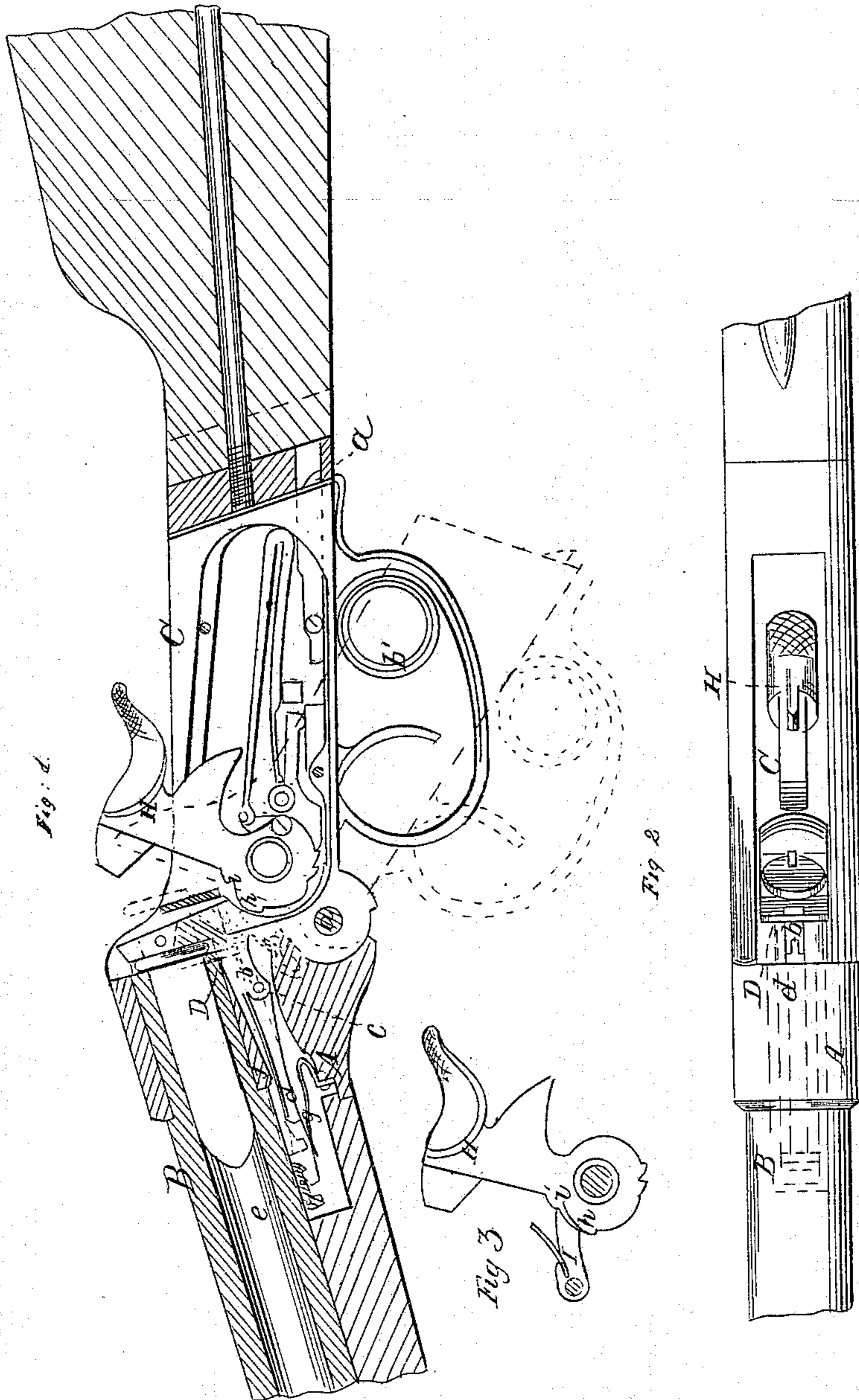


C. C. COLEMAN.
Breech-loading Fire-arm.

No. 59,500.

Patented Nov. 6, 1866.



Witnesses.
Jas. A. Service
Wm. Dean Overell

Inventor.
C. C. Coleman
per Wm. D. Overell
Atty.

UNITED STATES PATENT OFFICE.

E. B. STODDARD, OF WORCESTER, MASSACHUSETTS, ADMINISTRATOR OF
C. C. COLEMAN, DECEASED.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. 59,500, dated November 6, 1866.

