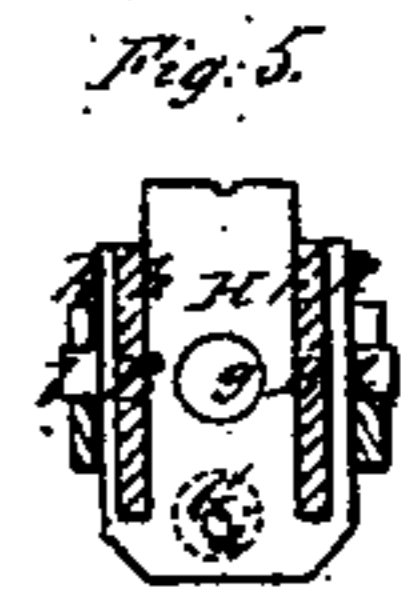
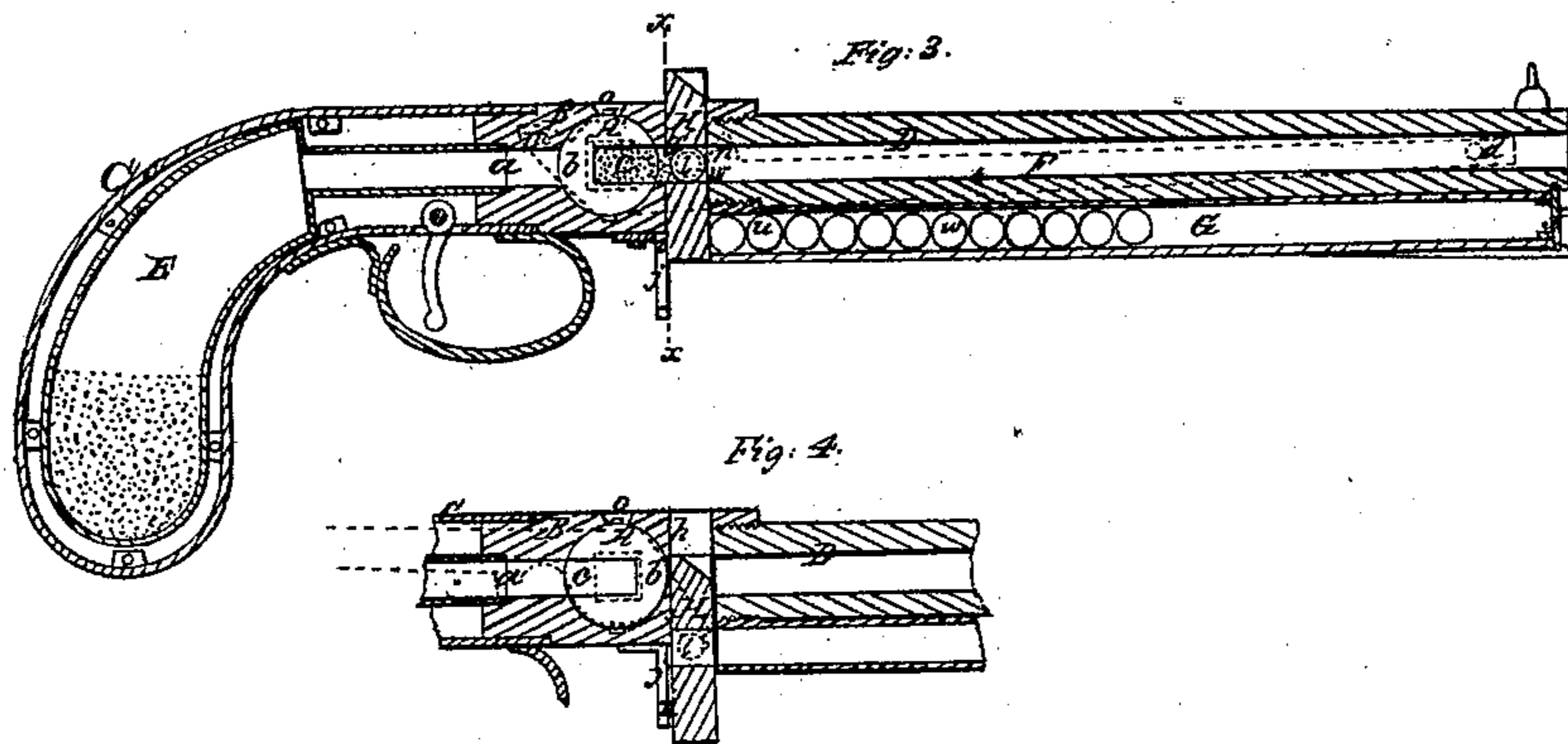
