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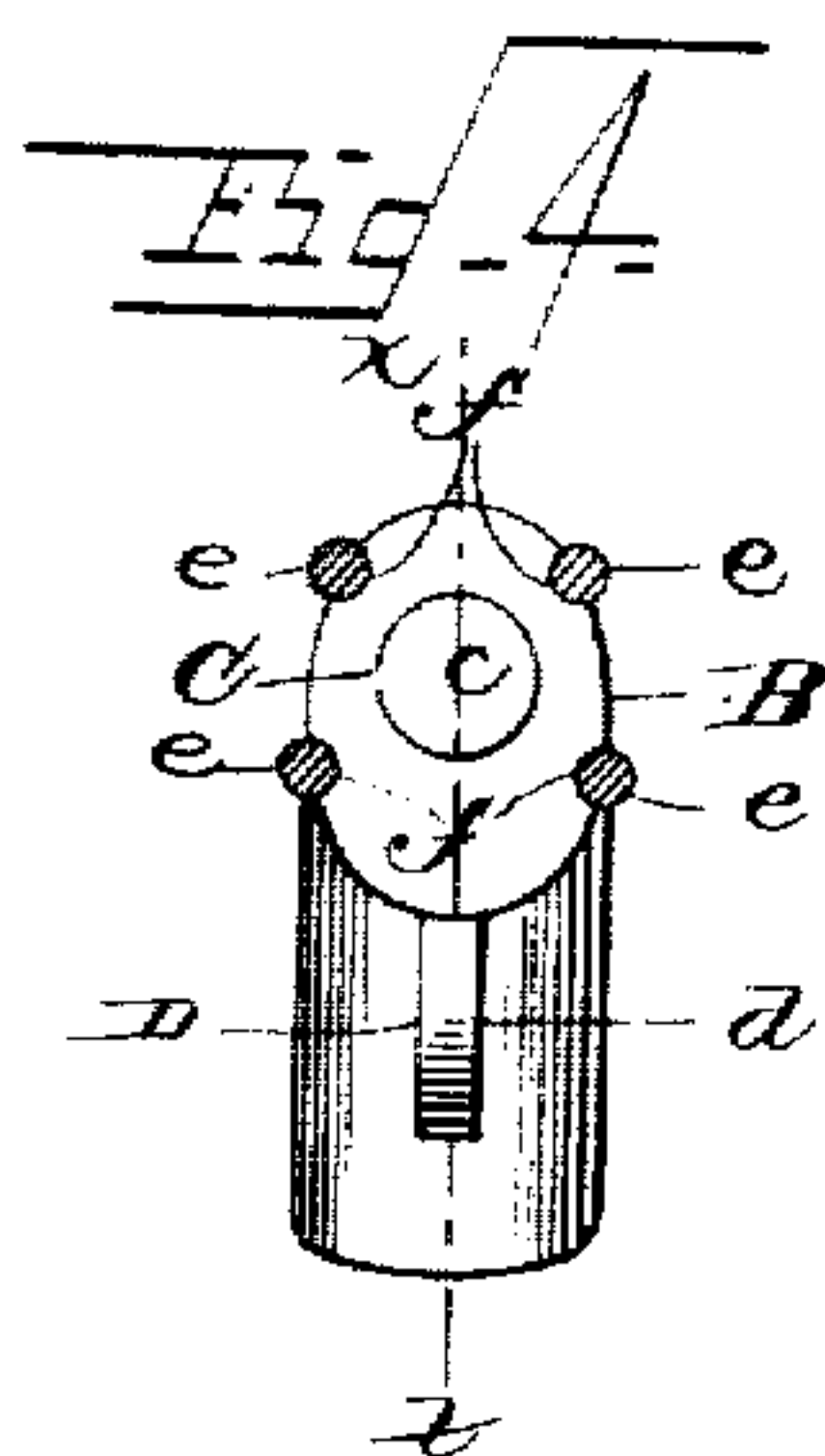
