

C. R. COCHRAN.

TOY PISTOL.

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907,461.

Patented Dec. 22, 1908.

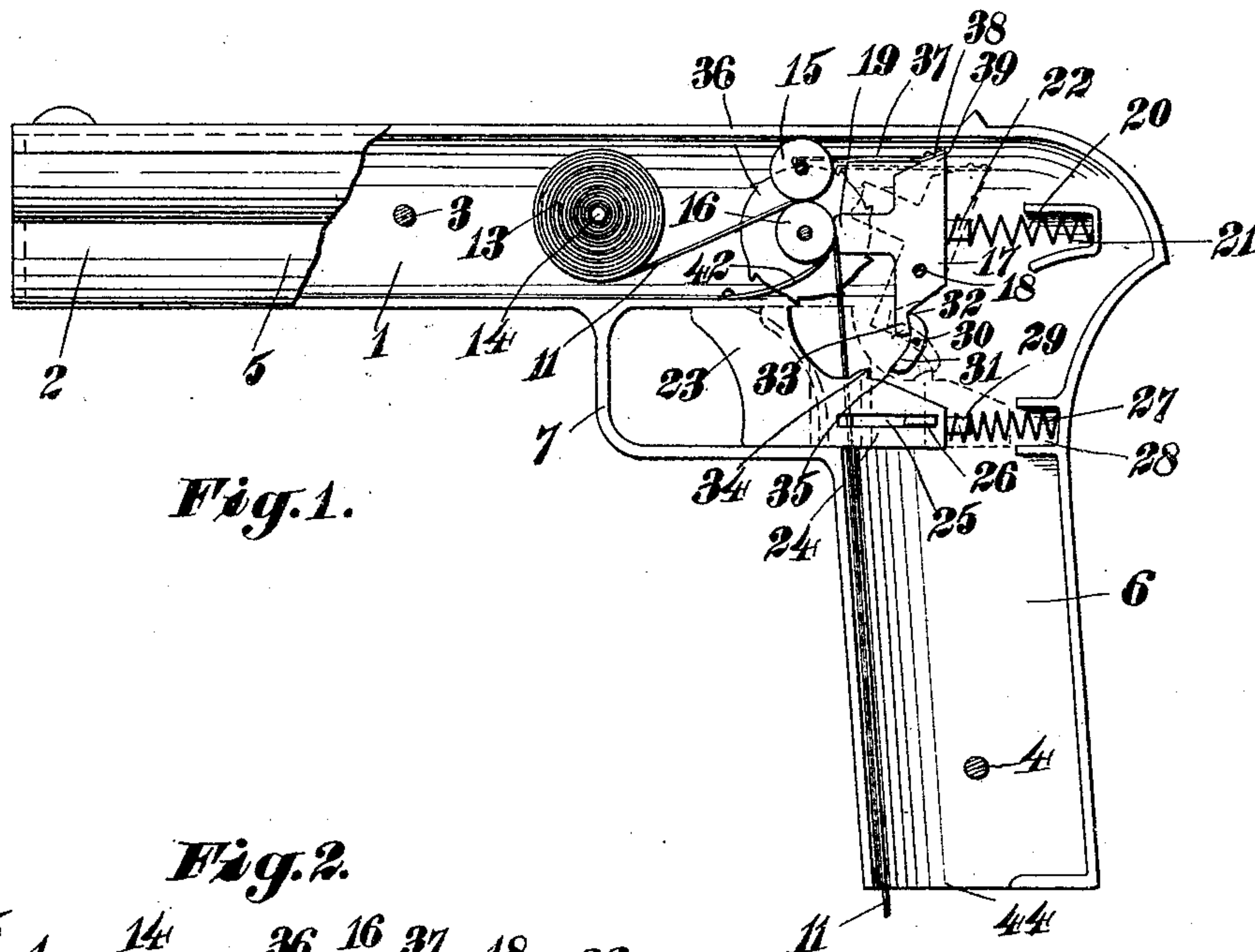


Fig. 1.

