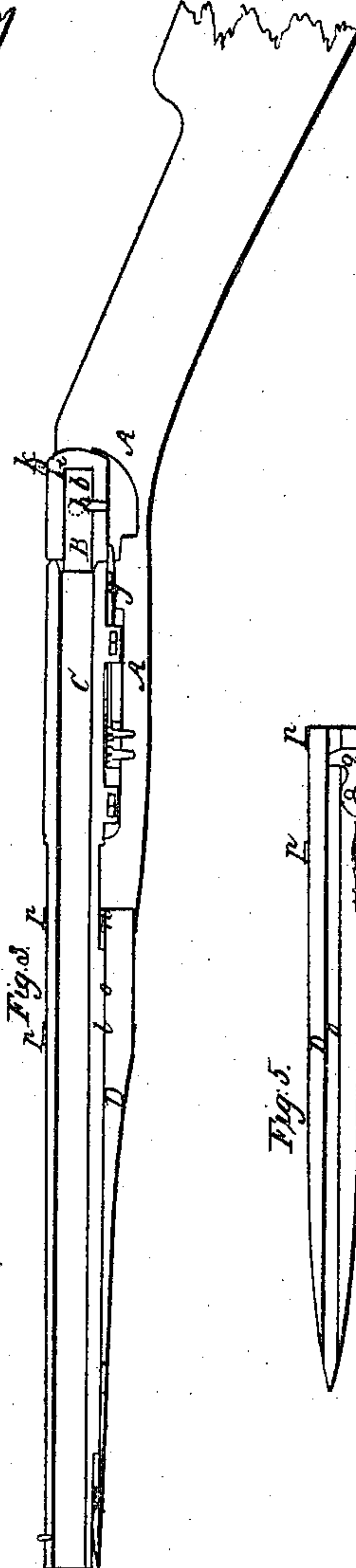
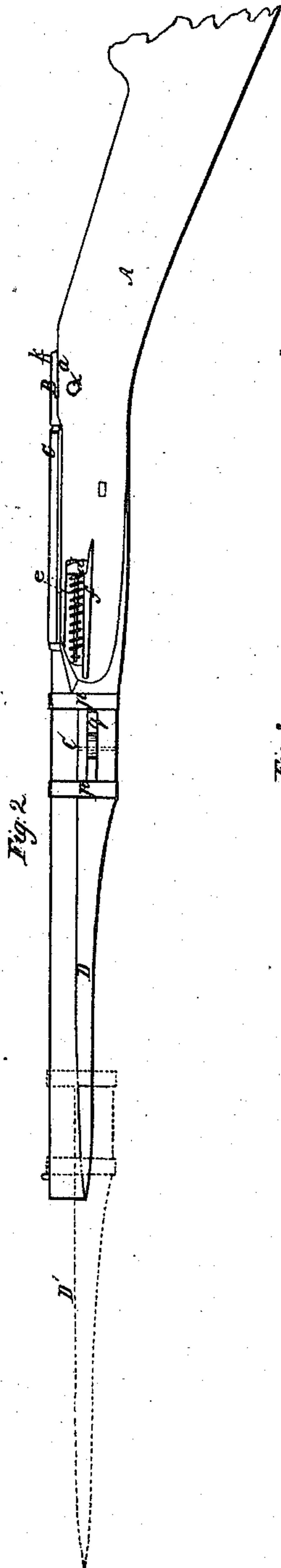
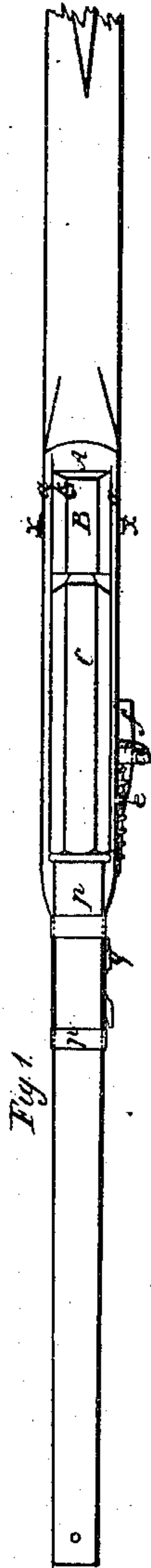


J. BOWNESS.
Breech-loading Fire-arm.

No. 43,733.

Patented Aug. 2, 1864.



Witnesses:
C. P. Hale
Frederick Bents

Inventor:
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by his attorney
A. W. H. H.

UNITED STATES PATENT OFFICE.

JAMES BOWNESS, OF PRINCE EDWARD ISLAND, ASSIGNOR TO HIMSELF
AND WILLIAM ROSS, OF BOSTON, MASSACHUSETTS, ASSIGNORS TO SAID
BOWNESS.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 43,733, dated August 2, 1864.

To all whom it may concern:

Be it known that I, JAMES BOWNESS, of Prince Edward Island, of the Kingdom of Great Britain, but at present residing at Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Breech-Loading Gun or Fire-Arm; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 denotes a top view, Fig. 2 a side elevation, and Fig. 3 a longitudinal section, of it. Fig. 4 is a transverse section taken through the barrel and bayonet.

