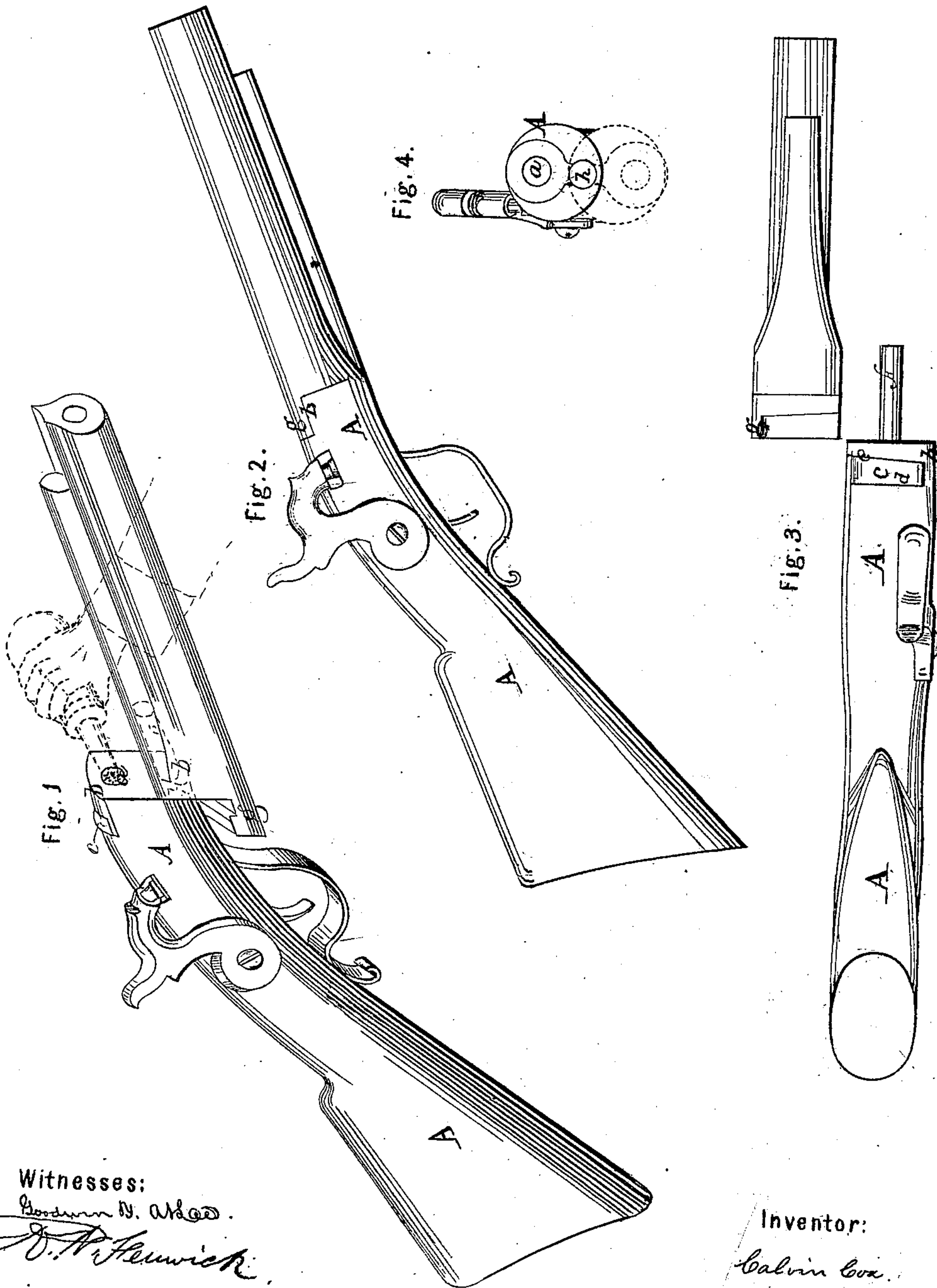


C. COX.
Breech-loading Fire-arm.

No. 27,778.

