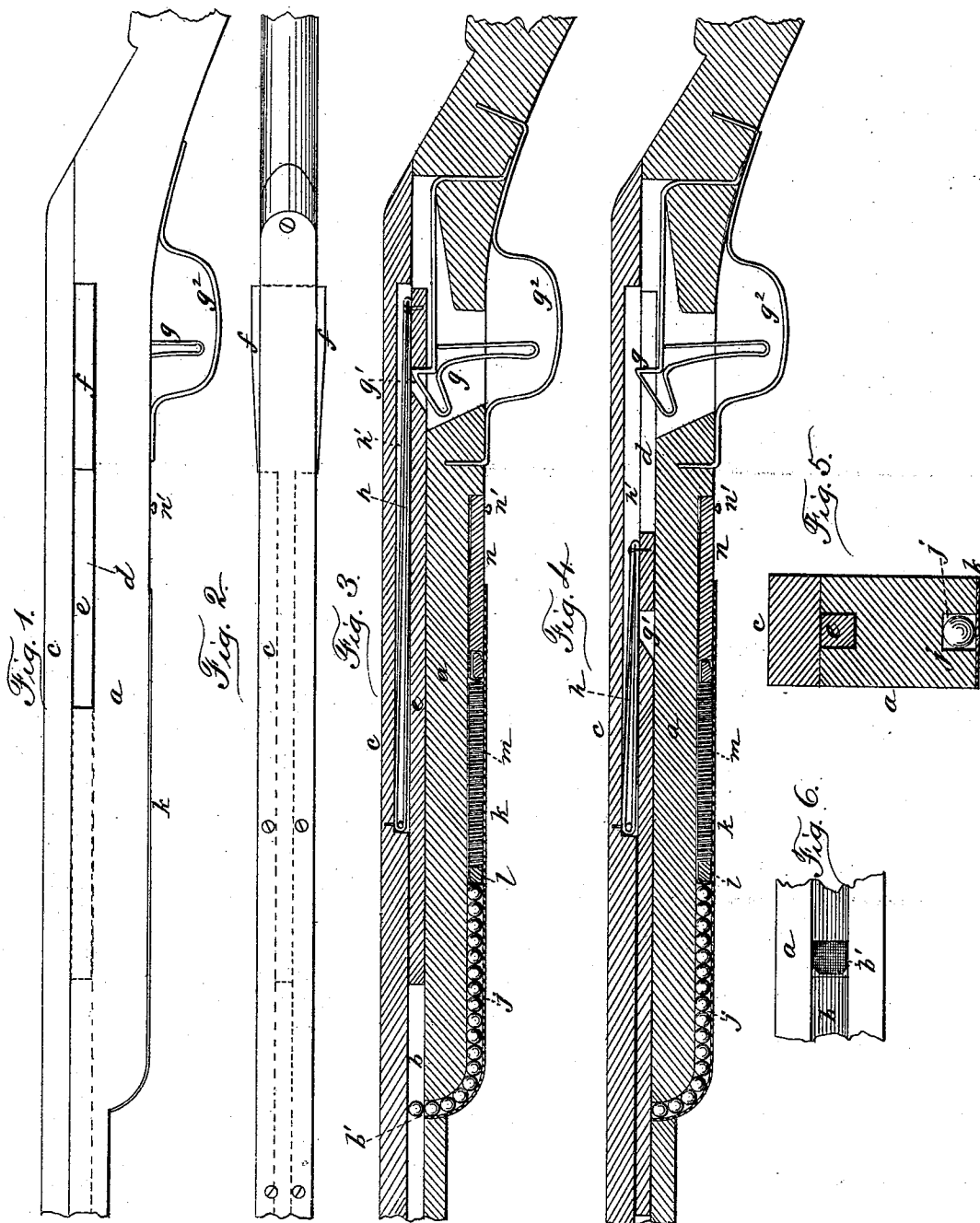


(No Model.)

A. L. RICH.  
MAGAZINE SPRING GUN.

No. 253,628.

Patented Feb. 14, 1882.



Witnesses:  
Edmond Broadbag  
Philip F. Larnier.

Inventor:  
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Johnson & Johnson  
Atty

# UNITED STATES PATENT OFFICE.

ABRAHAM LINCOLN RICH, OF WATER CURE, PENNSYLVANIA.

## MAGAZINE SPRING-GUN.

SPECIFICATION forming part of Letters Patent No. 253,628, dated February 14, 1882.

Application filed October 11, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, ABRAHAM LINCOLN RICH, a citizen of the United States, residing at Water Cure, in the county of Beaver and State of Pennsylvania, have invented new and useful Improvements in Magazine Spring-Guns, of which the following is a specification.

My invention relates to improvements in guns having a magazine feed and adapted by spring force for target practice. A groove in the upper side of the stock and a covering-plate therefor form the bore of the gun, while covered by a bottom strip of sheet metal, forms the magazine, and contains the spring-follower that feeds the projectiles therefrom into the bore. A driver is arranged within an open guideway formed by the top covering-plate and a recessed part on the upper side of the stock, and is operated by a rubber spring to eject the bullet. A spring-trigger serves to hold the driver when retracted, and the head of the latter forms side hand-holds, by which it is retracted. The top covering-plate has a groove on its under side to receive the rubber spring which is attached to said covering-plate and to the hand-hold part of the driver. The ends of the open guideway in the upper side of the stock form stops to limit the withdrawal and the projection of the shouldered driver. A portion of the bottom magazine-forming groove is uncovered to allow the magazine to be charged, and for the insertion and withdrawal of the feeding-spring.

