

UNITED STATES PATENT OFFICE.

BETHEL BURTON, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 26,475, dated December 20, 1859.

To all whom it may concern:

Be it known that I, BETHEL BURTON, of Brooklyn, in the county of Kings and State of New York, have invented, made, and applied to use certain new and useful Improvements in Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a vertical section of my improved fire-arm at the breech. Fig. 2 is a plan of the same; and Fig. 3 is a cross-section of the breech-slide.

Similar marks of reference denote the same parts.

In the drawings, *a* is the stock.

b is the barrel, to the rear of which a chamber, *c*, is provided, formed with the slings that pass to the stock.

d is a breech-pin sliding in this chamber, and provided with the nipple or cone 1 against which the hammer or cock *l* acts in discharging the piece. The front end of this breech-pin is made concave to take the conical rear end of the barrel at 2; and 3 is a plug forcing the cartridge into the barrel and past the sliding packing-ring 4, that occupies a recess at the rear end of the barrel, and is thrown by the explosion back against the breech-pin *d*, to make a perfectly tight joint. The breech-pin itself is guided in the chamber *c* by the base of the cone 1, and a projection, 6, on the opposite side sliding on the upper edges of the open part of the chamber, and when the breech-pin is drawn back the cartridge can be entered and forced up into the barrel, and the breech-pin secured by the following means:

f is a sliding-breech supporter, formed hollow, and receiving the rear end of the breech-pin *d*, which is formed as a pin, 7, setting within said breech-supporter *f*, and the two are connected by a cross-pin or screw entering a groove, 8, around said pin, so that the breech-supporter is free to turn without revolving the breech itself; but both are tightly

connected together, and a space is left, as at 9, to form a chamber for oil or grease. The rear part of this breech-supporter *f* is formed as a sectional screw, as at 10, and a similar sectional screw is formed on the inside of the chamber *c* in such a manner that the sections can be slid in endwise—that is to say, that each sectional part of the screw passes through where there is no thread on the inside of the chamber *c*, and when in place a partial rotation of the breech by the handle *g* brings the screws into each other and forces the breech-pin home to its place. In order, however, to prevent the screw-sections coming in contact until the breech is properly into place, and thereby the arm be discharged when improperly secured, I make use of a longitudinal guiding-slot, 11, in which is the end of a screw or pin, 12, that passes through the chamber *c*, so that the breech-supporter is guided thereby until the breech is up to place, when a transverse slot running around said breech-supporter allows the rotation of the parts to bring the screw-threads into each other. (See Figs. 1 and 3.) An opening is left in the chamber *c*, as at 13, which allows of ventilation between the breech-pin and chamber to prevent the parts becoming heated. By this arrangement the joint between the breech-pin *d* and supporter *f* is thoroughly lubricated, and the possibility of clogging by the smoke or escape fire entirely prevented.

I do not claim a sliding breech-pin in itself, neither do I claim sectional screw-threads; but

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

The combination and relative arrangement of the breech-supporter *f* with the sliding breech *d*, sectional screw 10, and guide-slot 11, and pin 12, substantially as set forth.

In witness whereof I have hereunto set my signature this 14th day of June, 1859.

BETHEL BURTON.