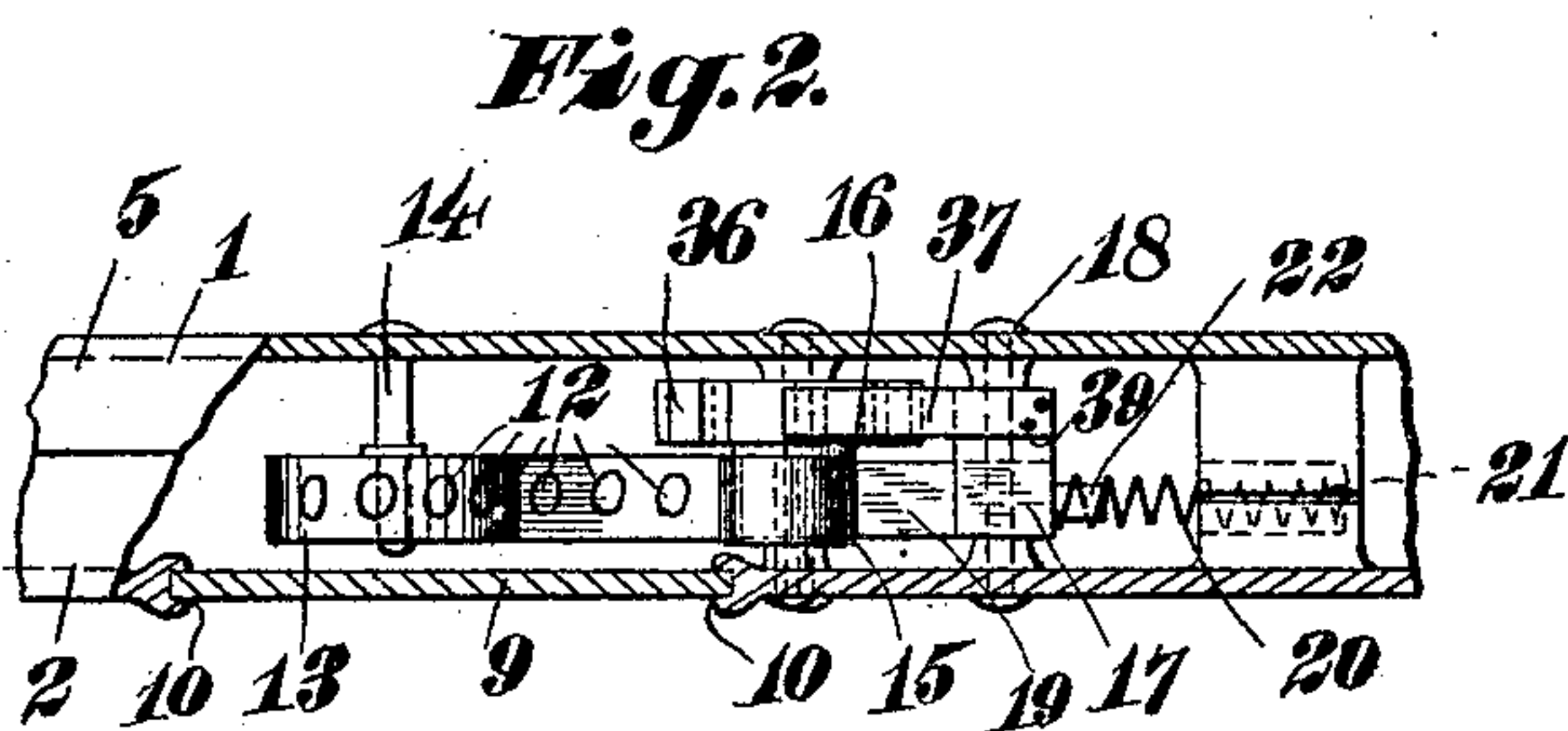


Fig. 2.

