

No. 631,945.

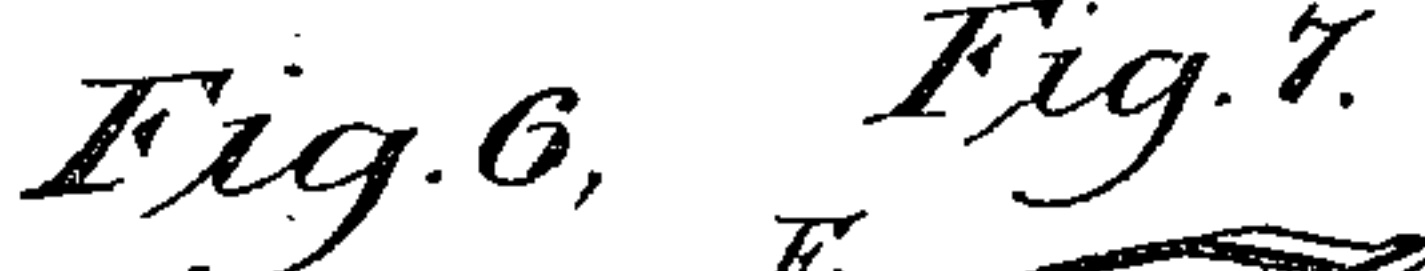
