

C. D. LADD.

MEANS FOR CONVERTING BREECH-LOADING RIFLES INTO:
MUZZLE-LOADERS.

No. 173,476.

Patented Feb. 15, 1876.

Fig. 1.

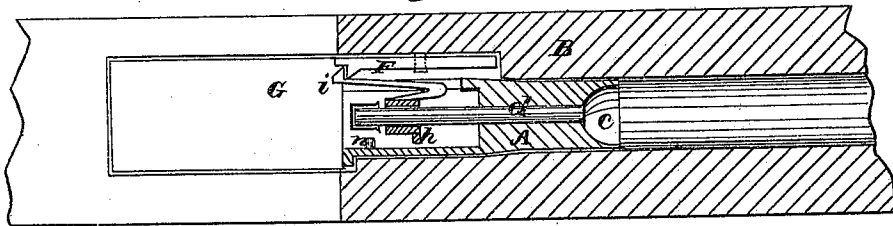


Fig. 2.

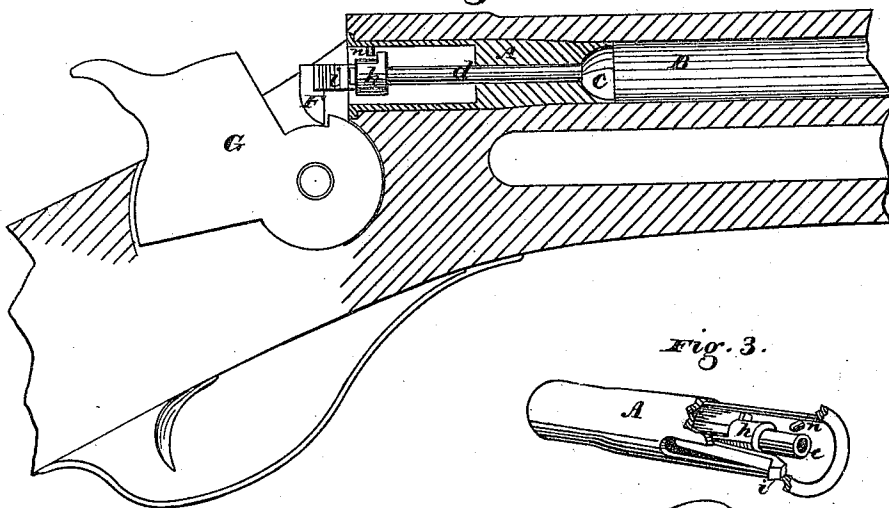
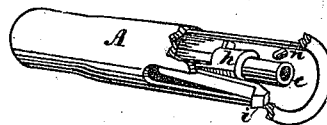


Fig. 3.



Witnesses

Geo. H. Strong.
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Inventor

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UNITED STATES PATENT OFFICE

CHARLES D. LADD, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN MEANS FOR CONVERTING BREECH-LOADING RIFLES INTO MUZZLE-LOADERS.

Specification forming part of Letters Patent No. **173,476**, dated February 15, 1876; application filed January 4, 1876.

To all whom it may concern:

Be it known that I, CHARLES D. LADD, of San Francisco city and county, State of California, have invented an Attachment for Breech-Loading Rifles; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention without further invention or experiment.

The object of my invention is to provide an attachment for breech-loading rifles, by the use of which I am enabled at any time to convert the breech-loader into a muzzle-loader, with a convenient mechanism for removing exploded caps.

Among the objections to breech-loading rifles are the expense of the cartridges and the uselessness of the piece if the hunter should exhaust his peculiar ammunition when at a distance from supplies of it.

Another great trouble is, that the fixed ammunition for breech-loaders is usually made with heavy charges of powder and heavy balls, fitted for the largest game, but which would utterly destroy small animals or birds, besides making a very disagreeable recoil.

In order to overcome these difficulties I construct a tube, A, having its exterior shaped precisely like a cartridge, so as to fit perfectly in the chamber of the rifle B. In the front of this cylinder a small chamber, c, is made, similar to the chamber of muzzle-loading rifles, and this chamber has a passage, d, extending back to the nipple e, which occupies the same position that the anvil does in the ordinary central-fire cartridge.

I have shown my device as adapted to the Remington rifle; but it will be readily seen that it can be easily fitted to any other form of breech mechanism. In this rifle the shell is usually extracted by means of a retractor, F, which is operated by the secondary hammer G of this weapon, and as the head of my attachment is shaped like a cartridge-shell, it is

necessary to make a slot in one side of it to allow the retractor to act without removing the tube. As a percussion-cap is used upon this tube, as in muzzle-loaders, it is necessary to remove this cap after exploding. In order to do this I surround the tube with a loose ring, h, and a spring-latch arm, i, extends outward until its head is in such a position as to be caught by the retractor and drawn back with it. This action removes the cap from the tube, when the ring is stopped by striking a pin, n, in the side of the tube. The continued movement of the hammer causes the retractor to slip past the latch, which, with the ring, will slip back, so that a new cap can be placed upon the nipple.

When the hammer G is let down to its place the retractor will slide past the latch i, and again be in readiness to withdraw a cap after the rifle has been fired. The charge of loose powder may be as large or small as desired, and can be inserted from the muzzle. The ball may also be patched and seated by means of a ramrod, in the usual manner, so that for small game, as birds, squirrels, &c., a light charge of powder and a small round ball can be used, while the fixed and more costly ammunition can be reserved for larger game.

The attachment can readily be seated by pressure at any time, and may be removed by forcing it out by a ramrod.

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

The tube A, with its nipple e, provided with its retracting-ring h and latch i, in combination with the chamber of a breech-loading rifle and the retractor F, or equivalent device, substantially as and for the purpose described.

In witness whereof I hereunto set my hand and seal.

CHARLES D. LADD. [L. S.]

Witnesses:

GEO. H. STRONG,
JNO. L. BOONE.