Patented April 10, 1860.



Witnesses:
Gordon W. Wood.
D. A. Hewick

Inventor:
Calvin Cox

UNITED STATES PATENT OFFICE.

CALVIN COX, OF COXVILLE, NORTH CAROLINA.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 27,778, dated April 10, 1860.

To all whom it may concern:

Be it known that I, CALVIN COX, of Coxville, in the county of Cox and State of North Carolina, have invented a new and useful Improvement in Breech-Loading Guns; 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 a part of this specification, in which—

Figure 1 is a perspective view of a gun constructed with my improvements. The gun is in condition for being loaded. Fig. 2 is a side view of the same ready to be cocked and fired. Fig. 3 is a top view of the breech part and the barrel part separated. Fig. 4 is an end view of the same.

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

The nature of my invention consists in dividing the barrel transversely at such a point that that part of the bore which receives the charge shall be a fixture with the breech, in combination with the manner of hinging the barrel and producing a close lock-joint between the same and breech, substantially as hereinafter described. My invention avoids the necessity of using a moving breech-piece; also, enables me to load the gun with powder as well as with cartridge at the breech. Likewise enables me to see and pick the rammed powder-charge in case the gun will not fire readily. I am likewise enabled to produce a perfectly-closed joint.

Heretofore where guns have been divided transversely only cartridges could be fired, as no chance for ramming a powder-charge is allowed; and in cases where a moving or hinged cartridge-tube has been used two joints are necessary; and, beside this, considerable additional expense is incurred in constructing the gun over that incurred in constructing my gun.

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

I construct my gun in two parts, A B. In the stock or breech portion A, I bore a charge-chamber, *a*, said chamber communicating with the nipple vent or bore of the cap-tube in just the same manner as in ordinary cap-guns which are not divided transversely. The barrel portion B is bored entirely through like an ordinary gun-barrel. To unite the parts

A and B, I cut away a portion of the metal forming the charge-chamber *a*, and from this point, circumferentially, a groove, *c*, said groove having one of its shoulders, *d*, square, and the other, *e*, slightly oblique or spiral. I also insert an eccentric fulcrum-pin, *f*, in the metal forming the charge-chamber. This pin is situated near the base of the outer circumference of the charge-chamber. On the rear end of the barrel, at the top, I construct an extension, *g*, which is of a form corresponding with the portion *b*, removed from the charge-chamber, and with the spiral or oblique groove *c*, formed at this point. I also bore a hole, *h*, in the metal forming the base of the barrel, to receive the fulcrum-pin *g*, the whole being thus constructed as represented in Fig. 2. I introduce the pin into the hole *h*, and force the rear end of the barrel up to the front end of the charge-chamber, as shown in Fig. 1, and then turn the barrel on the pin from the position shown in Fig. 1 to the position shown in Fig. 2. Thus turning the barrel up causes the oblique or spiral side of the tongue *a'* to bind against the oblique or spiral side of the groove *c*, and consequently the parts are drawn together and the joint perfectly closed.

To load the gun with unconfined powder, all that has to be done is to turn down the barrel to the position shown in Fig. 1, and apply the powder in the manner represented; then to insert the wad and ball, and ram the whole in the same manner as with an ordinary undivided gun. After this I turn up the barrel and lock the joint, as above described. In case the charge will not readily fire, turn down the barrel and pick the charge.

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

Dividing the barrel transversely at such a point that that part of the bore which receives the charge shall be a fixture with the breech, in combination with the manner of hinging the barrel and producing a close lock-joint between the same and breech, substantially as and for the purposes set forth.

The above specification of my improved breech-loading fire-arm signed by me this 1st day of November, 1859.

CALVIN COX.

Witnesses:

GOODWIN Y. AT LEE,
GUSTAV DIETERICH.