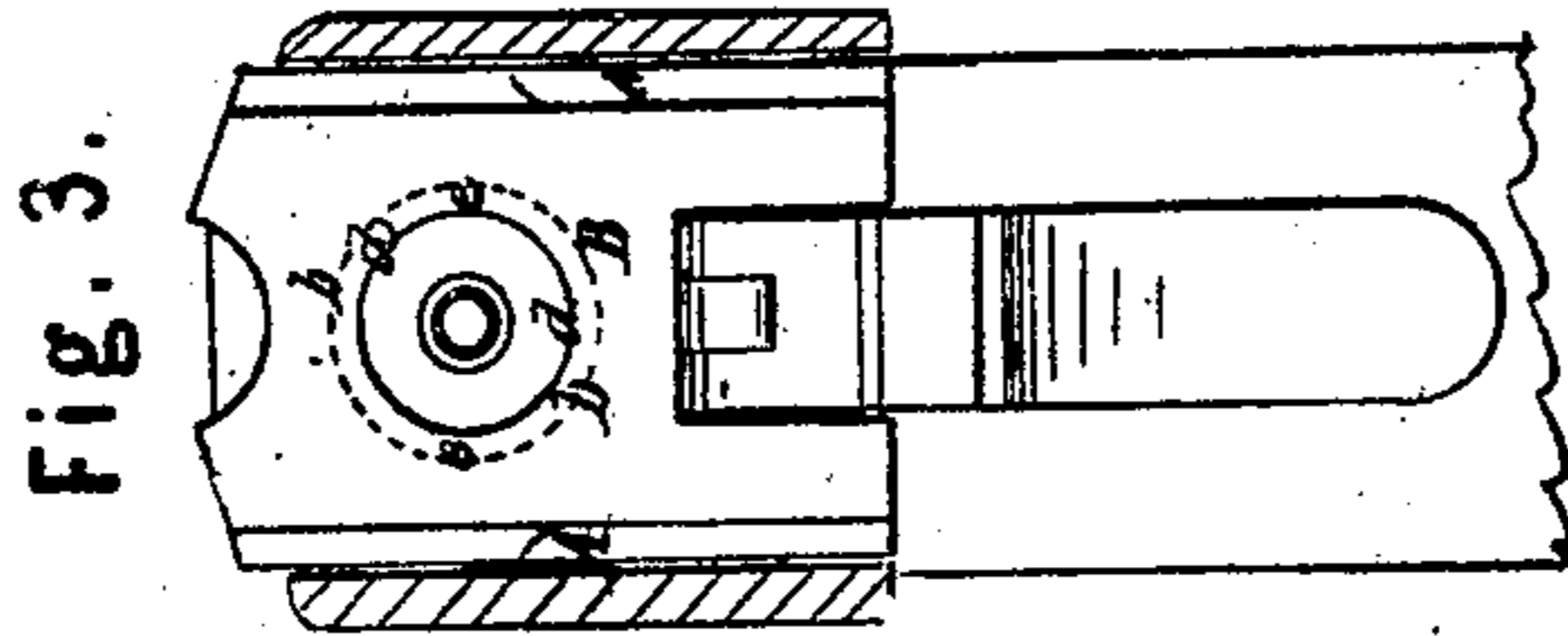
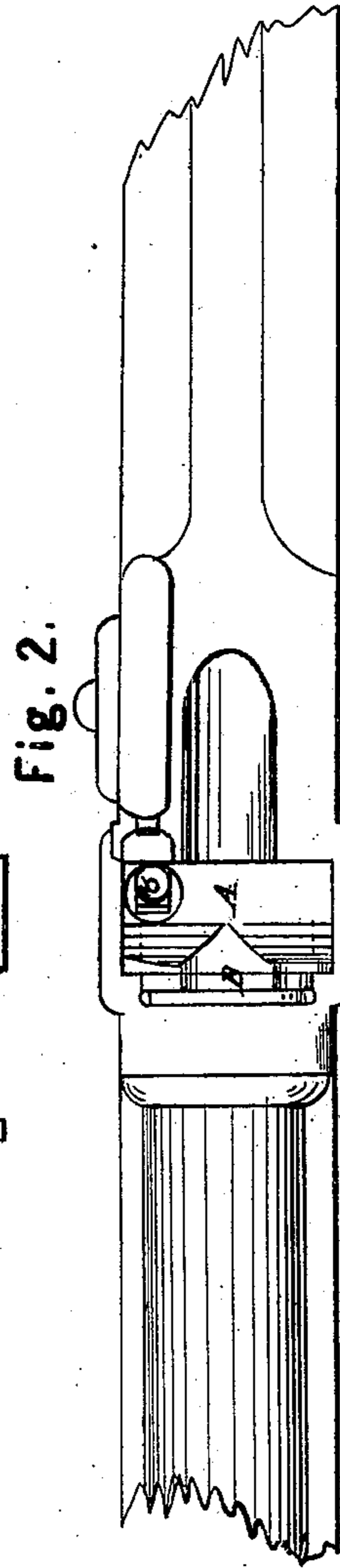
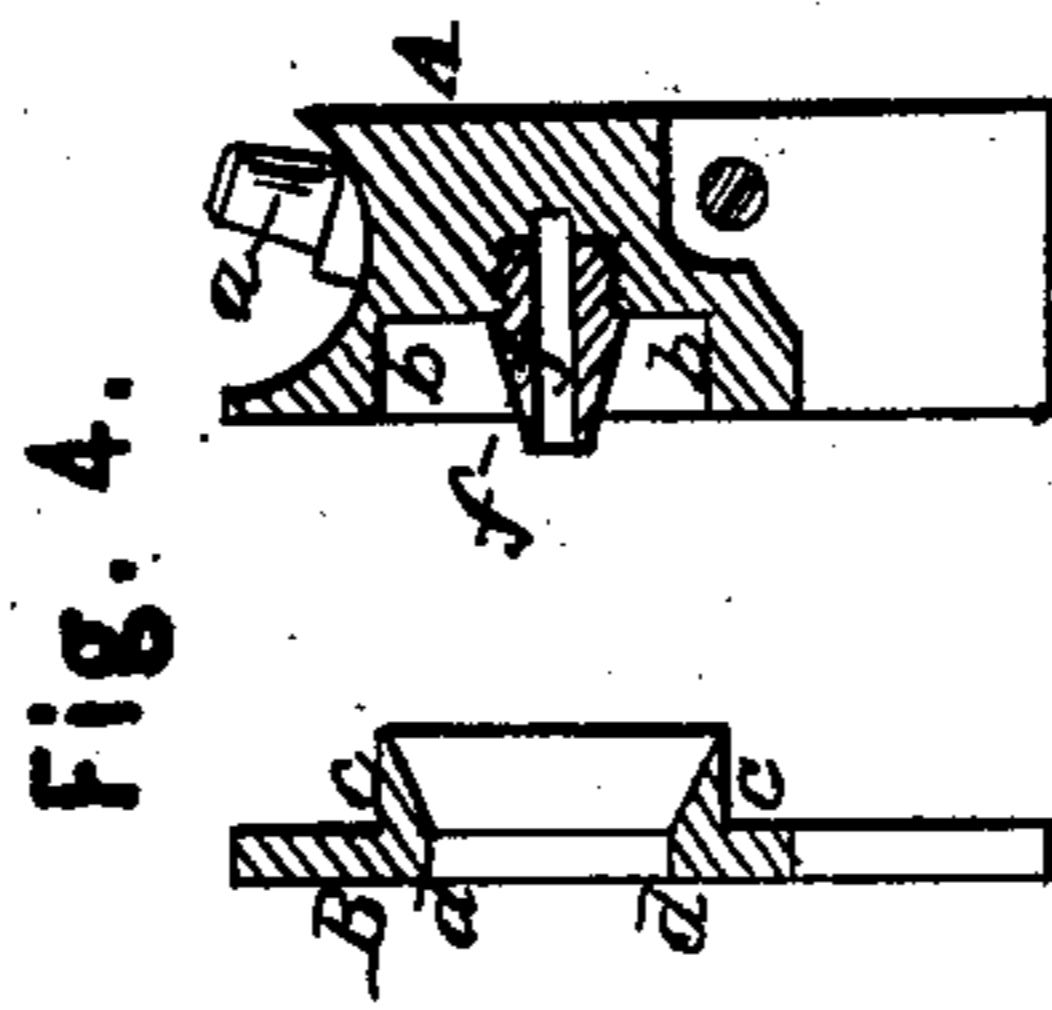