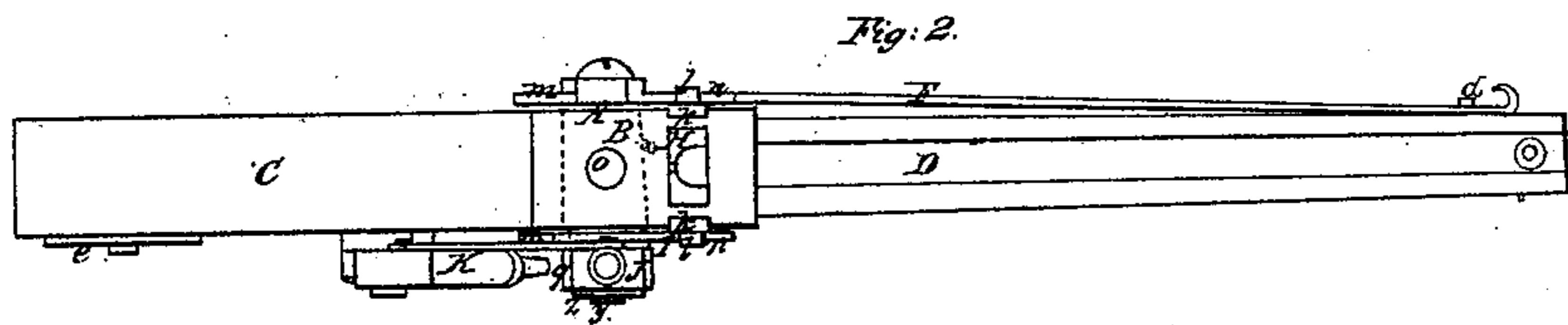
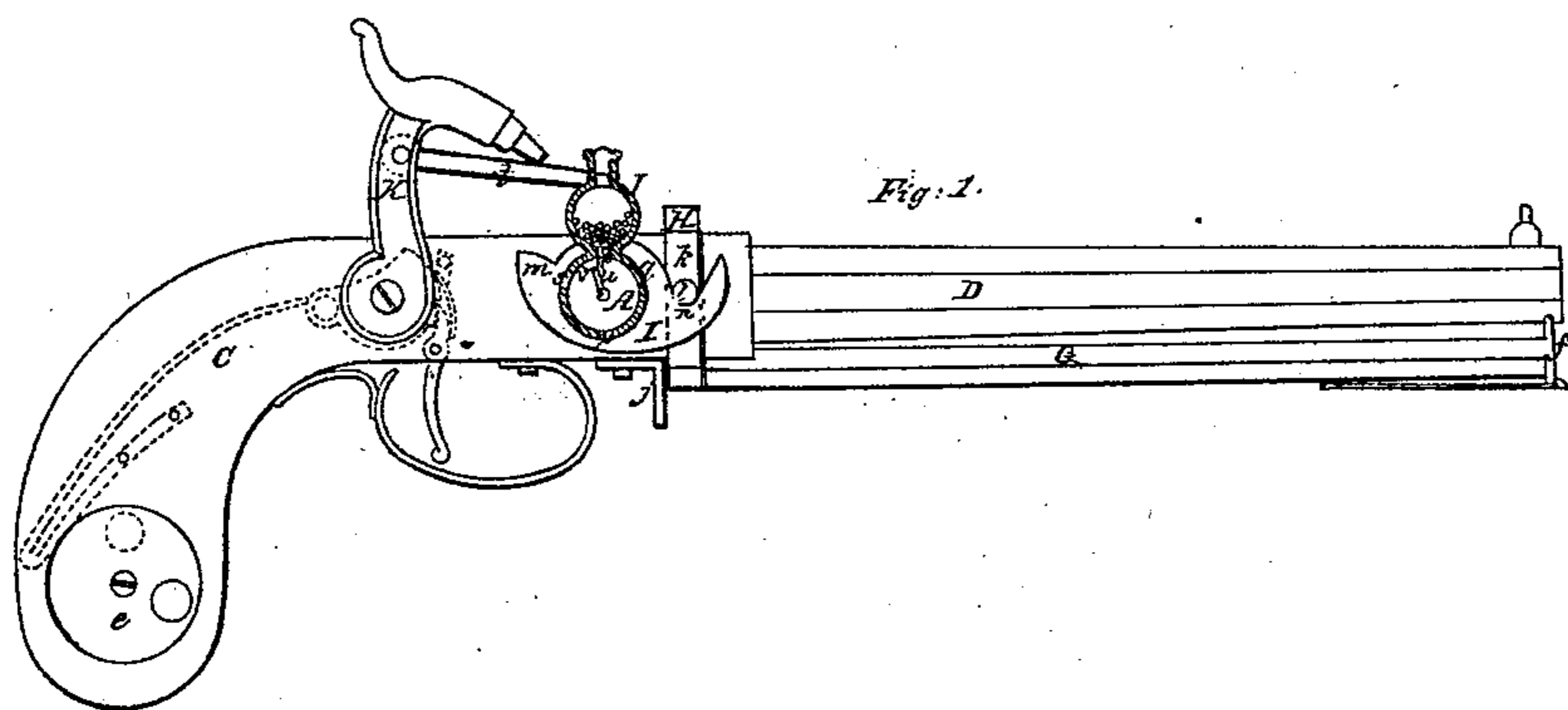