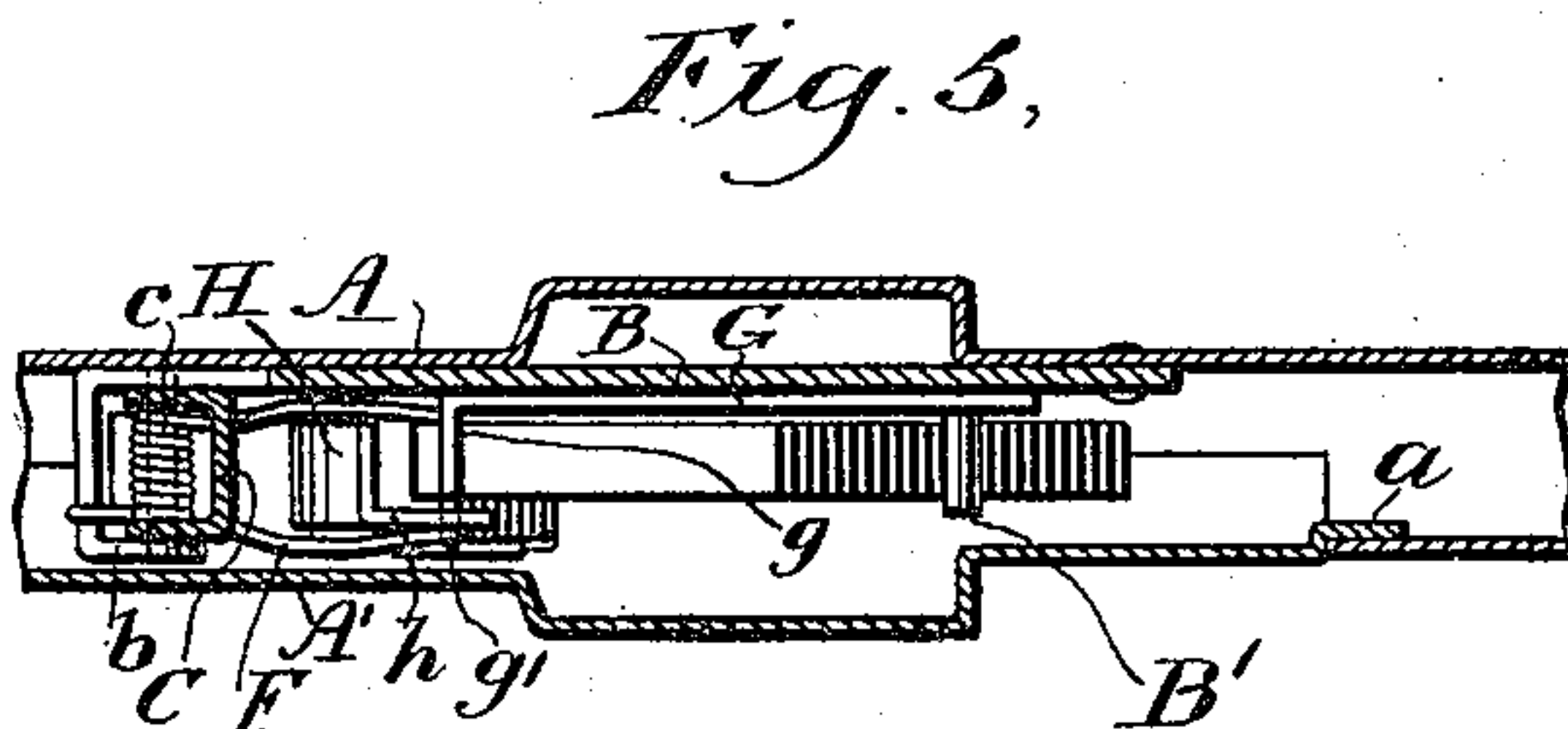
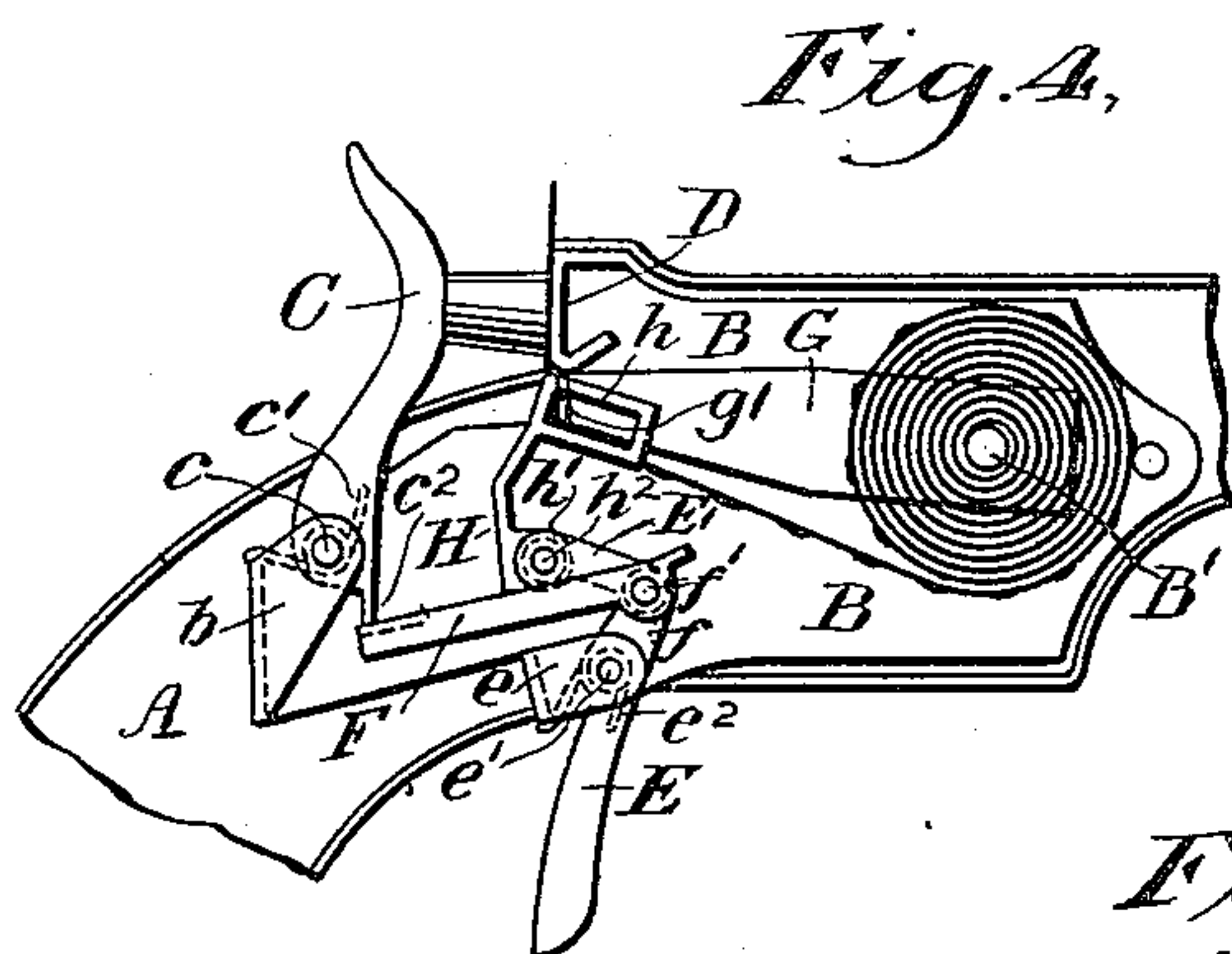
