

No. 692,460.

Patented Feb. 4, 1902.

M. LEHR.
TOY PISTOL.

(Application filed Oct. 21, 1901.)

(No Model.)

Fig. 1.

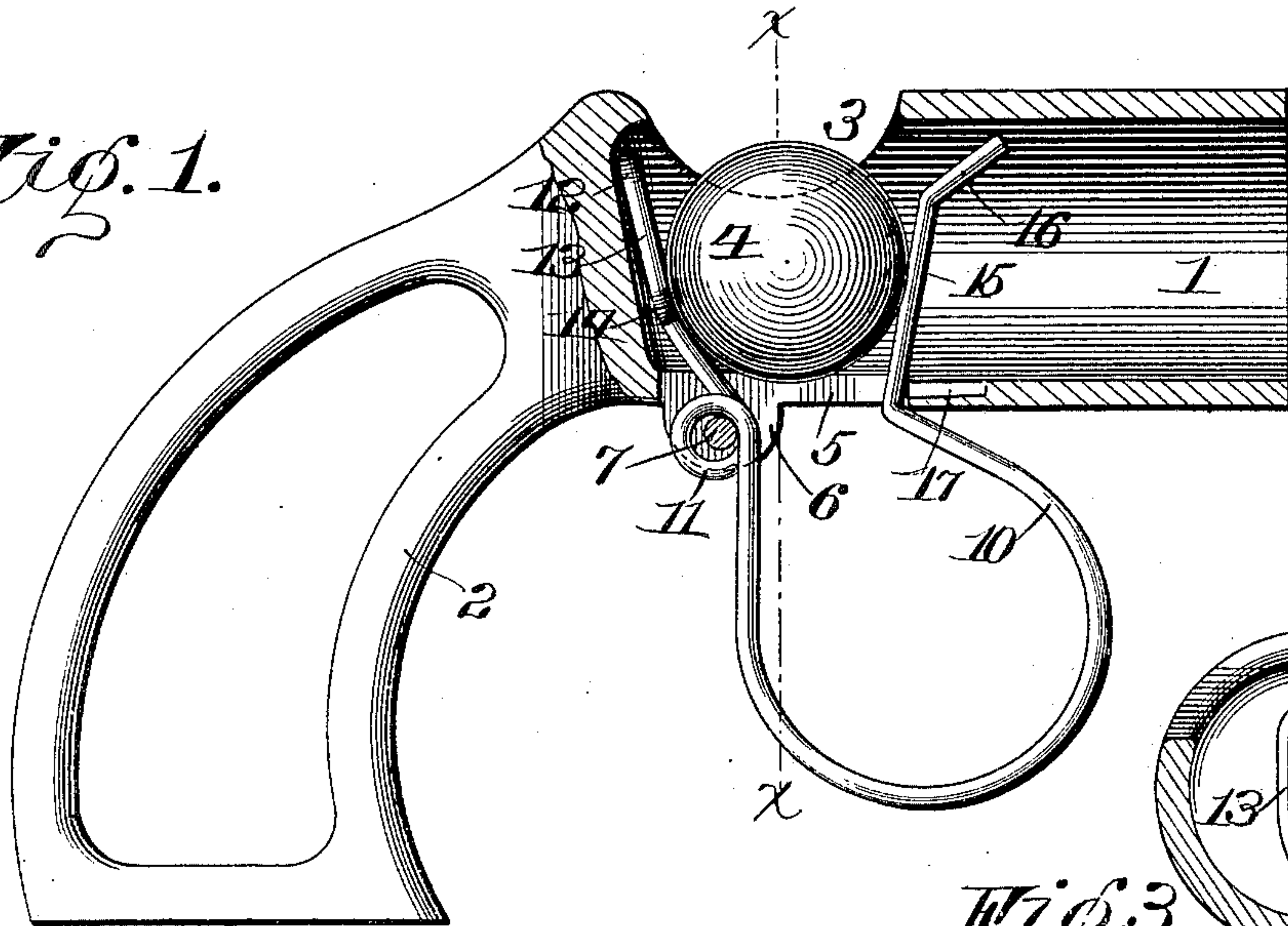


Fig. 3.