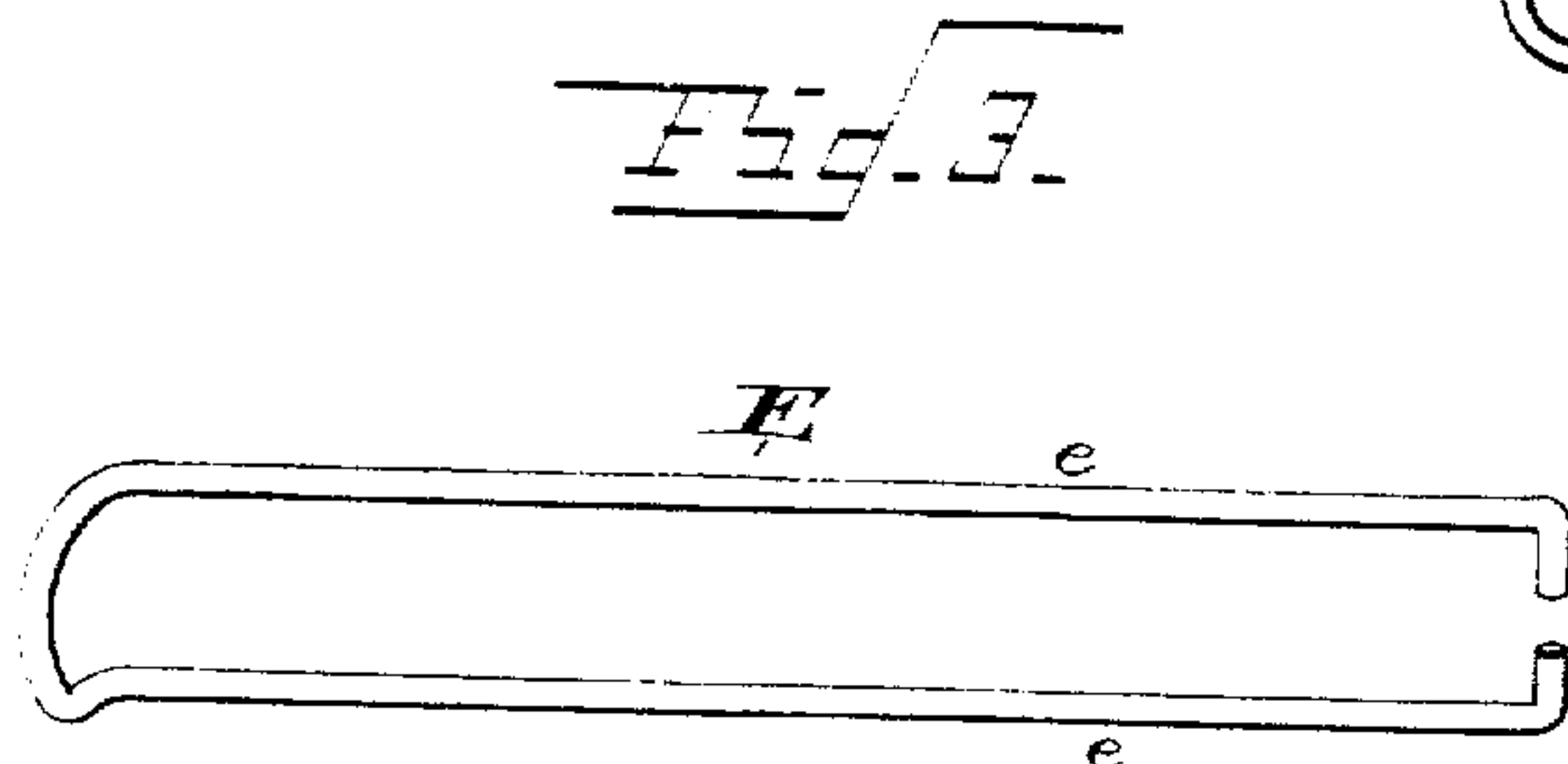
