

G. R. PIERCE.
BREECH LOADING FIREARM.

No. 119,474.

Patented Oct. 3, 1871.

Fig. 1.

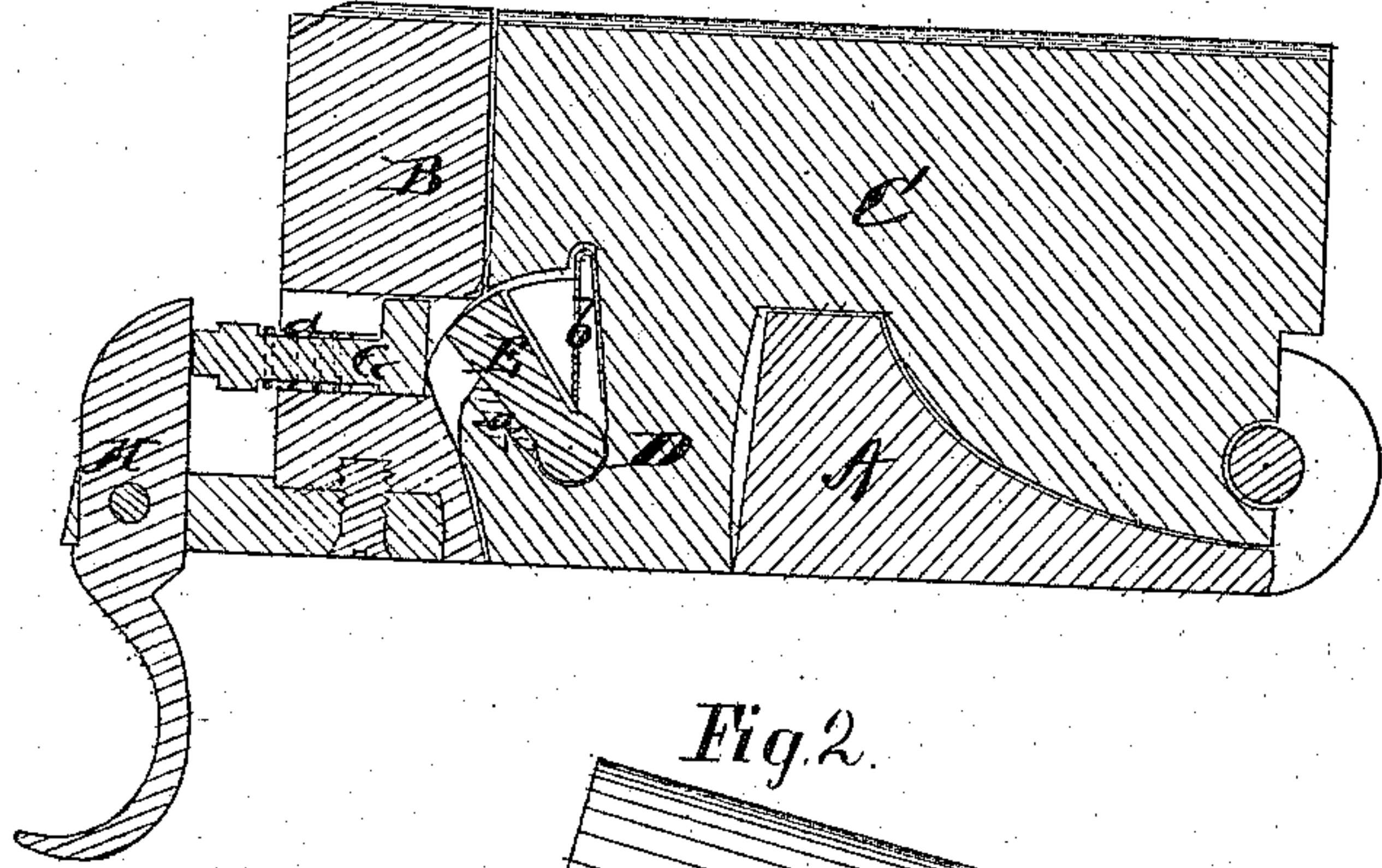


Fig. 2.

