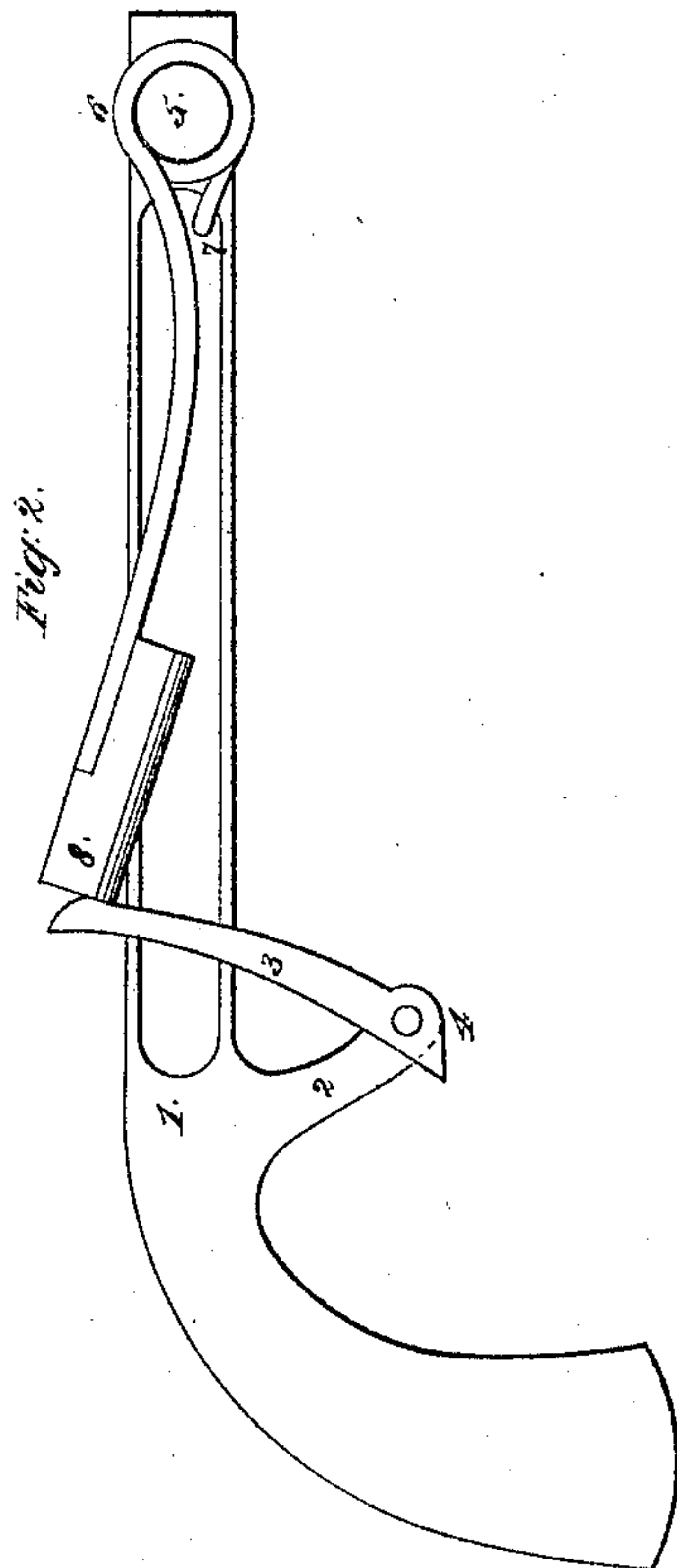
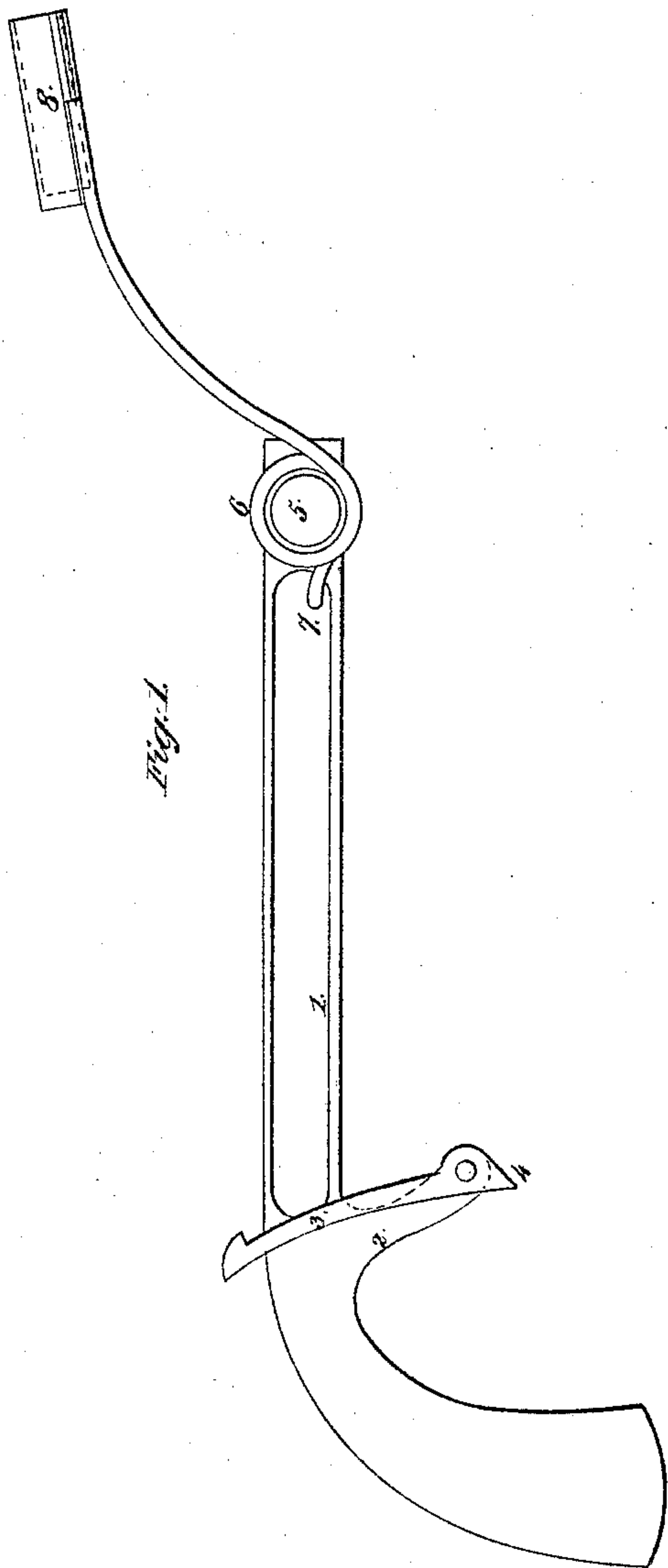