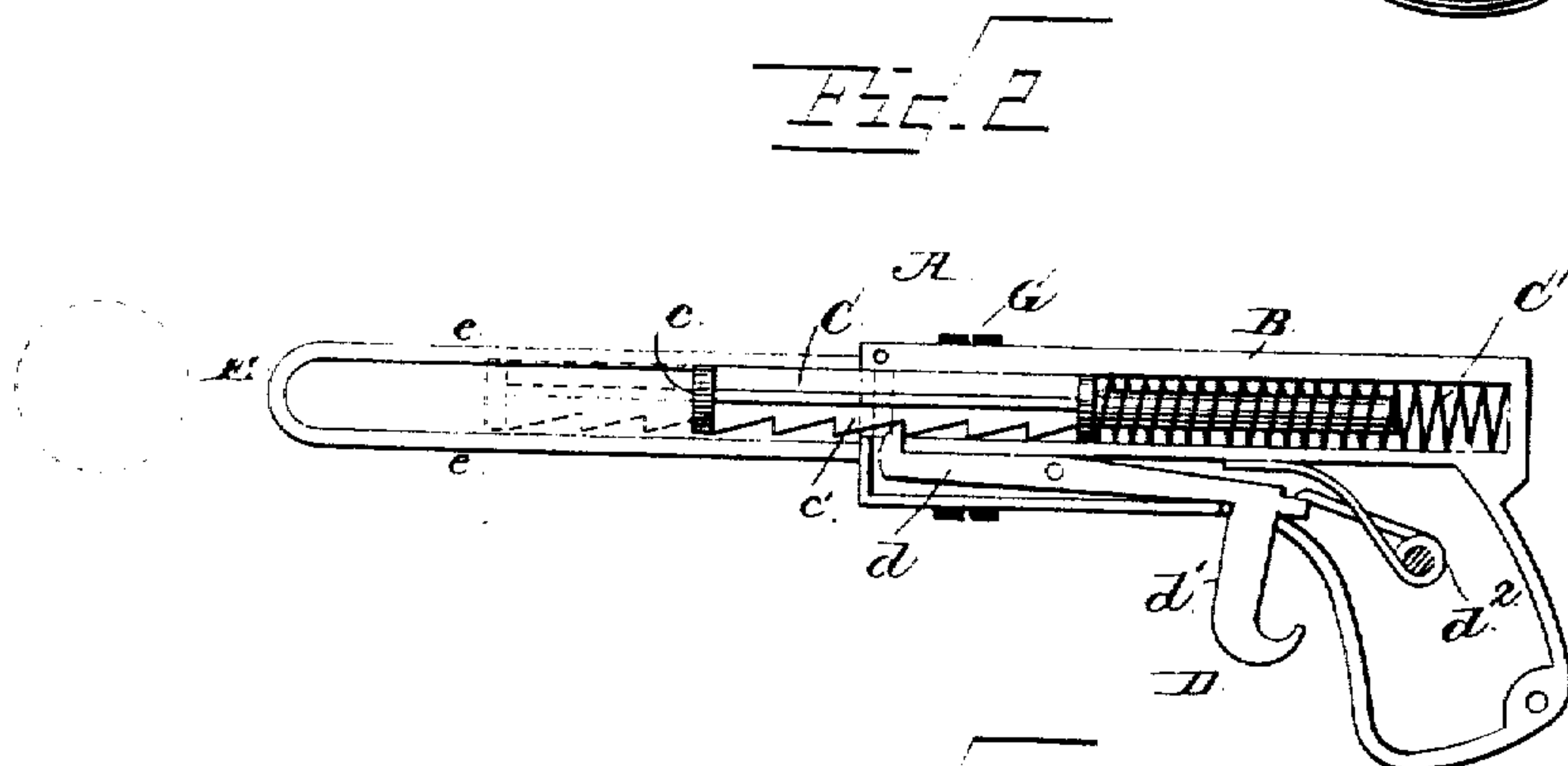
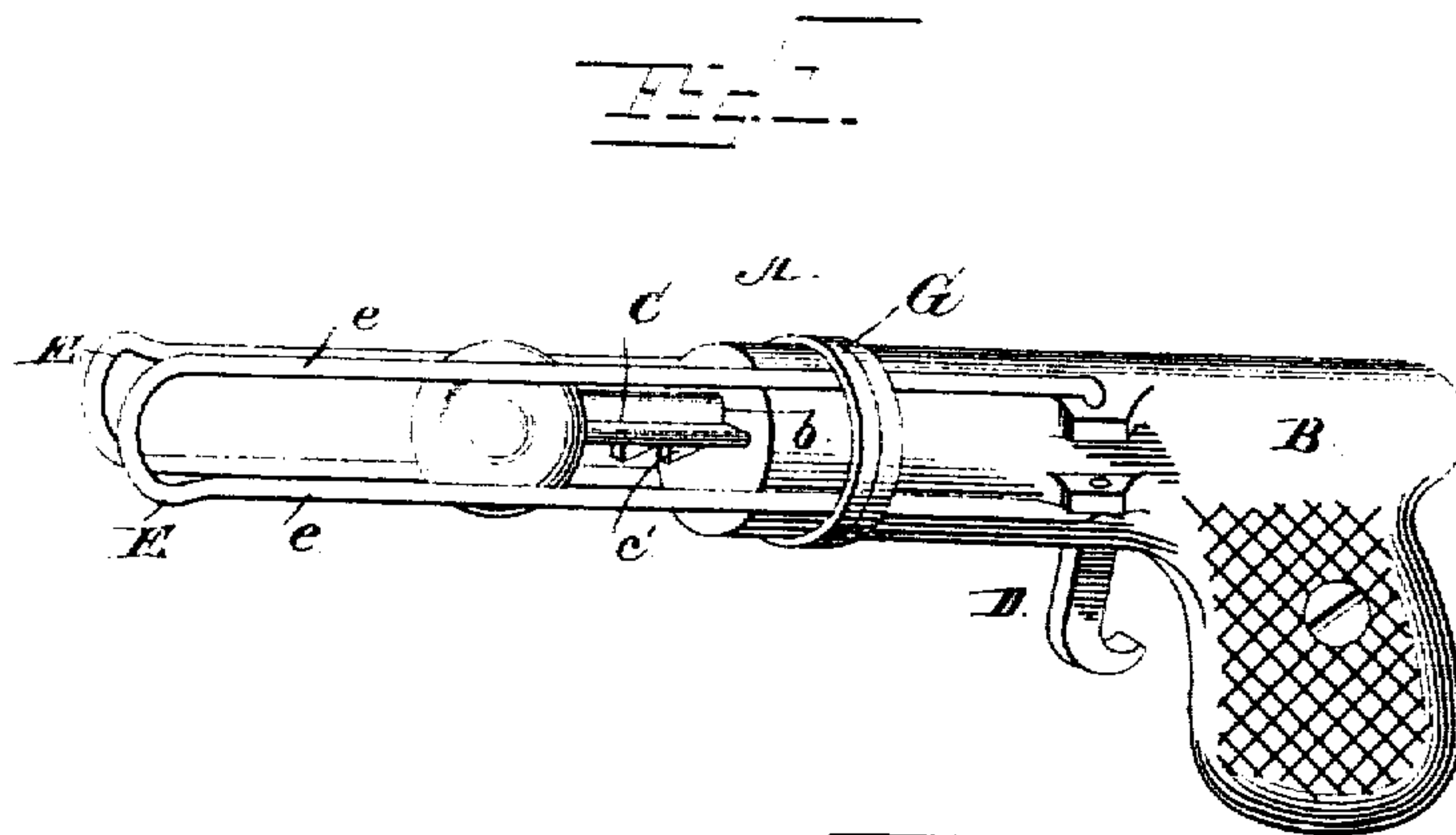
(No Model.)