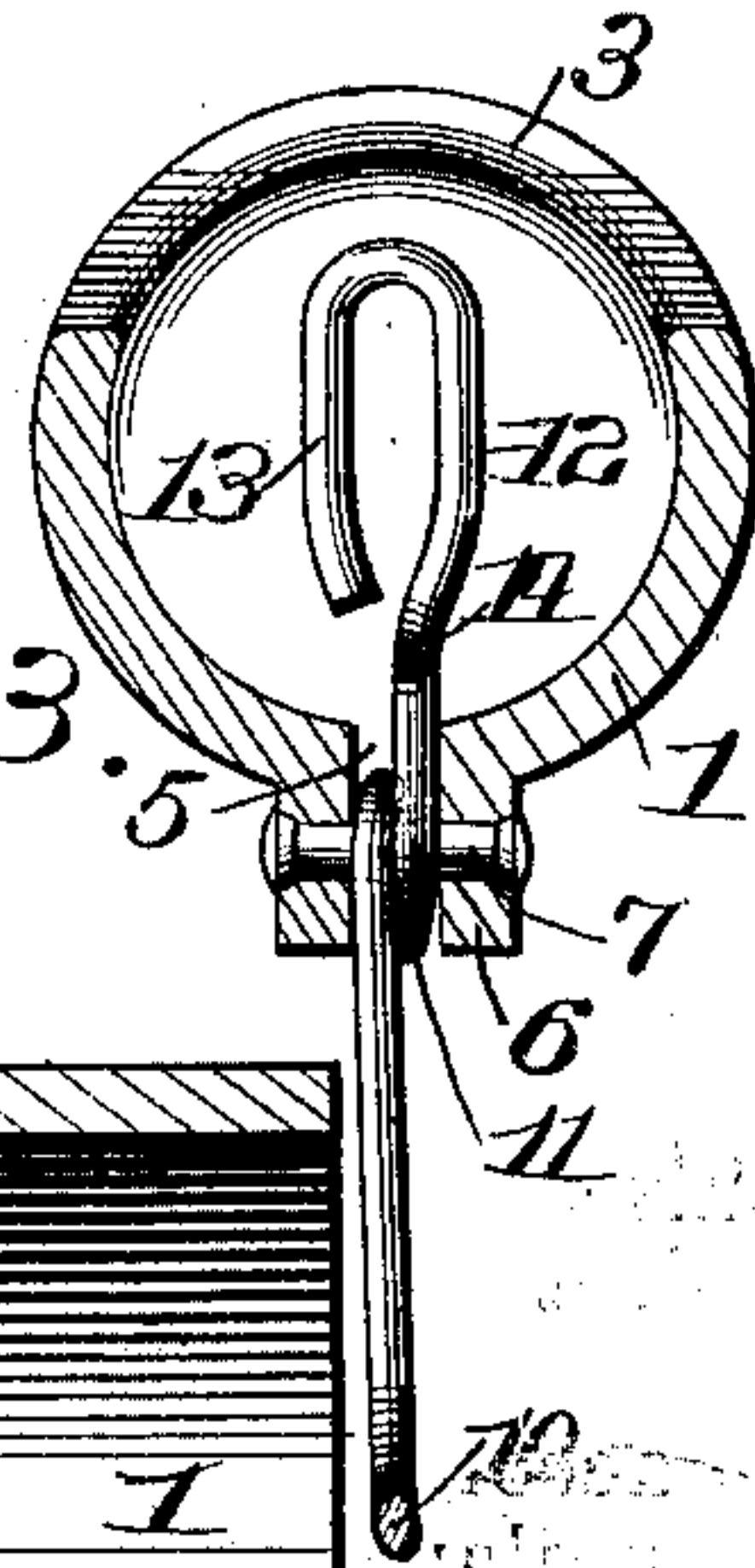
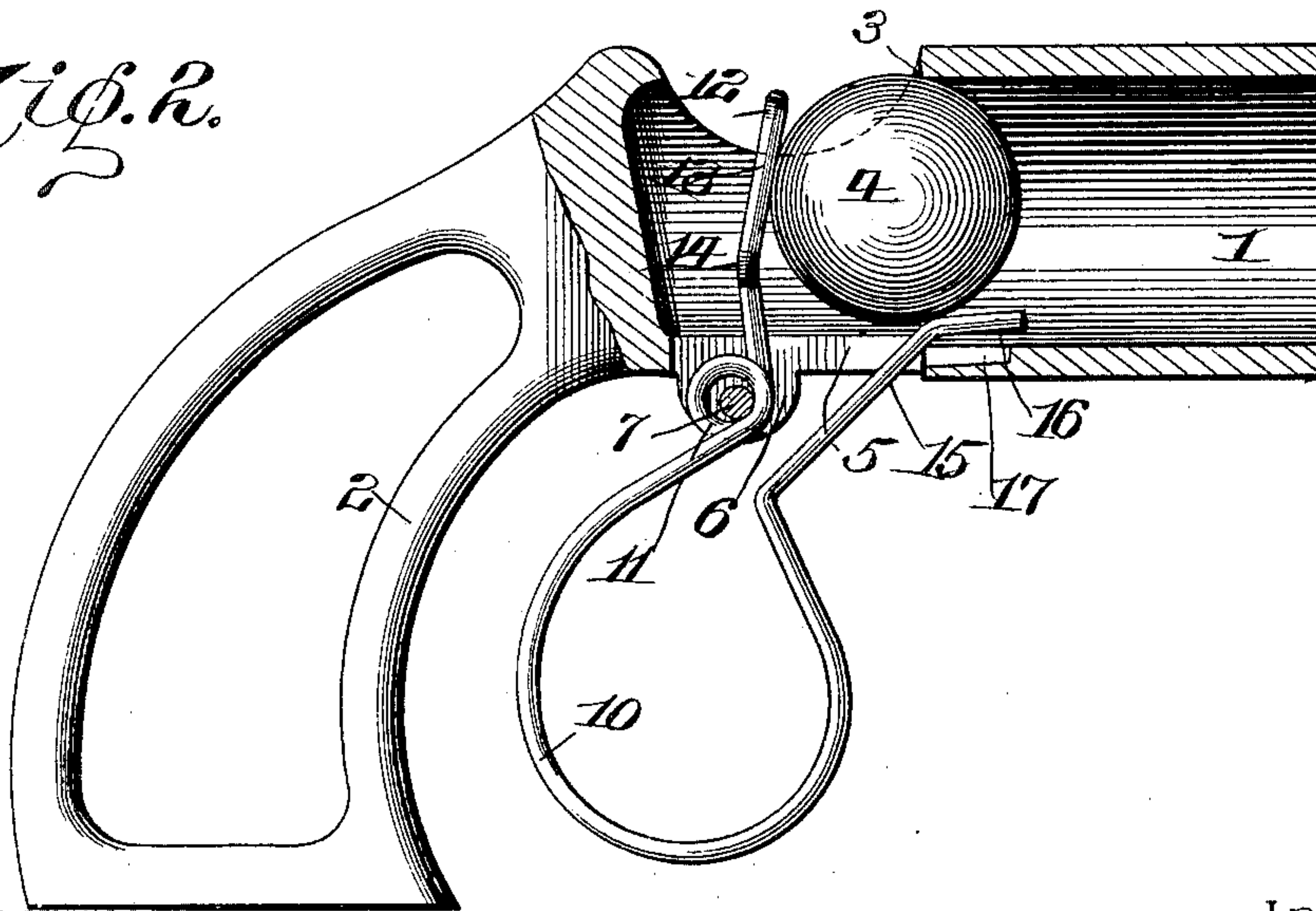