P. BOYNTON.
Magazine Fire-Arm

No. 23,226.

Patented Mar. 15, 1859.



Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

PAUL BOYNTON, OF CANTON, NEW YORK.

IMPROVEMENT IN MAGAZINE FIRE-ARMS.

Specification forming part of Letters Patent No. **23,226**, dated March 15, 1859.

To all whom it may concern:

Be it known that I, PAUL BOYNTON, of Canton, in the county of St. Lawrence and State of New York, have invented certain new and useful Improvements in Breech-Loading Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of a pistol with the primer in section. Fig. 2 is a top view of the same. Fig. 3 is a longitudinal central section of the same. Fig. 4 is a similar section of the breech and adjacent parts, exhibiting them in a different position. Fig. 5 is a transverse section of the same in the plane indicated by the line *x x* in Fig. 3.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in certain means of providing for the loading of fire-arms at the breech with loose powder from a magazine within the stock and with balls from a magazine under the barrel, whereby the operations of firing and reloading may be repeated very rapidly and with perfect safety.

It also consists in an improved contrivance applied in combination with a movable breech, for the purpose of applying the percussion priming by the act of cocking the hammer.

To enable others to make and use my invention, I will proceed to describe its construction and operation.

In carrying out my invention I use a chambered breech, A, of the faucet kind, (shown in Figs. 3 and 4,) fitted into a stout socket-piece, B, which may be made in the same piece with the barrel D, or have the barrel screwed into it or otherwise attached, and which serves as a means of attaching the stock C and barrel. From the interior of the transverse socket of the piece B, in which the breech A is fitted, there is a passage, *a*, directly opposite to the barrel, communicating with the powder-magazine E, which consists of a cavity of suitable size formed within the stock, and having a suitable opening in one side for filling it, said opening being closed by a door or valve, *e*.

The chamber *c* of the breech is of just sufficient length to receive the necessary charge of

powder, and the breech must be of such diameter as will leave sufficient depth of metal at *b*, in the rear of the chamber, to resist the force of the discharge.

The breech has attached on the left side of the weapon a lever, F, by which the chamber *c* can be brought into communication with the passage *a*, as shown in Fig. 4, to be loaded with powder, or in communication with the barrel, to a condition for firing, as shown in Fig. 3; and the said lever is made elastic laterally, that it may lock the breech with the chamber in the last-mentioned condition by springing onto a stop-pin, *d*, on one side of the barrel. Upon the rifle this lever should lie along the breech on the curve thereof, entirely out of the way, on the opposite side from the hammer, and is turned upward instead of down, but with precisely the same effect as when the lever is placed on the barrel.

G is the ball-magazine, consisting of a tube of a caliber large enough for the balls to pass easily through, said magazine being arranged immediately below and parallel with the barrel, and extending from a steel slide, H, which works up and down in a slot, *h*, in the socket-piece in front of the breech A, forward to the muzzle, or to as great a length as may be desired, and being fitted at its front end with a cap, *f*, which is made movable, for the purpose of filling the magazine with balls.

