ends, and a spring-depressed T-shaped block pivoted between said parallel members and provided with recesses on its under sides, said T-shaped block being adapted to engage with the front and rear portions of the lug B, substantially as set forth.

3. In a fire-arm, the combination, with the stock and forward portion pivoted to each other and constructed substantially as shown, of a bar G, pivotally secured to the forward portion of the stock and provided with a bifurcated rear end slotted, as shown, a ham-

mer pivoted to the stock and provided with a transverse pin which engages with the slots in the bar G, a notch below the pivot-pin of the hammer with which the upper end of the trigger engages, and springs E and E', operating upon the hammer and trigger, for the purpose set forth.

4. The combination, in a fire-arm constructed substantially as shown, of a fore stock having a recess on one side of the rearwardly-extended portion by which it is pivotally secured to the rear stock, said recess continuing upward to communicate with the cartridge-chamber, and a cartridge-ejector pivotally secured within said recess and provided with an extended portion which is adapted to abut against the rear stock when the parts of the stock are swung upon the pivot, said pivot also supporting the cartridge-ejector, substantially as shown, and for the purpose set forth.

5. The combination, with a fire-arm constructed substantially as shown, of a hammer pivoted to the stock and provided below said pivot with a reduced portion, a bar G, having a bifurcated rear portion with slots, and a transverse pin for connecting said bar loosely to the hammer, the forward end of said bar being pivoted to the fore stock in rear of the pivot for connecting the fore stock to the rear stock, substantially as shown, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

AMOS ASHLEY HAINES.

Witnesses:

THOS. B. QUAW,
FRED H. KURTZ.