L. J. INGERSOLL.

TOY PISTOL.

No. 333,635.

Patented Jan. 5, 1886.



WITNESSES

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UNITED STATES PATENT OFFICE.

LUTHER JUDSON INGERSOLL, OF DENVER, COLORADO.

TOY PISTOL.

SPECIFICATION forming part of Letters Patent No. 333,635, dated January 5, 1886.

Application filed October 6, 1885. Serial No. 179,151. (No model.)

To all whom it may concern:

Be it known that I, LUTHER J. INGERSOLL, a citizen of the United States, residing at Denver, in the county of Arapahoe and State of Colorado, have invented a new and useful Improvement in Toy Pistols, of which the following is a specification, reference being had to the accompanying drawings.

My invention has relation to improvements in toy pistols; and the novelty consists in the construction, combination, and arrangement of the various parts for service, substantially as hereinafter fully set forth, and specifically pointed out in the claims.

The invention has for its object the provision of a toy pistol adapted to shoot a marble or other small object; to provide means for holding and guiding the marble or other object to enable the device to be held at any position, slanting downwardly in a vertical position, or a horizontal position; to increase and vary the force of the holding devices on the marble, and to combine simplicity and durability of construction with thorough effectiveness and ease of operation and cheapness of manufacture.

In the accompanying drawings, Figure 1 is a perspective view of a toy pistol embodying my invention. Fig. 2 is a longitudinal vertical sectional view on the line *xx* of Fig. 4. Fig. 3 is a detail view of one of the spring holding-arms. Fig. 4 is a front elevation with the spring arms or loops in section.

Like letters of reference denote corresponding parts in all the figures of the drawings, referring to which—

A designates my improved toy pistol, comprising a handle or stock, B, having a recess, *b*, a spring-actuated plunger or piston, C, a trigger, D, and the spring arms or retainers E for holding the marble. The plunger or piston C has a head, *c*, a series of teeth, *c'*, and a coiled spring, C', arranged around the plunger and bearing against the head or a collar on the plunger, and an abutment formed in a recess in the stock B. The trigger has two arms, *d d'*, one of which, *d*, is normally pressed into engagement with one of a series of notches in the plunger by means of a spring, *d''*, while the other arm, *d'*, projects beyond the stock or handle, and can be operated by the hand of

the user to release the arm *d* from engagement with the spring-actuated plunger, which acts to propel or force a marble or other object arranged and held between the retainers or spring-arms E. The spring-arms E are arranged on opposite sides of the spring-actuated plunger and parallel therewith or flared outwardly therefrom. The arms project beyond the end of the handle or casing B and the plunger C, and are secured at one end to the handle or casing at some distance from the front end thereof.

