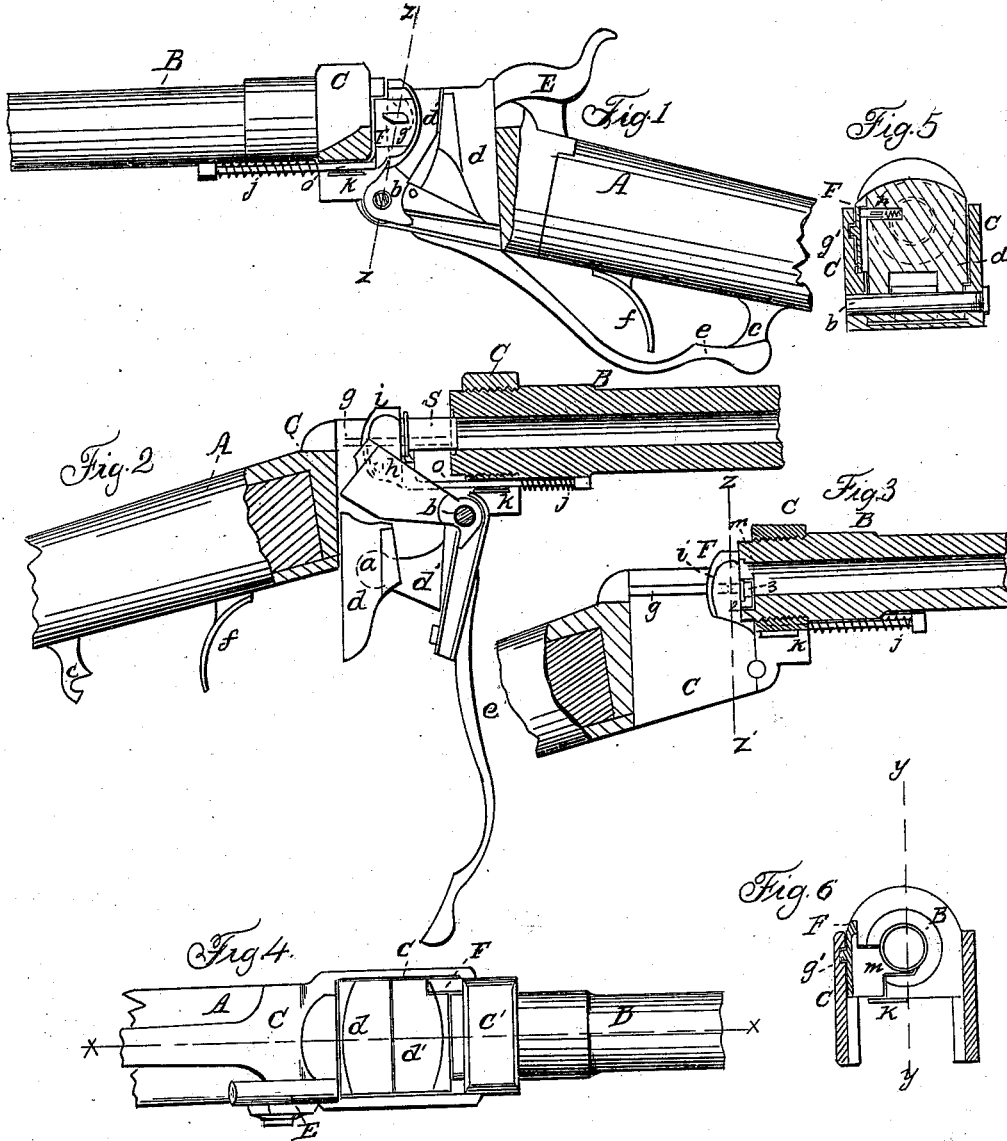


H. H. WOLCOTT.
Cartridge-Retractor.

No. 48,227.

Patented June 13, 1865.



Witnesses:
Wm. Brown
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UNITED STATES PATENT OFFICE.

H. H. WOLCOTT, OF YONKERS, NEW YORK.

IMPROVEMENT IN CARTRIDGE-RETRACTORS FOR BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 48,227, dated June 13, 1865.

To all whom it may concern:

Be it known that I, H. H. WOLCOTT, of Yonkers, in the county of Westchester and State of New York, have invented a new and useful Improvement in Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a portion of a fire-arm in side view, a part of the receiver being broken away to show the breech-plate *d'*, and the shell-drawer F. Fig. 2 is an elevation of a longitudinal section taken in the line *x* of Fig. 4. Fig. 3 is an elevation of a longitudinal section taken on the line *y* of Fig. 6. Fig. 4 is a plan view of that part of the arm which contains my improvements. Fig. 5 is a cross-section taken through the breech-plate on the line *z* of Fig. 1. Fig. 6 is a cross-section taken through the receiver C and the shell-drawer F' on the line *z* of Fig. 3. Similar letters of reference indicate like parts.