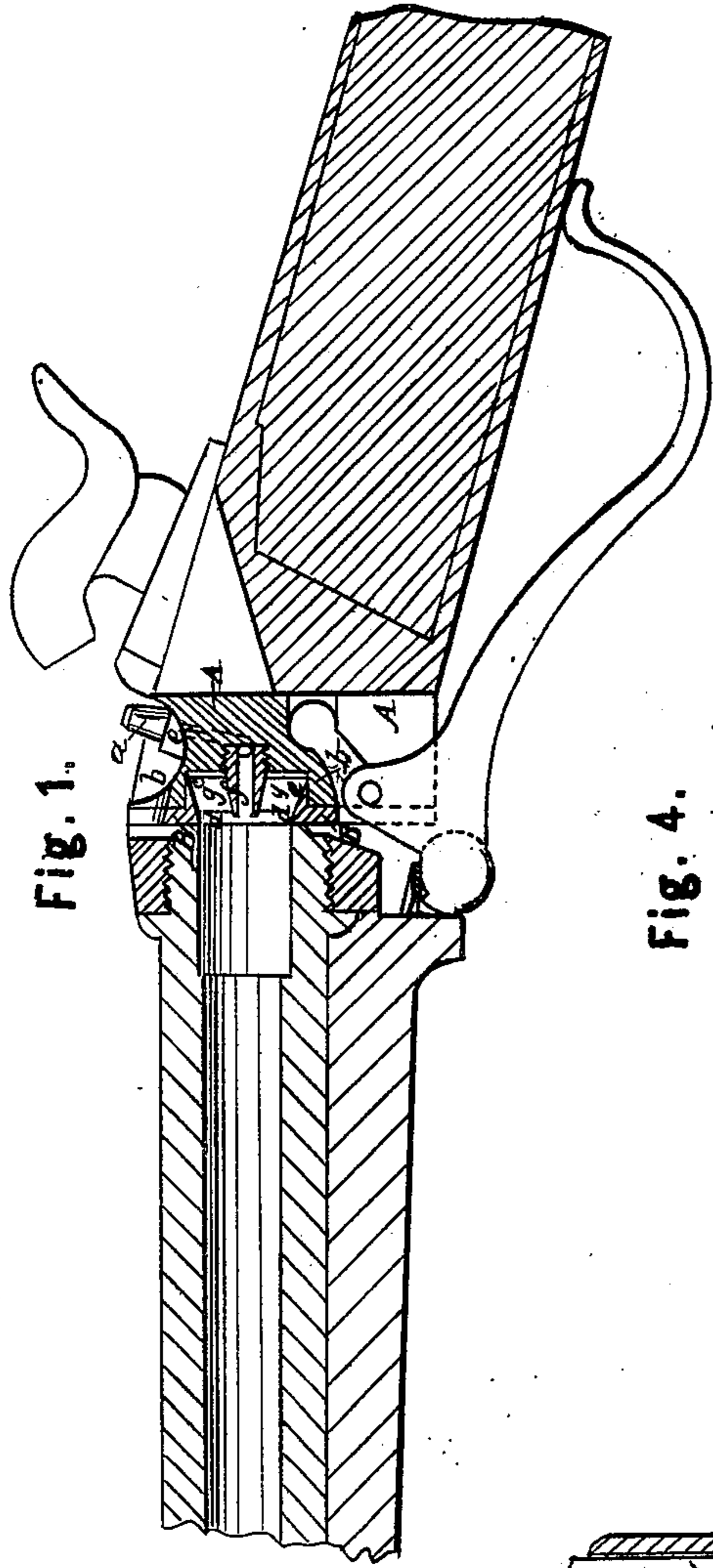
Witnesses:

LEMUEL W. SERRELL,
THOS. GEO. HAROLD.

R. S. LAWRENCE.
Breech-Loading Fire-Arm.

No. 26,504.

Patented Dec. 20, 1859.



Witnesses.

G. H. Green
Armin S. Case

Inventor.

R. S. Lawrence