My improvements are directed to the production of a target-practice gun in which the bore and the magazine are formed within and upon the top and the bottom sides of the stock, and in which the hand-hold of the driver is adapted to be grasped and withdrawn by the left hand while also holding the gun in position to be discharged.

Referring to the accompanying drawings, Figure 1 represents a side view of my improved magazine spring-gun; Fig. 2, a top view of the same; Fig. 3, a longitudinal section, the driver being shown as retracted; Fig. 4, a similar section, the driver being shown as projected; Fig. 5, a cross-section showing the bore

and the magazine formed in the top and bottom sides of the stock by parallel grooves, and Fig. 6 the bore feed-aperture.

The gun-stock *a* is preferably of wood, and has the bore *b* formed by a groove in its upper surface, and a top covering-plate, *c*, screwed upon the stock. The bore terminates at the front end of the open guideway *d*, formed by a recess in the stock, the bottom of which recess is on a level preferably with the bottom of the bore, and the covering-plate extends over and forms the top of said guideway.

A driver, *e*, is fitted within the bore, and has a shouldered hand-hold part, *f*, extending within the open guideway. The width of this hand-hold part of the driver is greater than the width of the stock, so as to project at the opposite sides of the stock to be grasped by the thumb and fingers of the hand in holding the gun in position to eject the bullet, and by which the driver is retracted.

A spring-trigger, *g*, is secured in a slot in the stock, so as to project within the open guideway, and the hand-hold part *f* of the driver has a slot, *g'*, adapted to receive the trigger and hold the driver when retracted, the trigger being so formed as to be depressed by the hand-hold as it is pulled back and to project within a guard, *g''*, at the under side of the stock.

The projecting-spring *h* is secured to the upper side of the hand-hold and to the under side of the top covering-plate, *c*, and lies within a groove, *h'*, formed on the under side of the latter, so that the spring is concealed.

A groove, *j*, in the under side of the stock, parallel with the bore, is covered by a sheet-metal bottom, *k*, and forms the magazine for the bullets, and communicates with the bore by an aperture, *b'*, through which the bullets are fed one by one by means of a follower, *l*, attached to a coil-spring, *m*, placed within the magazine, and held therein by a piece of harness-leather, *n*, or other suitable flexible material, fitted within a part of the groove *j*, which is uncovered, and to which said spring is also attached. This uncovered part of the magazine-groove *j* forms an opening, through which the magazine is charged, and the leather *n* closes this opening, when the spring is inserted in place, with its attached follower be-

hind the bullets. The leather *n* is bent to insert it under the metal cover *k*, and is seated flatwise within and against the end of the groove, so that it cannot be forced out by the pressure of the spring. and it is bent against the end of the bottom plate to withdraw it by a thumb-pin, *n'*.

The follower is of leather or other suitable material, and when the magazine is filled the spring is compressed, with the follower pressing against the bullets, so as to force one into the bore of the gun each time the driver is drawn back to uncover the exit-opening of the magazine.

The magazine connects with the bore by a curve, so as to direct the bullet into the bore in a line at right angles thereto, so that the pressure upon the line of bullets within the magazine will hold the bullet in the bore against the top thereof, so that only one is fed therein at a time each time the driver is retracted. In the normal position of the driver it covers the feed-aperture and forms a cut-off to the feed of the bullets.

The ends of the open guideway form stops to limit the projection and the retraction of the shouldered driver, in the latter position of which it uncovers the feed-aperture, and the bullet is held in the bore in position to be ejected.

The gun may be of any suitable length, and the charge for the magazine is regulated according to its length and the force exerted by the spring.

The feed-aperture allows of the free exit of the bullet, but is formed so as to prevent the entrance of the follower into the bore.

I claim—

1. In a spring-gun, the stock *a*, having its bore *b* formed by a top groove and the covering-plate *c*, and a magazine formed by a bottom parallel groove, *j*, and a bottom cover, *k*, the latter being of a less length than said bottom groove, *j*, in combination with the driver, its projecting-spring *m*, the spring-trigger *g*, and the spring-feeder, all constructed and arranged substantially as described.

2. The magazine-forming groove in the under side of the stock, having a length greater than that of its bottom cover, *k*, in combination with a spring-feeder secured within said groove by the leather strip *n*, provided with the thumb-pin *n'*, substantially as described, for the purpose specified.

3. The target-practice gun herein described, consisting of a stock having parallel grooves formed in its top and bottom sides, and covered to form respectively the bore and a magazine, the shouldered driver, its inclosed spring, the spring-trigger, and the spring-feeder, the latter secured by the leather strip seated within the uncovered part of the bottom groove, and all constructed and combined as shown and described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ABRAHAM LINCOLN RICH.

Witnesses:

L. R. MOORE,  
CHAS. B. HURST.