

A. Hall,

Spring Gun,

N<sup>o</sup> 47,815,

Patented May 23, 1865.

Fig. 1.

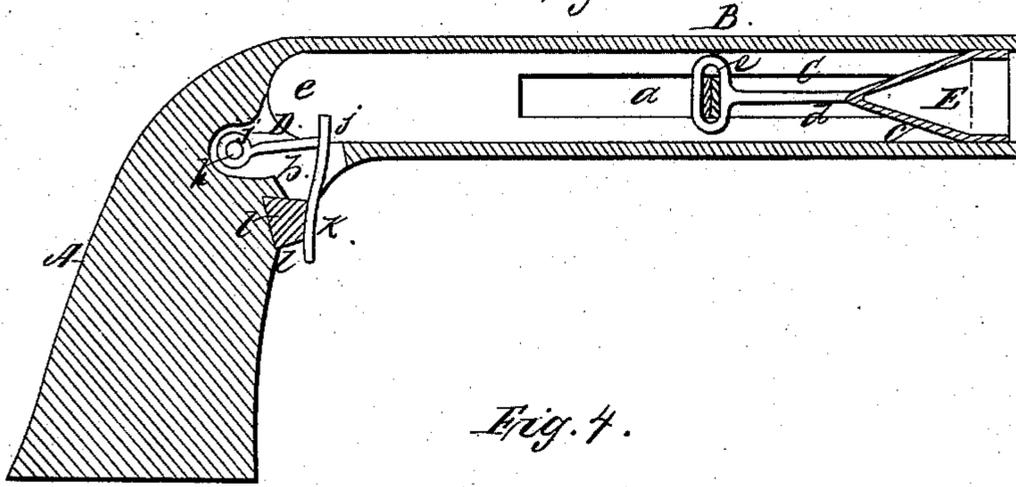


Fig. 4.

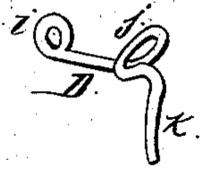


Fig. 2.

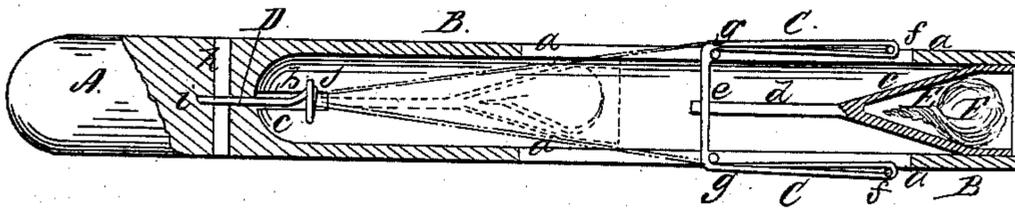
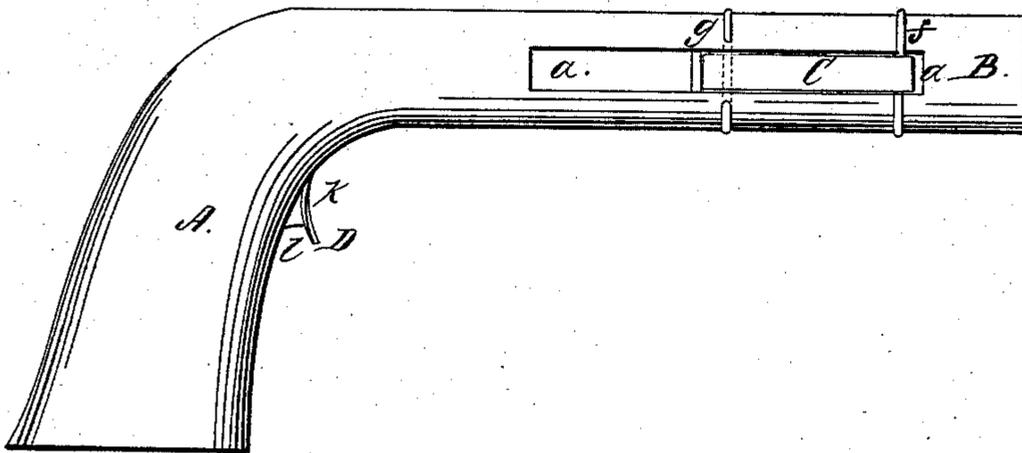


Fig. 3.