This invention consists in a new and improved shell-drawer for breech-loading fire-arms, which is operated by means of the swinging of the breech-plate.

A represents a portion of the stock, and B a portion of the barrel of a breech-loading gun of the pattern known as the "Starr" breech-loader, which I have here shown for the purpose of illustrating my invention and its application and use.

C is the receiver, within which are contained the breech-plate *d'* and the wedge-pin *d*, which are connected by a joint, *a*. The breech-plate is secured in the receiver by the pivot *b*, and it is locked in place therein by means of the guard *e* and the spring-latch *c*.

E is the hammer, and *f* the trigger, of the gun.

F is the shell-drawer, which is seen in side view from opposite sides in Figs. 1 and 2. Its position in the gun is in the left-hand corner of the receiver, a portion of the breech-plate being cut away (see Figs. 5 and 6) to give it place. It is fitted to move horizontally along the side of the receiver next to which it is placed, and is guided in its movements by a ledge, *g'*, which projects from it and fits easily in a horizontal

groove, *g*, made in that side of the receiver. An arm, O, projects through or beneath the forward part of the receiver and beneath and at one side of the breech of the gun, and extends beyond that part of the receiver far enough to receive a spiral spring, which is placed about it, whose outer end is held against a collar on the extreme end of the arm O, and its inner end against any suitable stop. In this example I have shown its inner end to be held against the front part of the receiver. The arm O in this example is held in a groove cut to receive it in the under side of the receiver, and it is held up and retained in the groove by means of the head of a screw, K, whose head is seen in Figs. 1, 2, 3, and 4.

m is an arm of the shell-drawer, which extends at right angles from its front edge, and which fits in a recess cut for it in the breech of the barrel. Its outline is seen in Fig. 6, which shows an elevation of the arm *m*, the breech-plate being withdrawn. A portion of the arm is curved to conform to the bore of the barrel, the curved part forming an arc of a circle, and its curved edge having a circular groove, 2, to receive the rim of the cartridge, thus leaving a rim, 3, on the curved part of the arm *m*, which is flush with the bore of the barrel, and which therefore embraces the shell of the cartridge forward of its rim.

The inner side face of the shell-drawer E is cut away, as seen in Fig. 3, in order to form a projection, *i*, on the back part. This projection is seen also in Figs. 5 and 6, which show it in edge view, and also in Figs. 1 and 2, where the dotted outline shows the part cut away. The hinder part of the shell-drawer is curved, as seen in Figs. 1, 2, and 3, and the recesses cut for it in the breech-plate are also curved, this configuration being given to those parts in this example of my invention, in order to permit the pin in the breech-plate to retain its hold of the projecting rim *i* while it is being withdrawn from the receiver.

h is a pin set in a socket made in the side of the breech-plate immediately before the line of the projecting rim *i* when the breech-plate and shell-drawer are in place in the receiver. A spiral spring placed in the bottom of the socket impels the pin outward, and that face of the pin which is toward the breech is beveled, so that it will slip past the said rim *i* by means of

the yielding of the spring when the breech-plate is brought up to its place. When the breech-plate is withdrawn to reload the gun the pin *h* is drawn against the inside of the rim *i*, and the shell-drawer is pulled backward, carrying the empty shell with it. Since the breech-plate is usually withdrawn rapidly it follows that the shell will be drawn out from the breech with a quick motion, and with a force which will carry it entirely out of the receiver. The inner side of the rim *i* is curved to permit the pin to run along with ease, and the pin escapes below the bottom of the rim when the breech-plate has reached its greatest distance in a horizontal direction from the breech of the gun, the rim being extended downward far enough to cause it to be retained by the pin until the shell-drawer has drawn the shell clear from the breech or to a sufficient distance to allow it to give the desired impetus to the shell. The ledge *g'* of the shell-drawer travels along the groove during its backward movement, and when the pin *h* has escaped from the foot of

the rim *i* the spring *j* on the arm *O* causes the shell-drawer to be returned to its place against the breech of the barrel.

I do not lay claim to the use of a spring for returning the shell-drawer to its place next the breech, nor to the means here shown of supporting a spring—to wit, by the arm *O*. Instead of using an arm like *O* to sustain and apply a spring to return the shell-drawer I can apply a suitable spring in the receiver itself; but as such a modification is within the skill of any competent gunsmith, I need not here describe any other mode of applying it.

I claim as new and desire to secure by Letters Patent—

The combination of the shell-drawer *F*, tongue *g*, laterally-projecting rim *i*, and pin *h*, all constructed and arranged substantially as and for the purposes set forth.

H. H. WOLCOTT.

Witnesses:

M. M. LIVINGSTON,
C. L. TOPLIFF.