The spring-arms E are each preferably made of a piece of spring-wire, doubled so as to provide two pieces, *e*, arranged a distance from each other to provide a guide for the marble or other object. The free ends of each spring arm or loop E are rigidly secured or pivotally connected to the casing or handle B, while the outer connected ends thereof are bent or flared outwardly to permit of the free passage of the marble, as will be readily understood.

f designates inclined grooves formed or cut in the casing or handle, in which are seated the longitudinal pieces *e*, which form the spring arms or loop E, which are normally flared out of the line of the handle or casing by reason of the spring-power inherent in the wire.

I provide means for varying the force with which the spring loops or guides bear upon the marble or other object contained between them by placing an inclosing-band, G, over the rear ends of the said springs and giving said band the desired position or number of turns or varying the force with which it bears against said loops or guides, thus forcing the outer ends thereof inwardly toward each other to a greater or less degree, according to the tension of said band, as will be very readily understood.

The operation of my invention is obvious from the foregoing description, taken in connection with the drawings. The spring-actuated plunger C is forced within the casing or handle until the trigger engages one of the series of notches near the outer end of said plunger-rod, when the marble or other object is placed in the spring loops or guides, in close juxtaposition to or contact with the head of the plunger, when the trigger is pulled, thus forcing the plunger outwardly and expelling

the marble or other object, the spring-loops serving as guides to the movement thereof and permitting its free and ready discharge.

I do not limit myself to the particular mechanism shown and described for actuating the plunger or piston, nor to the particular form of the spring arms or loops secured to the pistol casing or handle, as I am aware that many changes therein may be made without departing from the principle or sacrificing the advantages of my invention.

By means of the spring loops or guides the marble is held in proper position at any distance from the plunger, and the pistol can be aimed in any direction without danger of the marble becoming disengaged, said springs also permitting marbles or other objects of varying sizes to be employed with equal advantages, while at the same time they serve as guides and can be regulated to vary the force with which they bear on the marble or other object.

In lieu of the elastic band for inclosing and varying the tension of the guide-arms, a cord or metallic band may be passed around the rear ends of the stock and the said guide arms or loops, which loops may be either rigidly or pivotally connected to the stock or handle; and in lieu of being made and bent from a single piece of wire, they may be made of a single strip of sheet or other metal, which may be bent or grooved, as desired, to form guides for the projectile.

A spring, either coiled or flat, may be secured upon the handle and arranged to bear on the rear ends of the guides or loops to keep the same under proper tension, as will be very readily understood.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a pistol-barrel and the expelling-plunger, of yielding retaining-arms secured to the barrel independent of the plunger and projecting beyond the same, to

retain and guide the projectile between said arms, substantially as described.

2. The combination of a pistol-barrel, the expelling-plunger, and laterally-yielding retaining-arms pivoted to the barrel independent of the plunger, and arranged on opposite sides thereof and beyond the same, to retain and guide the projectile between the arms, substantially as described.

3. The combination of a pistol-barrel, the expelling-plunger, yielding arms pivoted to the barrel independent of the plunger, and a band encompassing the barrel and rear ends of the arms to regulate the tension of the latter, substantially as described.

4. The combination of a pistol-barrel, the expelling-plunger, laterally-yielding spring-arms pivoted to the barrel independent of the plunger and on opposite sides thereof, and an elastic band encompassing the rear ends of the arms and the pistol-barrel, substantially as described.

5. As a new article of manufacture, a toy pistol comprising a casing and barrel, a spring-actuated plunger having teeth, a trigger pivoted in the casing and adapted to engage the teeth of the plunger, laterally-yielding arms pivoted to the barrel independent of the plunger and on opposite sides thereof, and an elastic band encompassing the barrel and arms, substantially as described.

6. The combination, with a pistol-barrel and the expelling-plunger, of yielding arms pivoted to the barrel independently of the plunger, each arm being bent from a single piece of spring-wire, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

LUTHER JUDSON INGERSOLL.

Witnesses:

J. T. CLARKE,

Mrs. H. S. MORGAN.