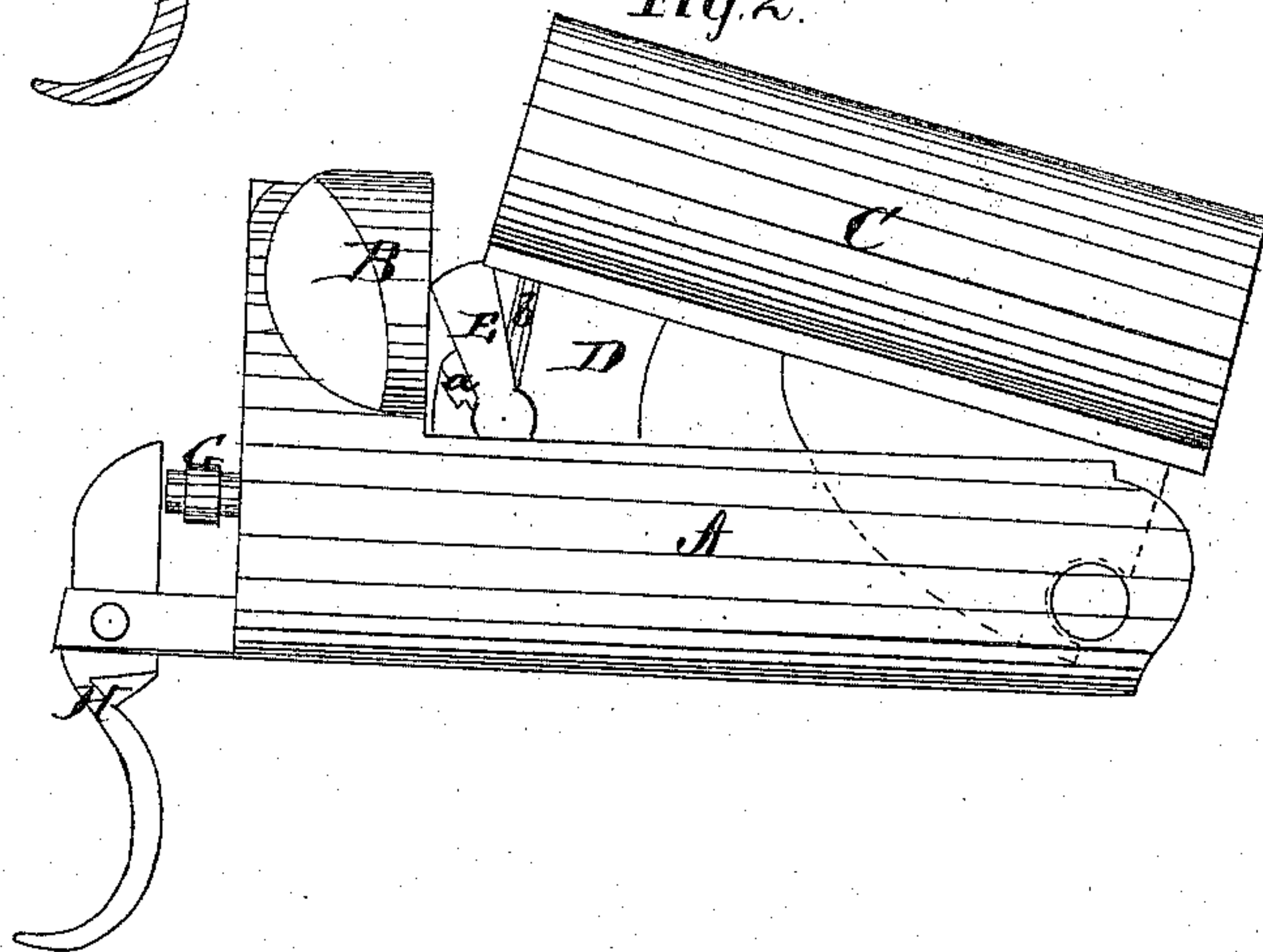
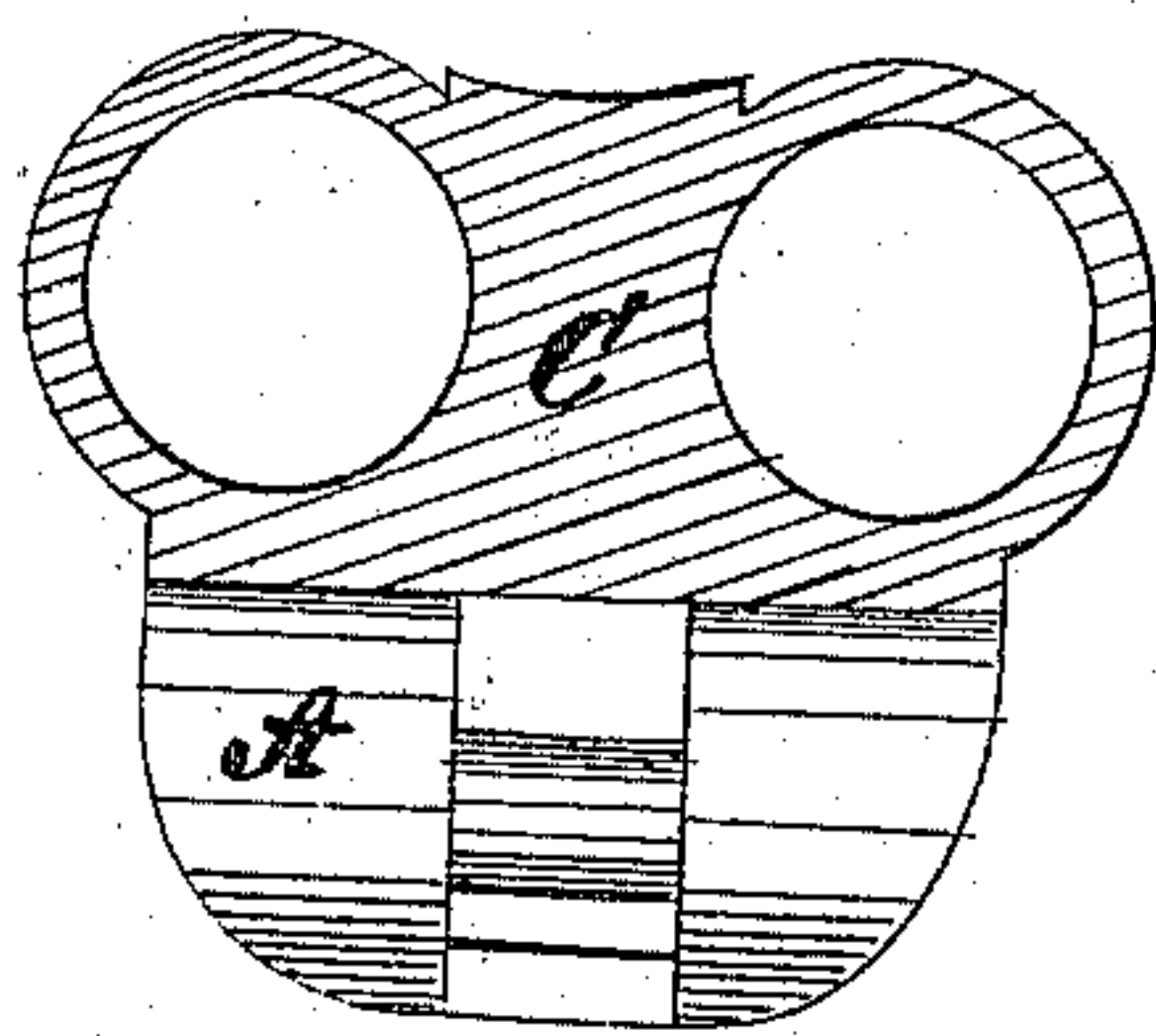