My invention, either in part or in whole, is applicable to ordnance as well as to fire-arms.

In the drawings, A denotes the stock, B the rotary breech, and C the barrel, of my improved fire-arm. The said rotary breech is supported by two journals or trunnions, *x x*, which extend from it in opposite directions at or near its middle, and enter the stock A or those parts *a a* thereof between which the breech is placed. This breech is a block of metal bored out, as seen at *b*, (for the reception of a charge or load,) is closed at its rear end, and has an annular and tapering tenon, *c*, at its front end. This tenon on recession of the barrel enters the rear end of its bore or a recess properly formed there, and so as to make a close fit or joint therewith. The barrel is to be so fitted to the stock as to be capable of being moved a short distance longitudinally therein, it being pressed forward by pressure against a thumb piece or projection, *d*, extending from its side, and provided with a spring, *e*, for pressing the barrel backward. A spring-latch, *f*, fastened to the side of the stock, latches on the thumb-piece, and when in engagement therewith operates to prevent the barrel from being moved forward or out of connection with the rotary breech. A spring-catch, *g*, arranged within the stock and underneath the barrel, so as to project beyond its rear end, as shown in Fig. 3, serves to hold the barrel forward or out of connection with the rotary breech. A person, by pressing the thumb of his left hand at one and the same time both downward on the spring-latch *f* and forward against the pro-

jection *d*, may disengage the latch from the thumb-piece and force the barrel forward entirely beyond the rotary breech. This having been accomplished the said breech, by reason of its rear half being the heavier of the two halves, will immediately be rotated through an arc of ninety degrees, or thereabout, and so as to bring the mouth of the bore of said breech into a convenient situation for receiving a cartridge, which, on being forced down into the said bore, will encounter a small sharp projection or knife, *h*, which is arranged in the said bore and just in advance of the vent or touch-hole *i* thereof. The object of this knife is to cut open the cartridge, so as to enable the flame of the priming, which may rush into or through the vent, to gain access to the powder of the cartridge.

The percussion-nipple of the breech is shown at *k*, a lock for discharging a cap when on such nipple not being represented, as it may be applied to the stock as it is in most kinds of guns. On depressing the rotary breech to a horizontal position after having been loaded, such breech-block will be forced against the rear part of the retaining-catch *g*, and will press the said catch away from the barrel, and so as to allow the spring *e* to press the barrel backward up into connection with the rotary breech, where it will be held firmly by the spring-latch *f*, and particularly during a discharge of the load of the piece. Along the under side of the barrel, and in front of the stock, there is a tongue, *l*, which projects from the barrel, and is provided with two recesses, *m n*. This tongue enters a corresponding groove, *o*, made in a bayonet, D, which is concave on its upper surface, so as to fit against the barrel. The said bayonet has clasps *p p*, to extend from it transversely over and about the barrel, and so as not only to connect the bayonet to the barrel, but permit the former to be slid forward and backward relatively to the latter. The bayonet is also provided with a spring-catch, *q*, (see Fig. 2, and also Fig. 5, which is a horizontal section of the bayonet and the catch *q*,) which, by taking into the rear recess, *n*, will operate to prevent the bayonet from being moved forward on the barrel. The spring-

catch *g*, by taking into the front recess, *m*, will also operate to hold the bayonet in an advanced position, as indicated by red lines at *D'* in Fig. 2.

The above mode of applying the bayonet to the barrel not only enables the former to be made very strong, but prevents it from turning laterally on the barrel or being detached from the barrel by a sword-blow.

I do not claim a gun as made with a rotary breech separate from the barrel and containing a charge-chamber, so arranged and applied as to be capable with the breech of being turned out of line with the barrel in order to receive a load, such being the principle of construction of the "Hall carbine" and others long known and used; nor do I claim the application of a bayonet to such a gun in such manner that it shall be capable of being slid or moved longitudinally under the barrel of the gun, in order that it may be projected beyond the barrel or drawn back entirely underneath it, such having been the mode of applying a bayonet in the said Hall carbine; nor do I claim a tilting breech provided with a tenon to enter the rear end of the barrel when stationary, the said tilting breech being furnished

with means by which it may be moved, so as to cause its tenon to enter or depart from its recess of the barrel, as circumstances may require.

What I claim as my invention is—

1. The improved gun as constructed with the sliding barrel *C* and the tilting breech *B*, and as having the recession-spring *e*, combined with the locking-spring-catch *f* and the thumb piece or projection *d*, as arranged together and applied to the stock and barrel, substantially as specified.

2. The improved gun as constructed with the sliding barrel *C*, the tilting breech *B*, the recession-spring *e*, the locking-catch *f*, the thumb-projection *d*, and the retaining-catch *g*.

3. The arrangement of the cartridge-cutter *h* within the rotary or tilting breech *B*, as described—viz., so that the cartridge, while being forced into the said breech *B*, shall be cut or turn longitudinally by such cutter.

JAMES BOWNESS.

Witnesses:

R. H. EDDY,

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