E. Sterry.

Toy Harpoon Gun.

No. 97,719. Patented Dec. 7, 1869.

Fig: 1.

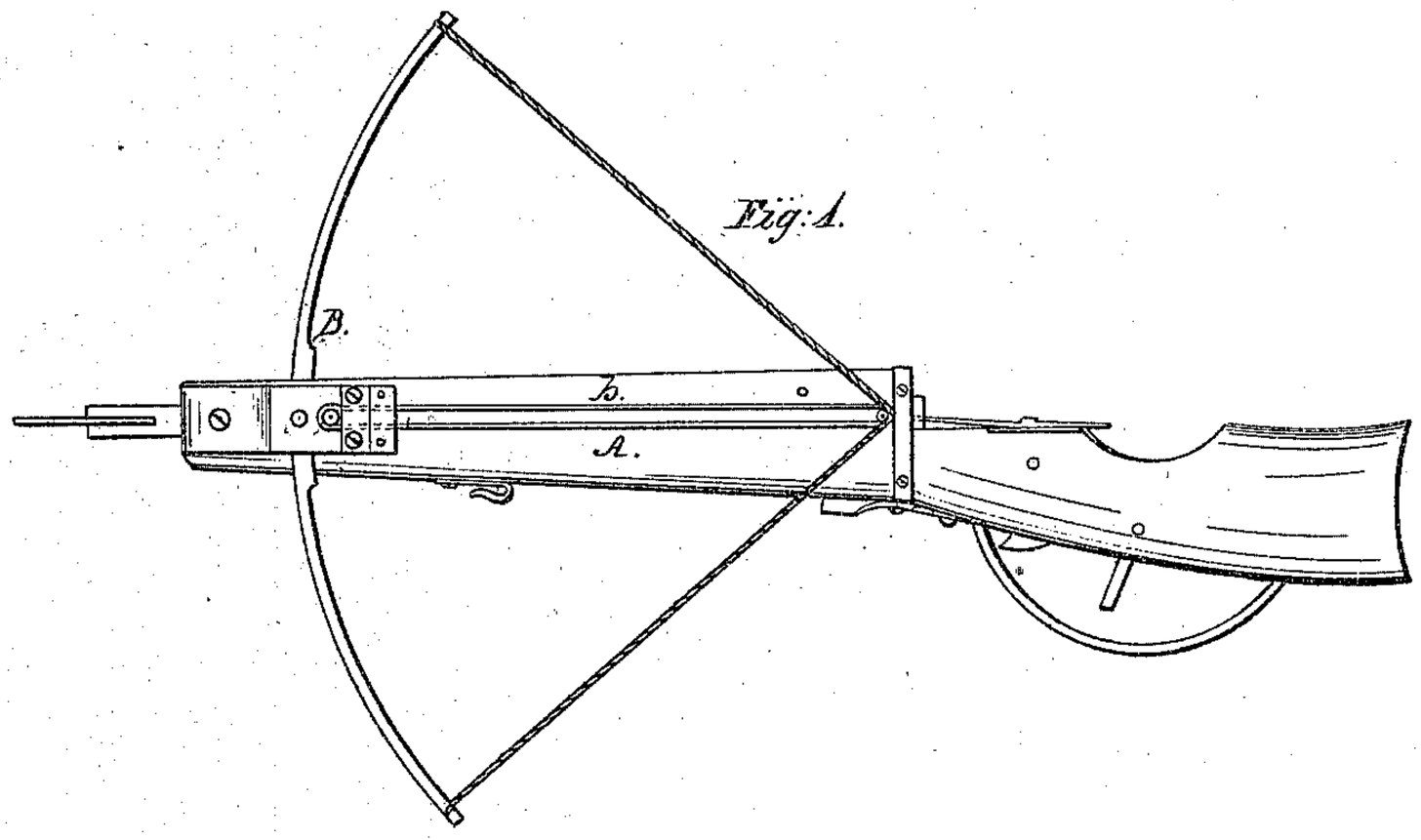


Fig: 2.