R. Shaler,
Spring Gun,

N^o 36,968.

Patented Nov. 18, 1862.



Witnesses:

L. P. Roberts
Nelson Cizer

Inventor:

Reuben Shaler
By Thos. P. Bous atty

UNITED STATES PATENT OFFICE.

REUBEN SHALER, OF MADISON, CONNECTICUT.

CENTRIFUGAL SPRING GUN.

Specification forming part of Letters Patent No. 36,968, dated November 18, 1862.

To all whom it may concern:

Be it known that I, REUBEN SHALER, of Madison, in the county of New Haven and State of Connecticut, have invented a new and Improved Centrifugal Spring Gun, the construction and operation of which I have described in the following specification and illustrated in its accompanying drawings with sufficient clearness to enable competent and skillful workmen in the arts to which it pertains or is most nearly allied to make and use my invention.

My said invention consists in the combination, in the manner hereinafter described, of a stock or holder, a spring, a barrel, and a catch or trigger, by which combination the barrel is made capable, by means of the centrifugal force given by the spring, of throwing a bullet with augmented force, and the expense of manufacture reduced very materially from what would be necessary to give the same effect in any other construction now known.

This device is intended to be used chiefly as a toy gun and as an instrument of practice for boys in acquiring the art of shooting, though it may, perhaps, be used for some heavier purposes with advantage.

In the accompanying drawings, Figure 1 is a side elevation of my spring-gun, the spring being at rest in its natural position without restraint, as it would appear immediately after discharge. Fig. 2 is also a side elevation, showing the spring brought back and the barrel hooked to the catch or trigger as it would be just before discharge and after the bullet is inserted in the barrel.

1 is the stock or main body of the gun, which may be a piece of cast-iron made in any form which good taste and fancy may dictate for the purpose. A brace, 2, extends down from it near the breech or handle, to support the trigger or catch 3, which is hinged to it at the lower end by the pivot or rivet 4. The stock 1 has a cylindrical projection, 5, near its forward end on the side upon which the spring 6 is placed to support the coils of said spring and regulate its action. The root of the spring is turned down and riveted into the stock at

7. The spring, as I have chosen to construct it, is made of brass or steel wire, and of the form represented in the drawings, being coiled several times—say three or four—around the cylindrical projection 5, the coils being large enough to avoid binding upon the projection 5 when the barrel 8 is brought back into the loading position. This barrel 8 is made cylindrical, and of course hollow, as indicated by the dotted lines in Fig. 1, the end toward the breech in the same figure being closed to retain the ball.

In using the instrument, a bullet is inserted in the barrel, which is then brought back and secured in the position represented in Fig. 2 by hooking the hook or catch on the upper end of the trigger 3 into it. Aim may then be taken by sighting along the stock, and when this is satisfactory a slight pull upon the trigger releases the barrel, which is thrown forward with great velocity by the force of the spring, and when this force is exhausted the ball flies off at a tangent, being guided and directed at the commencement of its flight by the then upper side of the barrel, along which it rolls as it is discharged. As the action of the spring will cease nearly uniformly at the same point, this gives a tolerable accuracy of direction to the ball, while at the same time a very light spring is sufficient to give it very considerable force. By this manner of combining the parts a very cheap and simple spring is made directly available to give a very great force of discharge, and that too without such destructive compression as would be ruinous to any but an expensive article made of the best materials.

Having thus fully described my said invention, I claim—

The combination, in the manner described, of the stock 1, spring 6, barrel 8, and trigger 3, by which the bullet is discharged by centrifugal force, as above set forth.

REUBEN SHALER.

Witnesses:

ISAAC H. HOW,
THOS. P. HOW.