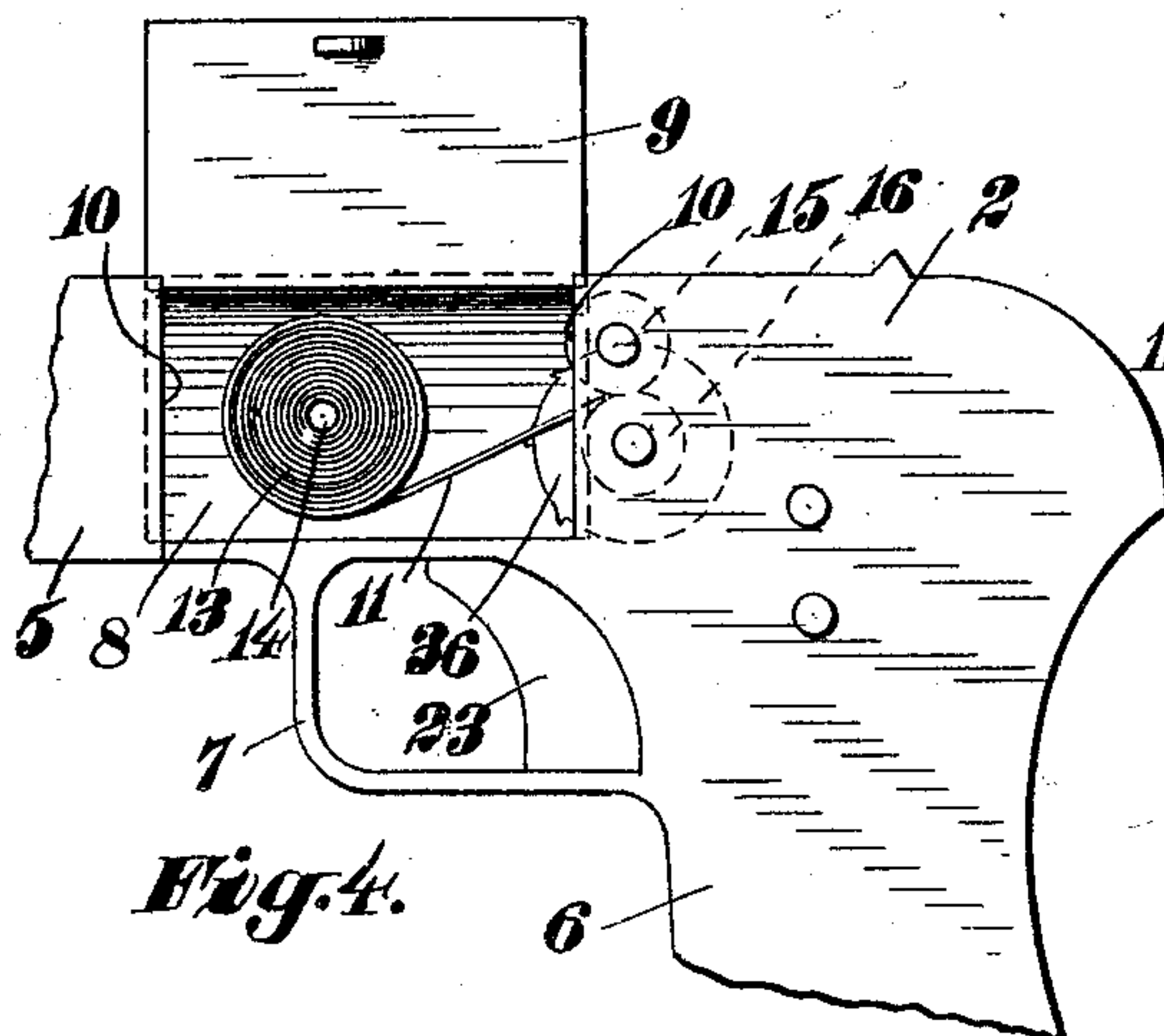


Fig. 3.

Fig. 4.

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UNITED STATES PATENT OFFICE.

CHARLES ROYAL COCHRAN, OF MEETEETSE, WYOMING.

TOY PISTOL.

No. 907,461.

Specification of Letters Patent.

Patented Dec. 22, 1908.

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To all whom it may concern:

Be it known that I, CHARLES ROYAL COCHRAN, a citizen of the United States, residing at Meeteetse, county of Bighorn, and State of Wyoming, have invented certain new and useful Improvements in Toy Pistols, of which the following is a specification.

My invention relates to toy pistols, and the object of my invention is to provide a toy pistol adapted to imitate an automatic repeating firearm, both as to its general appearance and as to its ability to produce a number of explosions in rapid succession.

In carrying out my invention a flexible strip or tape is employed, having a large number of percussion caps arranged at intervals thereon. This is passed between a pair of feed rollers one of which constitutes a firing wheel or anvil, and a hammer is arranged to strike each successive cap as it comes into position. A ratchet connection is provided between the hammer and the firing wheel so that the reciprocation of the former will rotate the latter to feed the tape. Suitable means are provided to prevent the tape from sticking to the roller and winding about the same, and other means are provided to hold the strip or tape in close contact with the firing wheel at the firing point and to prevent sparks from reaching the unexpended caps.

My invention consists generally in the toy pistol as above described and in the various details of construction and arrangements of parts all as will be hereinafter fully described and particularly pointed out in the claims.

My invention will be more readily understood by reference to the accompanying drawings, forming a part of this specification and in which,

Figure 1 is a vertical longitudinal section through the shell of a toy pistol embodying my invention in its preferred form, the mechanism and a portion of the barrel being shown in elevation, Fig. 2 is a plan view of the mechanism with the adjacent portions of the shell or casing shown in sections, Fig. 3 is a detail view similar to Fig. 1 illustrating the parts in firing position and Fig. 4 is a detail side elevation of the device with the loading slide in open position.

The shell of the pistol is formed of the right and left hand castings 1 and 2 respectively secured together by the rivets 3 and 4 and comprises the barrel portion 5 the stock 6 and the trigger guard 7. The right and

left hand castings 1 and 2 are substantially similar with the exception that the casting 2 is provided with an opening 8 in the barrel portion above the trigger guard for inserting the ammunition. The opening is closed by slide 9 arranged in ways 10 formed in the front and rear walls of said opening. The ammunition to be employed comprises a flexible strip or tape 11 having a large number of percussion caps 12 arranged at intervals thereon. These are to be supplied in rolls 13 adapted to be inserted in the pistol.