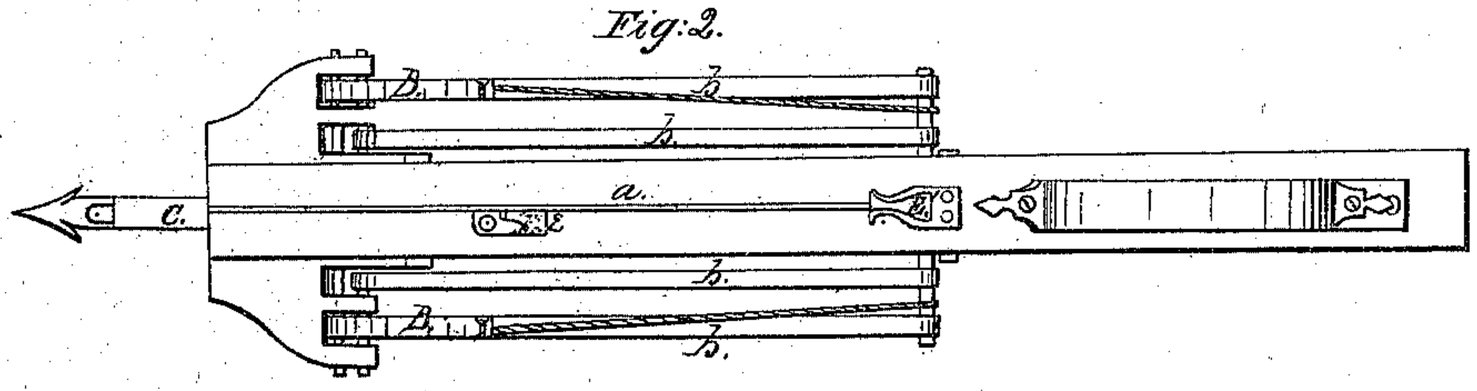
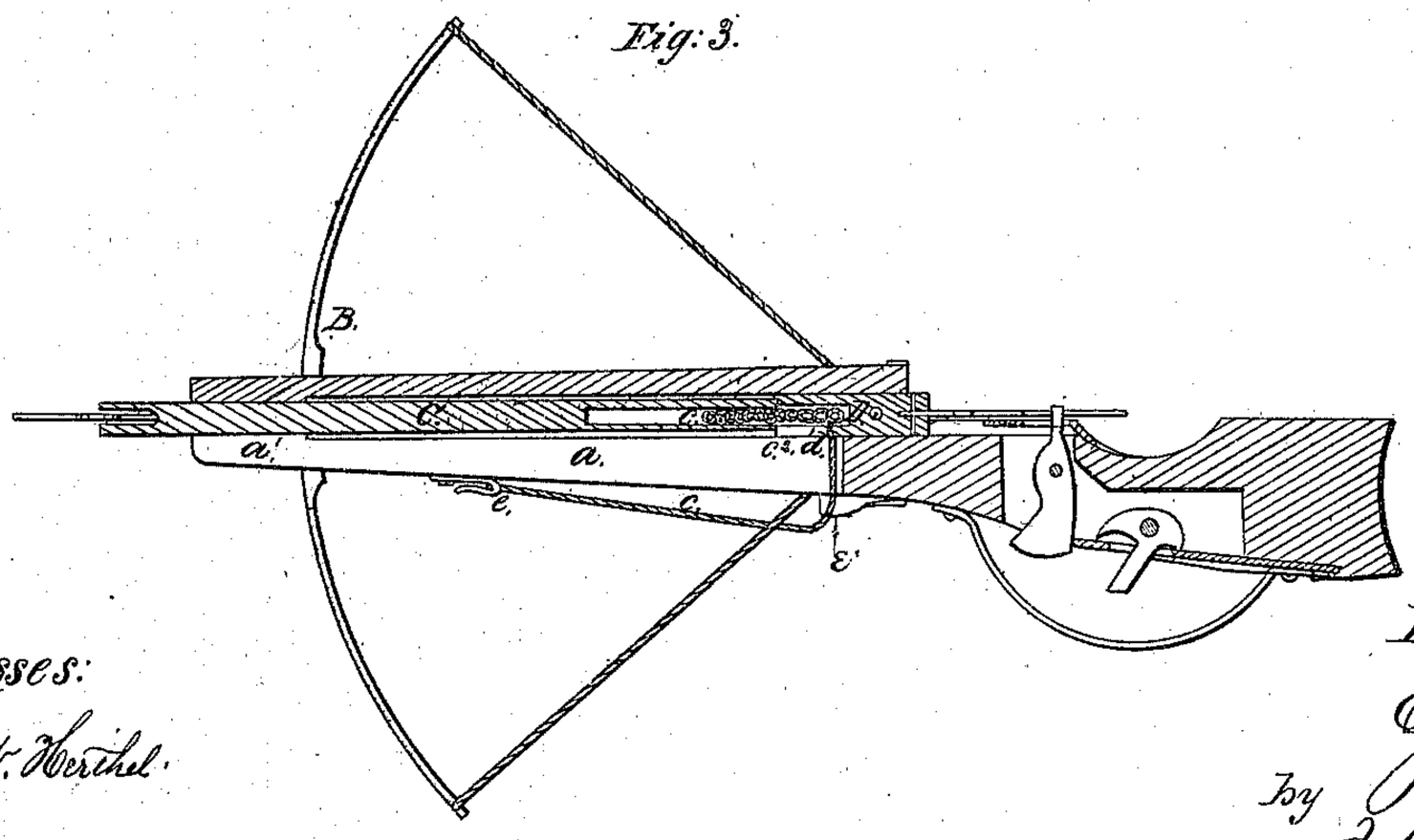