Fig. 2.



Witnesses.

Elizabeth Perry
Walter B. Payne.

Inventor.

Michael Lehr
By *Frederick S. Church*
Attorney

UNITED STATES PATENT OFFICE.

MICHAEL LEHR, OF ROCHESTER, NEW YORK.

TOY PISTOL.

SPECIFICATION forming part of Letters Patent No. 692,460, dated February 4, 1902.

Application filed October 21, 1901. Serial No. 79,417. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL LEHR, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Toy Pistols; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

My present invention has for its object to provide an attractive and amusing toy for children in the form of a pistol from which marbles, bullets, or the like may be ejected.

My invention has for its further object to provide an article that is simple, cheap, and compact and which possesses few parts, so constructed that they are not liable to injury through rough or careless handling.

To these and other ends the invention consists in certain improvements in construction and combinations of parts, all as will be hereinafter fully described, the novel features being pointed out in the claims at the end of this specification.

In the drawings, Figure 1 is a side elevation, partly in section, of a pistol constructed in accordance with my invention. Fig. 2 is a plan view illustrating the action of the trigger, and Fig. 3 is a cross-sectional view on the line *x x* of Fig. 1.

Similar reference-numerals in the three figures indicate similar parts.

The pistol I have illustrated consists of a tubular barrel 1, mounted upon a handle 2, and for convenience in manufacture the parts are formed integrally in a single casting, as shown. At the rear end of the barrel and at its upper side is provided an aperture 3, through which a marble, bullet, or similar missile (indicated by 4) may be inserted.

