

A. B. MAGUIRE.
Breech-Loading Fire-Arms.

No. 155,324.

Patented Sept. 22, 1874.

Fig:1.

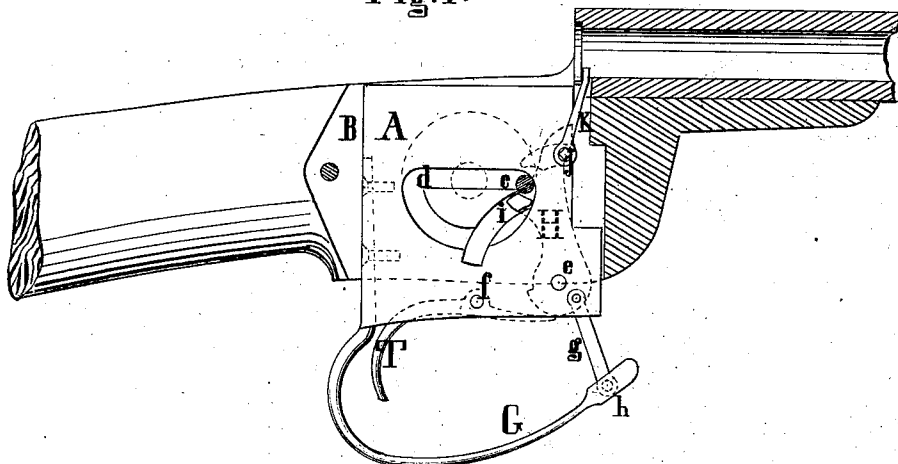


Fig.2.

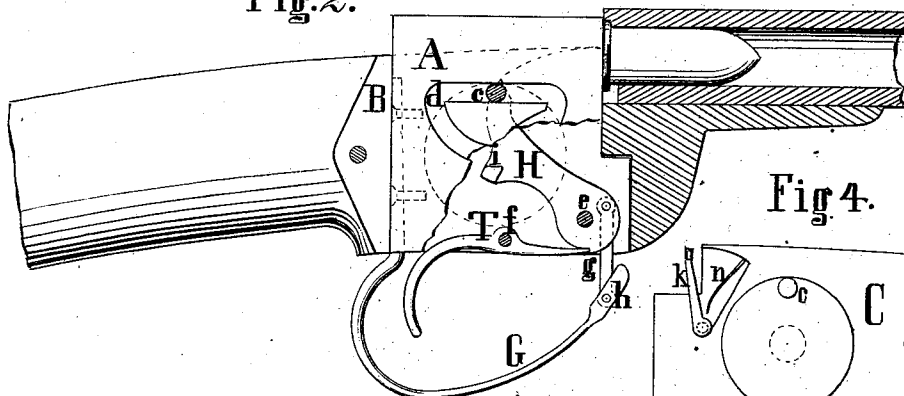


Fig.4.

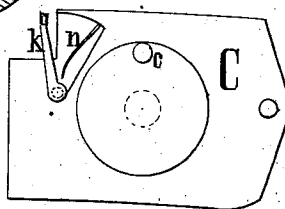
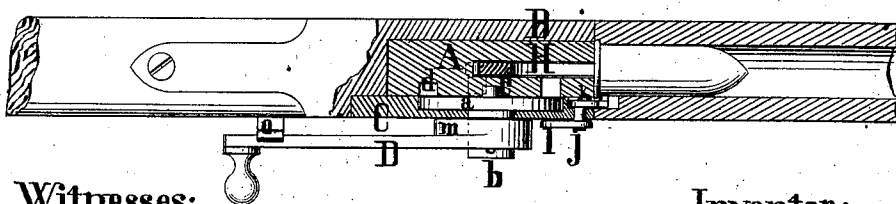


Fig:3.



Witnesses:

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UNITED STATES PATENT OFFICE.

ALBERT B. MAGUIRE, OF PORT HOPE, CANADA.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **155,324**, dated September 22, 1874; application filed March 13, 1874.

To all whom it may concern:

Be it known that I, ALBERT B. MAGUIRE, of Port Hope, Ontario, Canada, have invented a new and useful Improvement in Breech-Loading Fire-Arms; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a sectional side view of this invention when the breech-block is depressed and the chamber of the barrel is open for the reception of a fresh charge. Fig. 2 is a similar view of the same when the arm is ready for fire. Fig. 3 is a horizontal section of the same. Fig. 4 is a detached view of the shell-extractor and the disk which operates the breech-block and the hammer.

Similar letters indicate corresponding parts.

