E. G. DORCHESTER.

BREECH-LOADING FIRE-ARMS.

No. 183,255. Patented Oct. 17, 1876.

fig 1.

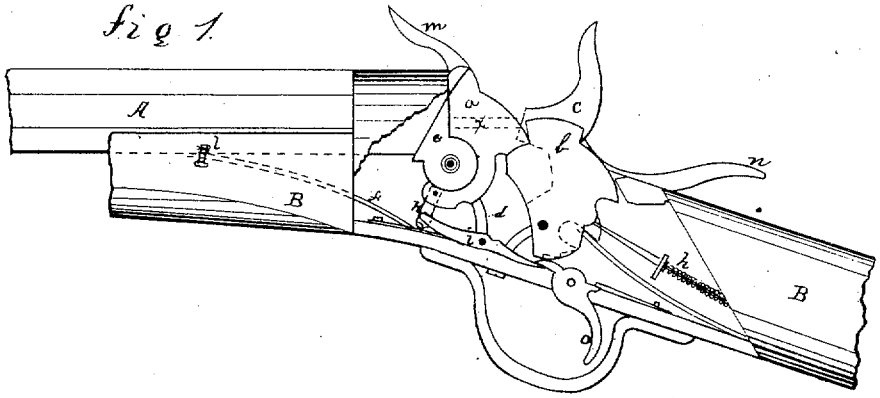


fig 2

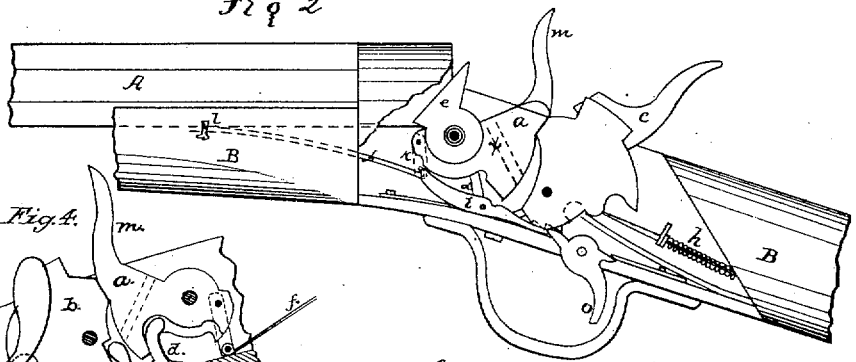


Fig. 4.

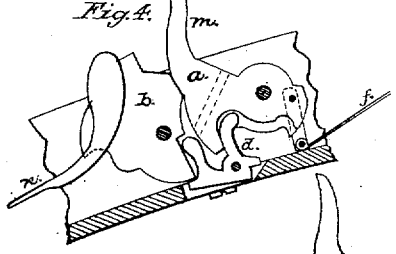
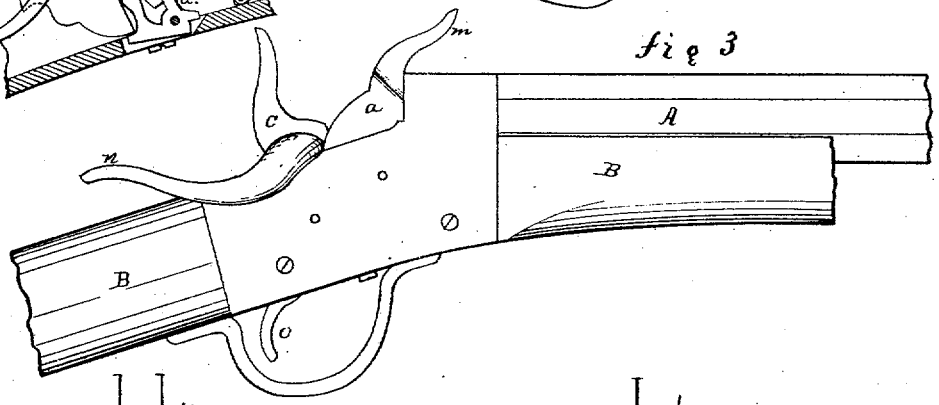


fig 3



Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD G. DORCHESTER, OF SIOUX CITY, IOWA.

IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

Specification forming part of Letters Patent No. **183,255**, dated October 17, 1876; application filed June 3, 1876.

To all whom it may concern:

Be it known that I, E. G. DORCHESTER, of Sioux City, in the county of Woodbury and State of Iowa, have invented a new and useful Improvement in Breech-Loading Guns; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

My invention relates to an improvement in breech-loading fire-arms; and consists in the combination of the several parts hereinafter described, operating with relation to each other in such manner that the cartridge-shell is extracted, cartridge inserted, driven home, and fired by three movements—viz., pressing upon the lever by the breech-support, forward movement of the breech-block, and pulling of the trigger, the two first movements being effected with the thumb, and the latter with the index-finger of the gunner.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification, Figure 1 is a side view, partly in section, representing the position of the parts prior to the loading of the gun. Fig. 2 represents the lever of the breech-support pressed down and the breech-block thrown back for the reception of the cartridge, showing the relative position of the several parts. Fig. 3 represents the position of the breech-block when the cartridge is forced home and the position of the hammer and lever of the breech-support after the gun is fired. Fig. 4 is a detail view, showing position of the connecting-lever between the breech-block and support when the breech is thrown open.

In the drawings, A is the gun-barrel; B, the stock. *a* is the breech-block, having a thumb-piece, *m*; *b*, the breech-support, provided with an operating-lever, *n*; *c*, the hammer; *d*, the connecting-lever between the breech-block and breech-support; *e*, the shell-extractor, against which the flange of the shell is forced by the forward movement of the breech-block *a*. *h* is the spring and piston for keeping and returning the breech-support to its place; *i*, the trigger-bolt; *k*, the bridle, connected to the spring *f* and breech-block *a*, said spring *f* being held in position by the set-screw *l*. *o* represents the trigger.

The construction of the several parts hereinbefore described, and the pivoting of them, and the relation that they bear to each other, will readily be understood by the skillful gunsmith by reference to the accompanying drawings and from the foregoing description. I will therefore proceed to describe the operation of working the gun.

The breech-support *b*, operated by the depression of the lever *n* connected thereto, is drawn back as far as it will go, which movement, operating upon one arm of the connecting-lever *d*, pivoted in the trigger-plate, causes the opposite arm of the lever to draw back the breech-block *a* by means of said arm working in a curvilinear groove in the side of said breech-block, as shown in Fig. 4. The spring *f*, attached to the front lower end of the breech-block, assists the arm of the connecting-lever *d* in throwing the breech-block forcibly back, thereby imparting a sudden motion to the extractor *e* for throwing the empty shell clear of the gun. In drawing back the breech-support *b*, the hammer *c* is carried with it until the trigger catches in the notch on its lower rear end, leaving it ready for firing the charge. The gunner then places in the cartridge-chamber a fresh cartridge, and with his thumb presses against the piece *m*, which causes the breech-block *a* to force the cartridge into the cartridge-chamber. The breech-support *b*, actuated by the spring *h*, and by the depression of the connecting-lever *d*, through the forward movement of the breech-block *a*, then flies suddenly forward, striking the breech-block *a*, forcing the cartridge thoroughly home.

The gunner at will, with his index-finger, pulls on the trigger *o*, which releases the hammer *c*, which, flying forward, strikes the end of the firing-pin *x*, driving it against the percussion end of the cartridge, thereby discharging it.

Having thus described my improvement,

what I claim as of my invention, and desire to secure by Letters Patent, is—

In a breech-loading fire-arm, the combination of the breech-block *a*, breech-support *b*, having the connecting-lever *d* arranged between the two, hammer *c*, springs *h* and *l*, and cartridge-extractor *e*, the several parts being arranged in relation to each other, substantially as and for the purpose described.

EDWARD G. DORCHESTER.

Witnesses:

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