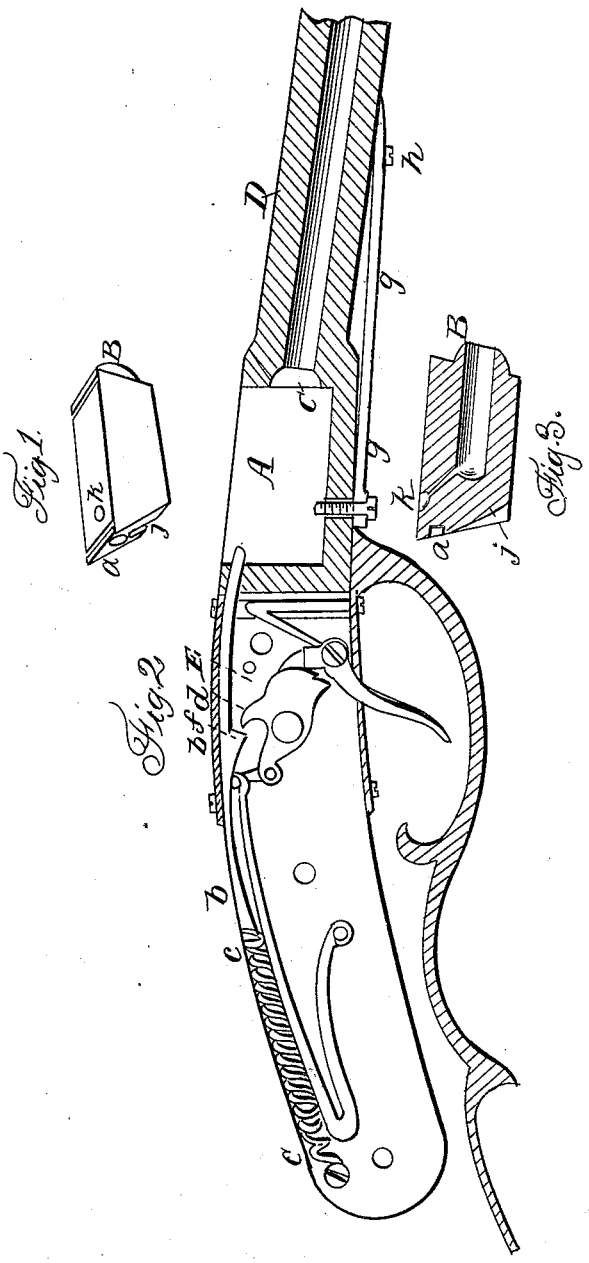
J. R. THOMAS.

Breech-Loading Fire-Arm.

No. 1,611. Patented May 19, 1840.



UNITED STATES PATENT OFFICE.

JAMES R. THOMAS, OF COLLINSWORTH, GEORGIA.

IMPROVEMENT IN RIFLES AND OTHER FIRE-ARMS.

Specification forming part of Letters Patent No. 1,611, dated May 19, 1840.

To all whom it may concern:

Be it known that I, JAMES R. THOMAS, of Collinsworth Institute, in the county of Talbot and State of Georgia, have invented a new and useful Improvement in the Manner of Constructing and Affixing the Chambers of Rifles, and which improvement may be applied also to other guns or fire-arms; and I do hereby declare that the following is a full and exact description thereof.

I employ a detached chamber to contain the charge, any number of which chambers may be prepared and kept ready to be inserted within the recess or opening prepared to receive them at the rear end of the barrel.

I am aware that detached chambers, to be kept ready charged, have been previously used, they having been constructed in various ways; and I do not therefore make any claim to the invention of a detached chamber, taken alone; but I have, as I verily believe, so constructed and arranged my detached chambers and so combined them with the other parts of the fire-arm as to render then more simple, convenient, and efficient than those heretofore known and used.

Figure 1 in the accompanying drawings is a perspective view of one of my separate or detached chambers; and Fig. 2 is a section of that portion of the rifle within which it is to be placed, together with such parts of the lock and barrels as are necessary to show the manner in which I construct them, so as, in combination with the detached chamber, to produce the desired effect. Fig. 3 is a section through the middle of the detached chamber.

The detached chamber, Fig. 1, which is bored out to receive the charge, is to be received within the recess A, which forms a box in the metal of the breech of the rifle exactly adapted to it in size and form. On the fore end of the chamber there is a convex piece or protuberance, B, which, when the chamber is in place, is received into a corresponding concavity, C, prepared for that purpose in the rear end of the barrel D, and at the rear end of the chamber there is a small mortise or hole, at *a*, which is to receive the end of a spring-bolt, to be presently described, and by which bolt that end of the chamber is confined in place. In the section, Fig. 3, the mortise *a* and protuberance B are also distinctly shown.

In Fig. 2, *b b* is the spring-bolt, which is forced forward by means of the spiral spring *c c*, within which the back end of the spring-bolt is received. This spring-bolt is drawn back in the act of half-cocking, and this is effected by means of the projection *d*, formed in the upper part of the tumbler E. As the hammer is drawn back to a half-cock, the projection *d* comes in contact with the offset *f* on the spring-bolt and forces it so far back as to withdraw it entirely from the recess A, and consequently from the mortise *a* in the chamber when that chamber is in place. When the hammer is drawn back a little beyond the half-cock, the projection *d* on the tumbler escapes from offset *f* on the spring-bolt, and that bolt is again forced forward.

In Fig. 2, *g g* is a spring, which is affixed by a screw, *k*, to the lower part of the barrel, and has at it opposite end a pin, *i*, which is forced up into the recess A by the power of said spring. This pin will, when the spring-bolt *b b* is withdrawn from the mortise *a*, throw the detached chamber up and admit of its ready removal.

j, Figs. 1 and 3, is a slope made in the lower angle of the back of the chamber, to press against and force the spring-bolt back when a chamber is to be passed into the recess.

k is the touch-hole, which may be made so as to receive a pellet of percussion-powder, or a percussion-cap, as may be preferred. In Fig. 3 the touch-hole is shown as if situated in the middle of the width of the top of the chamber; but I generally place it near to one side, as shown in Fig. 1, so as to be near to that side on which the hammer is situated.

Any required number of the detached chambers may be prepared and kept ready charged. When a discharge has been made, on drawing back the hammer to cock the gun the spring-bolt will be retracted and the chamber will be raised by the action of the spring *g g*, and when the gun is cocked the empty chamber may be removed and a charged one substituted therefor.

Having thus fully described the manner in which I construct the detached chambers and the parts of the rifle or gun with which they are immediately connected, what I claim as constituting my invention, and desire to secure by Letters Patent, is—

The constructing a detached chamber in the form and manner herein described and represented, and so constructing the breech of the gun as to receive the same, so that said chamber may be held in place by the projecting end passing into the rear end of the barrel, and by the spring-bolt entering the mortise in the back part of said chamber, and so that it will be removed in the act of cocking the gun or rifle by the action of the spring *g* and pin *i*, as herein described. I do not make claim to either of these parts taken individually, but I do claim the manner in which I have combined them with each other, so as to co-operate together, substantially in the manner and for the purpose set forth.

JAMES R. THOMAS.

Witnesses:

JNO. H. WEEKES,

A. MORRILL.