This invention consists in the arrangement of a rotary disk in the side of the breech, said disk being provided with an eccentric pin, which engages with a cam-groove formed in the breech-block, which slides up and down in the breech, and which contains the hammer and the trigger, in such a manner that, by revolving said disk, the breech-block is first depressed to open the barrel for the reception of a cartridge, then the hammer is cocked, and the breech-block is raised to its closing position, rendering the arm ready for fire. The lever, which serves to turn the disk, also acts on the shell-extractor, the fulcrum-pin of which has its bearing in the face-plate of the breech. The trigger-guard is attached to the breech-block, and also serves as the mainspring.

In the drawing, the letter A designates the breech-block, which slides up and down in the breech B, said breech being closed by the face-plate C after the breech-block has been introduced. Said face-plate is provided on its inner surface with a circular recess, to receive a disk, *a*, Figs. 3 and 4, from the outer surface of which projects a central pin, *b*, which extends through the face-plate C, and on which is mounted a lever, D, by means of which said disk can be turned. From the inner surface of the disk *a* projects an eccentric pin, *c*, which engages with a cam-groove, *d*, Figs. 1 and 2,

in the face of the breech-block, said cam-groove being so formed that, when the disk *a* is turned, the breech-block receives a reciprocating motion in the breech, whereby the chamber in the barrel is opened, as shown in Fig. 1, and then closed, as in Fig. 2. In the breech-block is formed a recess for the reception of the hammer H and of the trigger T, the fulcrum of the hammer being on a pin, *e*, and that of the trigger on a pin, *f*, Fig. 2. The hammer connects, by a link, *g*, with the trigger-guard G, which is firmly secured to the breech-block, and which also acts as the mainspring. The loose end of said trigger-guard is flattened, to form a finger-piece, *h*, which serves to let the hammer down easy, if it is desired to place the arm at rest; and then, by pressing on said finger-piece, the hammer can be cocked without moving the breech-block. From the head of the hammer projects a lip, *i*, which extends into the cam-groove *d* of the breech-block, so that when the disk *a* is turned the eccentric pin *c*, as the same sweeps through the cam-groove, will strike the lip *i*, and the hammer is cocked, while the breech-block is depressed. In this position the hammer is retained by the trigger T, the breech-block being raised as the revolving motion of the disk *a* continues, and as soon as the breech-block has been raised the arm is ready for fire.

When the breech-block has been depressed to the position shown in Fig. 1 the chamber of the barrel is open for the reception of a cartridge.

The face-plate C of the breech forms the bearing for a pin, *j*, on the inner end of which is mounted the shell-extractor *k*, Fig. 4, to which, on its outer end, is secured a tappet-arm, *l*, Fig. 3; and the hub of the lever D is provided with a nose, *m*, which, whenever said lever is turned round, acts on the tappet-arm *l*, whereby the shell-extractor is moved backward, and the shell contained in the barrel is thrown out. This motion takes place at the time the breech-block has reached the position shown in Fig. 1. As soon as the nose *m* has passed the tappet-arm *l*, the shell-extractor is carried back to its original position by a spring, *n*, Fig. 4, and the chamber of the barrel is open for the reception of a fresh cartridge. Then the motion of the lever D is continued

until it reaches the position shown in Fig. 3, when it is caught by a spring-catch, *o*, of any suitable construction, leaving the arm in a condition ready for fire.

If it is desired to place the hammer at rest, the palm of the hand is pressed against the finger-piece of the trigger-guard, and by pressing on the trigger the hammer is released, and it is let down easy.

When it is desired to cock the hammer without moving the lever *D*, this object is accomplished by a smart, quick pressure on the finger-piece of the trigger-guard, whereby the hammer is carried back until it is caught by the trigger, in position ready for fire.

By this arrangement an arm is obtained which can be fired very rapidly, a single revolution of the lever *D* serving to open the breech-block, to throw out the empty shell, to cock the hammer, and to carry back the breech-block to its closing position after a fresh charge

has been introduced into the chamber of the barrel.

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

1. The combination of a disk, *a*, eccentric pin *c*, and suitable operating means with the breech-block *A*, provided with a slot, whereby the breech-block is operated to open and close the breech, substantially as described.

2. The combination of a lever, *D*, eccentric *m*, and extractor *k* with a disk, *a*, carrying a pin, *c*, and the breech-block *A*, substantially as described, whereby the breech-block is opened and the shell extracted by the movement of the lever *D*, as set forth.

This specification signed by me this 11th day of February, 1874.

A. B. MAGUIRE.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.