Fig. 3.



Witnesses.

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GEORGE R. PIERCE, OF GRAND RAPIDS, MICHIGAN.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 119,474, dated October 3, 1871.

To all whom it may concern:

Be it known that I, GEORGE R. PIERCE, of the city of Grand Rapids, in the county of Kent and in the State of Michigan, have invented certain new and useful Improvements in Breech-Loading Fire-Arms; and 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 making a part of this specification.

My invention relates to that class of breech-loading fire-arms in which the barrel or barrels are swung forward on a pivot to open and backward to close their rear ends; and it consists in the construction and arrangement of a lock to hold them firmly and securely in place, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section, showing the barrel or barrels locked. Fig. 2 is a side view, showing the barrels thrown open; and Fig. 3 is a transverse section immediately in front of the pivot point for the barrel or barrels.

A represents a portion of the frame, provided with an upward-projecting fixed abutment or stationary breech B. The barrel or barrels C are pivoted at the front end of the frame A in such a manner that they can tip forward to open, and when closed their rear ends will be up against the abutment or breech B. The barrels C are near their rear ends, on the under side, provided with a lug, D, which, when the barrels are closed, fits into a mortise in the frame A. This lug is nearly L-shaped, as shown in Fig. 1, and in the angle is made a semicircular groove for the insertion of the inner end of a pawl, E. This inner end of the pawl is rounded, as shown, and a gib or key, *a*, is dovetailed into the upper side of

the rear end of the lug D, confining said pawl in its place, but at the same time allowing it to turn on its bearing. The pawl is pressed toward the rear by means of a spring, *b*, against the gib *a*; and when said gib should become worn out it can readily be removed and replaced by a new one. The spring *b* bears against the pawl E in a groove on the inner side thereof. The pawl works in a circular groove formed in the under side of the barrel and in the breech, so that when the barrel is closed the pawl will be forced by the spring *b* into the groove in the breech. This circular groove is what may be termed a "diminishing circle," so as to form with the pawl a wedge-lock for the barrel. Through the frame A passes a bolt, G, to throw the pawl E forward, this bolt being operated for this purpose by means of a trigger, H, and thrown back again by a coil-spring, *d*, surrounding the bolt. By pulling the trigger H the pawl E is released and throws the rear end of the barrel or barrels upward without any assistance from the hand. This device is equally applicable to single or double-barreled guns.

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

1. The pawl E and spring *b*, in combination with the bolt G and trigger H, constructed and arranged to operate substantially as and for the purposes herein set forth.

2. The combination of the lug D, pawl E, gib *a*, spring *b*, bolt G, and trigger H, all constructed and arranged to operate substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 1st day of March, 1871.

GEORGE R. PIERCE.

Witnesses:

HIRAM A. BROOD,
THOMPSON SINCLAIR.