Fig: 3.



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EBENEZER SPERRY, OF ST. LOUIS, MISSOURI.

Letters Patent No. 97,719, *dated December* 7, 1869.

TOY HARPOON-GUN.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, EBENEZER SPERRY, of St. Louis, in the county of St. Louis, and State of Missouri, have made certain new and useful Improvements in Toy and Harpoon-Guns; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to certain improvements in toy and harpoon-guns, patented by me on the 9th day of July, A. D. 1867.

The new improvements relate—

First, to a slotted arrangement of the gun-barrel, whereby the line holding the arrow or shot is allowed to traverse the barrel with the projectile;

Secondly, to a hollow arrow;

Thirdly, to a slotted hollow plunger; and

Fourthly, to a spring-clamp, for holding the line from kinking as the missile leaves the gun.

To enable those skilled in the art to make and use my improved gun, I will proceed to describe its construction and operation,

Figure 1 is a side elevation of one side of the gun.

Figure 2 is a bottom plan of the same.

Figure 3 is a longitudinal sectional elevation of the gun.

The barrel A is similar to that described in patent No. 66,531, except that it has a slot, *a*, in its bottom side, extending from the breech to the muzzle.

Through this slot, the cord which holds the missile to the gun traverses, at each discharge of the piece, the cord being necessary for harpoon-purposes, and also desirable when used as a toy-gun.

In my former patent, elastic springs *b* only were used to draw the plunger forward, but in the present invention I combine the bows B, placed vertically by the sides of the barrel, with the said springs *b*. The number of the bows B may be increased indefinitely.

As is clearly shown in fig. 3, the arrow C is hollow at its base, so as to permit the cord *c* to be coiled therein when the piece is loaded, while a notch in the back end of the arrow, at c^2, permits the said cord to pass downward through the slot *a*, and at the same time allows the base end of the arrow to rest against the plunger or follower.

The plunger or follower D has its front end hollowed, for the reception of the cord *c*, and in combination with this hollowing, a notch, *d*, in its bottom side, permits the cord to pass downward through the slot *a*.

The cord *c* is to be principally coiled in the cavity of the plunger, and is to pay out on the discharge of the piece, so as to retain and bring back the missile, as in harpoon-practice.

In order to keep the line or cord *c* in such a position as to hold the arrow or other missile back to the plunger, when the muzzle of the piece is depressed in aiming, it is passed through a spring-clamp, *e* or *e'*, secured to the bottom of the barrel or stock, as shown best in fig. 2.

The contraction of the front end of the orifice of the barrel, at *a'*, is not only intended to stop the forward motion of the plunger, but also is intended to hold the arrow up in such a position as to cause its axis to coincide with the axis of the gun-barrel.

Having described my invention,

What I claim, is—

1. The barrel A, when provided with a slot, *a*, in its bottom side, for the passage of the cord *c*, as herein described and set forth.

2. The arrow C, when made hollow, for the reception of the cord *c*, and otherwise provided with a notch, at c^2, for the passage of the cord to the slot *a*, as herein described.

3. The hollow plunger or follower D, when slotted at *d*, for the passage of the cord *c* to the slot *a*, as set forth and described.

4. The spring clamp *e* or *e'*, in combination with the barrel A, as described and shown.

EBENEZER SPERRY.

Witnesses:

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