At the lower side of the barrel is provided an elongated slot or aperture 5, and projecting downwardly at either side thereof are ears or lugs 6, between which extends a pin 7, forming a journal or bearing on which is pivoted the trigger. The latter is composed of a single piece of spring material, as wire, bent to form a loop 10 to receive the operating or trigger finger of the operator's hand, as will be understood, and having its rear end

provided with a coil 11, by which it is journaled on the pin 7 and extending upwardly into the barrel to form an ejector 12. This end of the wire is provided with an elongated eye 13, the sides of which are adapted to engage the rear side of the marble or bullet at separate points, and it is also bent at the point 14 at a slight angle, so that the ejector when in operation, as shown in Fig. 2, will engage the marble above its center, exerting a normal tendency to force it downwardly and out of contact with the upper side of the barrel. The free outward movement of the marble is prevented by a retaining-finger 15, formed at the forward end of the wire loop 10 and projecting into the barrel when it normally extends in a substantially vertical position in the path of the marble, as shown in Fig. 1, engaging the forward end of the aperture 5 and operating through the latter into and out of the barrel 1. The extremity of the finger projects slightly forward, as at 16, said end being adapted to engage the interior of the barrel and prevent the removal of the finger through the aperture 5 in case the trigger is pulled excessively toward the rear. A notch or recess 17 is arranged to receive this portion, allowing the extremity to lie below the interior surface of the barrel and permitting the free outward passage of the marble therein.

The loop 10 normally exerts a spring-pressure tending to separate the finger 15 from the ejector 12, and the latter being held by the pivot-pin 7 and the movement of the former being limited by the end of the aperture 5 the force exerted will cause the finger to rise in the barrel, at the same time returning the trigger and ejector 12 to the normal position. (Shown in Fig. 1.) While the loop 10 is constantly under a slight tension, the spring-pressure is increased by pulling the trigger rearwardly, which action retracts the finger 15, as shown in Fig. 2, so that when the trigger is released the parts are returned very quickly.

In operating the pistol the marble or bullet is inserted into the barrel through the aperture 3, where it is engaged at its forward side by the finger 15 and at its rear side by the ejector 12. Upon pulling the trigger the ejector is

pressed against the marble, while the finger 15 still remains in the barrel, thereby causing a tightening of the coil 11 about the pin 7 until the finger 15 is entirely retracted, or if the marble happens to be smaller than the bore of the barrel until said finger has been removed sufficiently to allow the marble to pass over it, when the sudden release of the latter will permit the ejector to snap and project the marble with some force from the pistol.

Various modifications of my device may be devised by those skilled in the art without departing from the spirit of my invention; but the arrangement which I have described is simple and embodies few parts, which may be easily constructed and assembled, thereby providing an attractive toy that is practicable in that it cannot be easily destroyed or rendered unserviceable by rough or careless handling.

I claim as my invention—

1. The combination with a pistol having a barrel, and a pivoted trigger provided with an ejector adapted to engage the rear side of a missile inserted in the barrel, a finger extending in front of said missile, and a spring connection between said finger and trigger.

2. The combination with a pistol having a barrel, and a pivoted trigger, of a finger engaging the barrel, and a spring connection between the trigger and finger adapted as the trigger is moved to retract the finger and to be put under tension to return the trigger when the latter is released.

3. The combination with a pistol having a barrel provided with an aperture at one side, and a pivoted trigger provided with an ejector normally lying in rear of a missile inserted in the barrel, of a finger projecting through the aperture and engaging the barrel, and a spring connection between the trigger and finger by means of which the latter is retracted by the operation of the former which operation also moves the finger in contact with the edge of

the aperture to return the parts to their normal position when the trigger is released.

4. In a toy pistol, the combination with a barrel provided with an aperture, in its lower side, of a journal-pin beneath the aperture, a trigger composed of a single piece of material forming the coil surrounding the pin and having one end extending from said coil into the barrel, and adapted to lie in rear of a missile inserted therein, and its opposite end engaging the missile and adapted to be removed from engagement therewith after the first end has been put under tension by the movement of the trigger.

5. The combination with the barrel, of a missile holding and ejecting device pivoted at one side of the barrel and having the missile-holding arm projecting into the barrel forward of the pivot and the elastic projecting arm connected directly to said holding-arm.

6. The combination with the barrel, of a missile holding and projecting device consisting of a single piece of spring material pivoted at one side of the barrel and having the holding-arm extending into the barrel forward of the missile and the ejecting-arm in rear thereof, said device being adapted to be moved on the pivot to withdraw the holding-arm from the barrel.

7. The combination with the barrel, of a missile holding and projecting device pivoted at one side of the barrel having the elastic ejecting-arm extending into the barrel, a missile-holding arm extending in front of said ejecting-arm and an extension or operating portion to which said arms are directly connected and by the movement of which the ejecting-arm is flexed and the holding-arm withdrawn from the barrel.

MICHAEL LEHR.

Witnesses:

ERNEST B. MILLARD,
FREDERICK F. CHURCH.