The slide H, which is for the purpose of loading the weapon, has a hole, *g*, bored through it of a proper size to receive the balls *w w* one at a time, its thickness also being just sufficient to contain the ball, the circumference of which should be slightly greater than that of the bore of the barrel, in order that it may not drop through the latter; and the said slide is made slightly taper, as shown in Figs. 3 and 4, for the purpose of enabling it to fit the slot *h* very closely to make a tight joint with the barrel and chamber around the hole *g* when the latter is opposite the barrel, as shown in Fig. 3. The said slide is capable of such a length of movement as will permit its hole *g* to be brought to a position opposite the magazine G, as shown in Fig. 4, such movement being limited by a pin, *i*, on the back part of the slide and a slotted plate, *j*, secured to the bottom of the socket-piece B. To provide for

this movement the said slide is provided with cheek-pieces *kk*, (shown in Figs. 2 and 5,) which are fitted to work in grooves in the exterior of the socket-piece, and on which are ears *ll*, one on each, one of which is operated upon by horns *m n* on a plate, *I*, secured to one end of the faucet-like breech, and the other by corresponding horns on the lever *F*, for the purpose of moving the said slide up and down.

J, Figs. 1 and 2, is the priming-box, intended to contain pill-priming, having an opening, *p*, in the bottom just large enough for the passage of the pills one at a time, terminating in a collar or band, *q*, which is fitted to turn on a portion of the breech *A*, which is made to protrude through the right-hand side of the socket-piece *B*, said collar or band being confined by a screw, *y*, and washer *z*. The said box *J* is connected with the hammer *K* by a link, *t*. Its band *q* has a hole, *r*, for oiling, and an opening, *s*, which, when the hammer is down, is brought opposite to the vent *u* in the breech, so that the point of the hammer will strike through it.

When the hammer is cocked while the chamber is in communication with the barrel, it, by its connection *t*, brings the opening *p* of the priming-box opposite to the vent, so that a pill may drop into the small cavity *v*, which is provided at the mouth of the vent to receive it, and which is sufficiently deep to prevent the pill in it from interfering with the turning of the band *q*.

The box *J* is filled with priming through an opening in the top, which is fitted with a stopper.

The hammer and lock of the weapon are, or may be, of the kind most commonly used.

The operations of loading and firing are as follows: The hammer being at half-cock, the lever *F* is first thrown back by a downward motion from the position represented in Figs. 2 and 3 to turn the breech to a position to bring the chamber *c* into communication with the passage *a* of the powder-magazine; and this movement causes the horns *m n* on the said lever and plate *I*, by their action on the ears *ll*, to push down the slide *H* to a position in which the opening *g* is in communication with the ball-magazine. The breech and slide are stopped in the proper position by the pin *i* arriving at the bottom of the slot in the plate *j*. The piece is then held muzzle downward to cause the chamber *c* to be filled with powder, and when this has been done, and while the piece is still held in the same position, the lever *F* is turned half-way back, which closes the chamber *c*, with the proper-measured charge within it, without moving the slide *H*, which is left undisturbed by there being a

proper distance between the horns *m* and *n*. While the lever *F* is in the last-mentioned position the piece is inverted or held muzzle upward to permit a ball to enter the hole *g* in the slide *H*, and in this position of the piece the lever is moved back the remainder of the distance and locked by the catch *d*, thus bringing the chamber *c* again into line with and in direct communication with the barrel, and causing the horns *m n*, by their action on the ears *ll*, to force up the slide to the position in which the hole *g* is in direct communication between the chamber and barrel.

The piece, being now loaded, may be held in any position till it is desired to fire. When the hammer remains at half-cock the vent is closed by the band *q* of the priming-box; but by cocking it a pill is deposited in the cavity *v* of the vent, and when the trigger is drawn the hammer in its fall moves forward the priming-box and exposes the primed vent through the opening *s*, so that as the hammer comes down it explodes the pill and fires the piece.

In firing there is not the slightest danger of the fire reaching the powder-magazine, as the breech is ground in its socket with a perfect joint, and whatever reaction is produced upon it by the explosion of the charge only tends to make it close tighter around the passage *a*.

The ball-magazine may be fitted with a spiral spring, which would force the balls into the hole in the slide *H*, without the necessity of holding the piece muzzle upward, as herein-before described.

I do not claim, broadly, the arrangement of a powder-magazine in the breech of a gun, or of a ball-magazine under and parallel with the barrel, nor yet the use of the slide *H* to load the bullets; but

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

1. Combining the powder-magazine in the stock with the barrel of a fire-arm by means of the faucet-like chambered breech, applied and operating as described, to measure its own charge.

2. Combining the bullet-loading slide *H* with the faucet-like chambered breech by means of the ears on the slide and the horns *m n* attached to the breech, that the slide may be operated, in combination with the breech, in the manner herein specified.

3. The combination, with the faucet-like breech, of the priming-box *J* and its perforated collar *q*, operated by a connection with the hammer, substantially as herein described.

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Witnesses:

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