To all whom it may concern:

Be it known that CHARLES C. COLEMAN, late of Worcester, in the county of Worcester and State of Massachusetts, deceased, did during his life-time, invent a new and useful Improvement in Breech-Loading Fire-Arms; and I, E. B. STODDARD, administrator of the estate of said COLEMAN, 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 represents a longitudinal vertical section of this invention, showing the breech closed in black and open in red outlines. Fig. 2 is a plan or top view of the same. Fig. 3 is a detached elevation of the hammer and pusher.

Similar letters of reference indicate like parts.

This invention consists in connecting the dog which serves to operate the cartridge-ejector with the swinging breech-block by means of a link or arm extending from said breech-block, in combination with a cam at the under surface of the barrel, in such a manner that when the breech-block is thrown open the cartridge-ejector is set free and allowed to move in with the new cartridge to be inserted in the barrel.

It consists, further, in the arrangement of a pusher or other equivalent device, in combination with the frame of the fire-arm and with the swinging breech-block and hammer, in such a manner that in closing the breech-block the hammer is automatically thrown at half-cock, and a premature discharge of the piece is avoided, or at least much less likely to take place than with other fire-arms.

It consists, finally, in the arrangement of a swell and suitable notch on the hammer, in combination with the pusher and with the hinged breech-block, in such a manner that when the breech-block is closed the point of the pusher is not allowed to interfere with the usual motion of the hammer; but when the breech-block is being closed while the hammer is down the point of the pusher drops in-

to the notch of the hammer and throws the same at half-cock, thus preventing the premature discharge of the piece without requiring any further attention.

A represents the stock or frame of a rifle or other fire-arm, to which the barrel B is secured, in the usual manner, by a screw-thread or any other suitable means. C is the breech-block, which is connected to the frame A by a screw-pivot, *a*, that passes through its lower front corner, and screws into the frame in such a manner that said breech-block is free to swing up to the position shown in black outlines in Fig. 1, or to swing down to the position shown in red outlines in the same figure.

A spring-bolt, *a'*, projecting from the rear edge of the breech-block and operated by a ring, *b'*, serves to lock the breech-block when the same is pushed up. From the front edge of the breech-block extends an arm, *b*, which connects by a pivot, *c*, with the dog *d*, by means of which the cartridge-ejector D is thrown out whenever the breech-block is depressed.

The cartridge-ejector is a semicircular fork secured to two rods, which slide back and forth under the barrel, said fork being so arranged that when it is pushed up to the barrel it fits into a recess at the rear edge of the same and forms a continuation of the barrel. If a cartridge is inserted in the barrel, its head or flange is outside the ejector, so that by moving the breech-block down to the position shown in red outlines the cartridge (or its shell, if the piece has been discharged) is drawn out. After the empty shell has been removed, and if a new cartridge is to be introduced, it is desirable to have the cartridge-ejector so arranged that the same will move in with the cartridge. This purpose is effected by the combination of the arm *b* and dog *d* with the hook *e* on the under surface of the ejector, and with a cam, *f*, secured to the under surface of the barrel, in such a manner that when the breech-block is clear down and the ejector has reached its extreme position, the dog *d*, by coming in contact with the cam *f*, is depressed and caused to release the hook *e*, leaving the ejector free to move in with the cartridge. When the breech-block is raised a

spring, *g*, forces the dog up and causes the same to catch behind the hook *e*, ready for the next operation.

The hammer, *H*, together with the entire mechanism of the lock, is attached to the breech-block *C*, and a pusher, *I*, is pivoted to the frame *A* in such a position that when the breech-block is depressed while the hammer is down, and then again raised, by the action of said pusher the hammer is thrown automatically at half-cock, and a premature discharge of the piece is avoided.

In order to prevent the pusher from interfering with the ordinary motions of the hammer when the breech-block is closed, said hammer is provided with a swell, *h*, which is so formed that it prevents the point of the pusher from dropping into the notch *i* as long as the breech-block is closed; but when the breech-block is opened while the hammer is down, and then raised, the point of the pusher drops into the notch *i* and throws the hammer at half-cock.

This motion of the hammer is perfectly automatic, and takes place while the breech-block is being locked. All danger of a premature discharge of the piece is thereby avoided, even if the person handling the same should neglect to put the hammer at half-cock previous to inserting a fresh cartridge.

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

1. The pusher *I*, or its equivalent, arranged in combination with the hammer and swinging breech-block, substantially as and for the purpose set forth.

2. The swell *h* on the hammer, in combination with the pusher *I* and swinging breech-block *C*, constructed and operating substantially as and for the purpose specified.

E. B. STODDARD.

Witnesses:

CLARENDON HARRIS,
H. W. WHEELER.