14 indicates a pin or stud extending horizontally from the casting 1 and directly in front of the opening 8 to receive the roll 13. To the side of, or rather to the rear of the opening 8 are the feed rollers 15 and 16 arranged one above the other.

To load the pistol the slide 9 is raised as shown in Fig. 4 and the roll 13 mounted upon the stud 14. The end of the tape 11 is then inserted between the rollers 15 and 16 which are slightly rotated in a manner hereinafter described to draw the tape between them.

17 indicates the hammer pivotally mounted on a pin 18 behind and below the roller 16, said roller being the firing roller, and the forward end of the hammer 19 is shaped to conform to the roller.

20 indicates a coil spring for driving the hammer against the firing roller, one end of the spring being held in a socket 21 formed in frame castings and the other end being held in engagement with the hammer by a lug 22 formed upon the rear face thereof.

The trigger 23 is slidably mounted in position and is provided with an extension 24 extending beneath the hammer. The extension 24 is horizontally or longitudinally slotted as at 25, and the guide lug 26 formed on the shell castings extends through said slot. The trigger is normally held in forward position by a spring 27 having a seat 28 in the rear wall of the frame and held in engagement with the trigger by a lug 29 formed upon the rear of the extension 24.

Pivotally mounted between the lower end of the hammer and the extension 24 of the trigger upon a pin 30 is the cocking pin or lever 31, the upper end 32 of which lies behind the depending portion or tail 33 of the hammer. The trigger is provided with an upwardly extending lug 34 which engages the lower end 35 of the lever 31 when the trigger is drawn back. It is obvious that by drawing back the trigger the lever 31 will be

rocked and this in turn will draw back or cock the hammer.

The parts are so proportioned that as the trigger reaches its rearmost position the end 5 35 of the cocking lever will slip over the lug 34, and that before the end 32 reaches the lower end of the tail 33 of the hammer. The spring 20 then drives the hammer forcibly against the firing wheel 16, exploding the 10 cap. As the trigger returns to normal position the lug 34 may pass beneath the lever 31 as said lever is free to turn in reverse direction without operating the hammer.

Formed integrally with the firing wheel 16 15 is a ratchet wheel 36 engaged by a spring arm or pawl 37 secured to the upper end 38 of the hammer, the hammer being upwardly extended and off-set as at 39 for this purpose. The teeth on the ratchet wheel 36 are 20 engaged by the pawl 37 at each backward stroke of the hammer and by rotating the roller 16 feed a cap into firing position at such time.

40 indicates a spring arm having a foot 41 which rests against the strip 11 pressing the 25 same into engagement with the wheel 16. The foot impinges against the strip at a point slightly above the hammer.

42 is a scraper. This comprises a spring arm arranged beneath the wheel 16 and hav- 30 ing one end bearing against the wheel just below the hammer. The scraper prevents the strip 11 from sticking to the wheel 16 and winding thereon, and also directs it downwardly through the stock.

35 The trigger is provided with a vertically disposed aperture or passageway 43 through which the extended portion of the strip 11 extends and the bottom of the stock is provided with a discharge opening 44.

40 It will be seen from the foregoing that the

pistol is of simple construction and one which will not readily get out of order and that it will discharge a large number of caps in rapid succession. Furthermore the opera- 45 tive parts are entirely incased, hence there is no danger of pinching or burning the fingers. It should be especially noted that the firing point is in such a position that it is impossible for sparks to escape from the device, also that the presser arm 40 prevents the sparks 50 from reaching the unexpended ammunition.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. In a toy pistol a pair of feed rollers 55 adapted to feed a flexible strip having a plurality of percussion caps arranged at intervals thereon, one of said rollers comprising a firing wheel, a hammer pivotally mounted adjacent to said firing wheel, a trigger slid- 60 ably mounted beneath said hammer and a pivoted lever arranged between said hammer and said trigger, said lever being adapted to cock and release said hammer as the trigger is retracted, as and for the purpose specified. 65

2. In a toy pistol a pair of feed rollers adapted to feed a flexible strip of ammunition therebetween, one of said rollers comprising a firing wheel, a hammer, and a trigger for operating said hammer, said trigger 70 having a passageway for the expended ammunition strip, as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of 75 two subscribing witnesses.

CHARLES ROYAL COCHRAN.

Witnesses:

WILLIAM O. STEELE,
A. S. McALLISTER.