Witnesses:  
G. W. Reed  
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Inventor:  
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# UNITED STATES PATENT OFFICE.

ALBERT HALL, OF NEW YORK, N. Y.

## TOY SPRING-GUN.

Specification forming part of Letters Patent No. 47,815, dated May 23, 1865.

*To all whom it may concern:*

Be it known that I, ALBERT HALL, of the city, county, and State of New York, have invented a new and useful Improvement in Spring Toy Guns; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a central longitudinal vertical section of a pistol constructed according to my invention. Fig. 2 is a horizontal section of the same. Fig. 3 is a side view of the same. Fig. 4 is a perspective view of the trigger.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in a certain novel and cheap construction of a spring toy gun or pistol for throwing torpedoes or other missiles, whereby it is made to more nearly resemble a fire-arm in its appearance and action, and to throw the torpedoes or missiles more directly than the toy guns or pistols of the same kind heretofore invented.

To enable others to construct spring toy guns according to my invention, I will proceed to describe it with reference to the drawings.

A represents the stock, and B the barrel, made of one or more pieces of wood or metal. The barrel is slotted on each side, as shown at *a a*, for the passage of the india-rubber throwing-spring C, and the stock has provided in it a mortise, as shown at *b*, for the reception of the trigger D, and the bore *c* of the barrel extends as far back as the said mortise.

E is the cup or receiver for containing the torpedo, inserted loosely into the bore *c* and capable of sliding very freely backward and forward therein. The front part and mouth of this cup are of cylindrical form for the reception of the body of the torpedo F; and the rear portion is taper for the reception and centering of the tip *m* of the same, and enabling it to be projected with greater accuracy of aim. To the rear end of the said cup there is attached a shank, *d*, at the extremity of which is an eye or loop, *e*, for the reception of the india-rubber throwing-spring C. For greater facility of application and attachment, the throwing-spring C is composed of an india-rubber ring or band, which is passed double

through the two slots *a a* in the sides of the barrel and through the loop *e* on the shank of the cup, and is attached to the front part of the barrel by a ring, *f*, which is clasped tightly around the barrel within a groove in the exterior thereof; and some distance in rear of the ring *f* a ring, *g*, is placed around and partly through the barrel, to serve as a stop to the spring to prevent it from throwing forward the cup E beyond the muzzle of the barrel. Pins inserted through each side of the barrel may be used instead of the rings *f* and *g* to attach and stop the spring. This trigger D is formed of a piece of wire with a round eye, *i*, at one end for the reception of the pin *h*, on which it works, and with a transverse elongated eye, *j*, near the middle of its length, the upper part of the said eye constituting the sear. From the eye *j* it is bent nearly at a right angle to the part between the eyes *i j*, to form the finger-piece *k*. The trigger, thus constructed, is inserted into the mortise *b* of the stock and secured by the pin *h*, inserted into a hole drilled or bored transversely through the stock and through the eye *i*. The finger-piece *k* protrudes from the mortise *b*; and a spring, *l*, composed of a small block of india-rubber, is inserted into or otherwise attached to the stock behind the finger-piece, to press the latter forward and press the sear upward.

The stock and band may be covered with paper or metal foil to cover, inclose, and conceal the slots *a a*, spring C, and rings *f g*.

The operation is as follows: The torpedo or other missile is inserted into the cup E with its tip inward while the cup is in the forward position, (shown in full outline in Fig. 2,) to which it is brought by the spring C when released from the trigger. The cup is then pushed back to the position shown in dotted outline in Fig. 2 by means of a stick or ramrod, the end of which is as large as will permit it to pass into the bore *c*, and too large to slip into the cup and explode the torpedo, and by this means the spring C is stretched, and the lower edge of the eye *e*, attached to the cup passing over the sear *j*, is retained, so that the gun may be said to be cocked. By thus pulling back the finger-piece of the trigger the sear *j* is depressed and the eye liberated, and the spring C suddenly throws forward the

cup in the barrel to the position first mentioned and causes the torpedo or missile to be thrown directly forward from the cup and barrel.

What I claim as my invention, and desire to secure by Letters Patent, is—  
The receiver E, spring C, and trigger D,

constructed and arranged and combined with each other and with the slotted barrel B substantially as herein specified.

A. HALL.

Witnesses:

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G. W. REED.