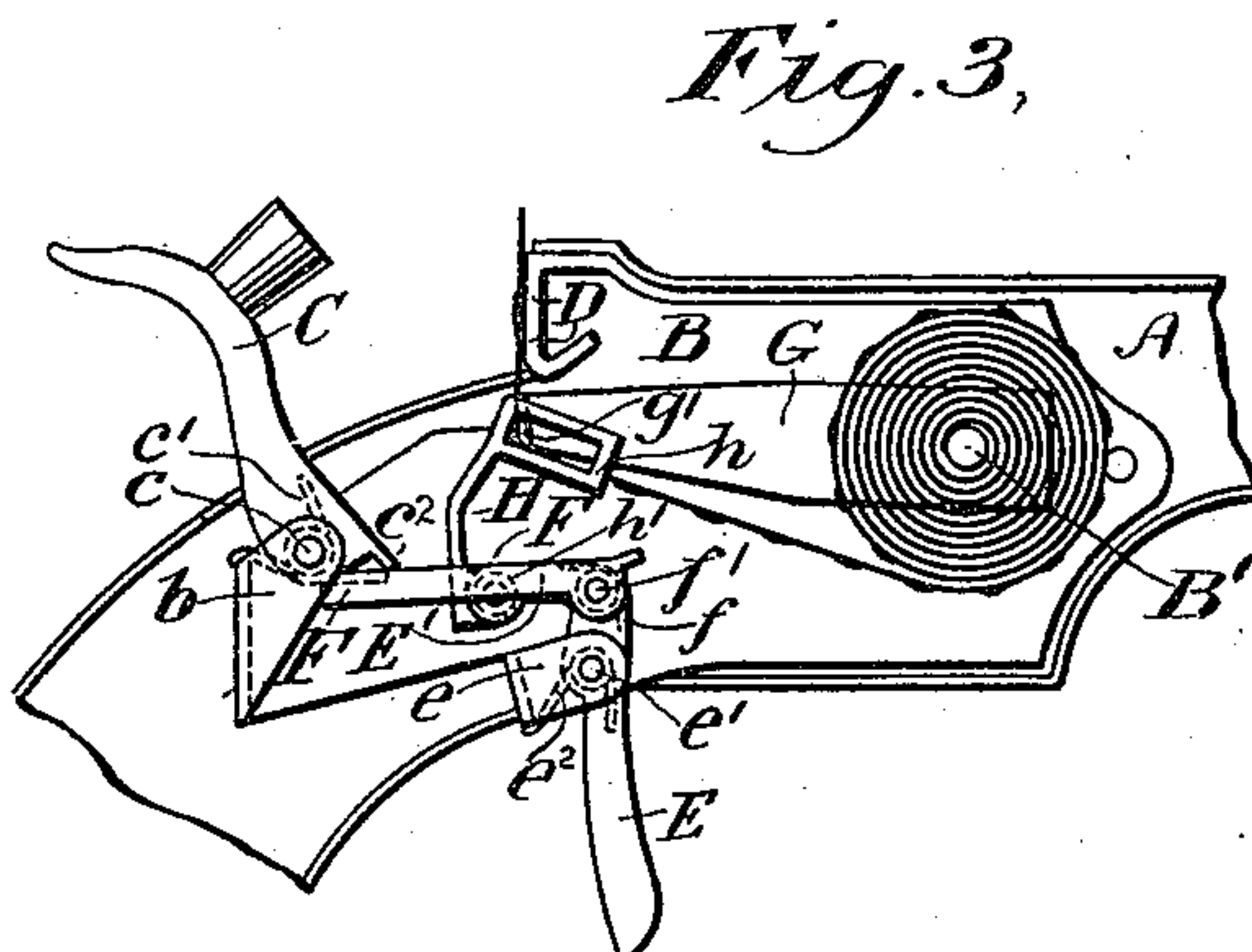
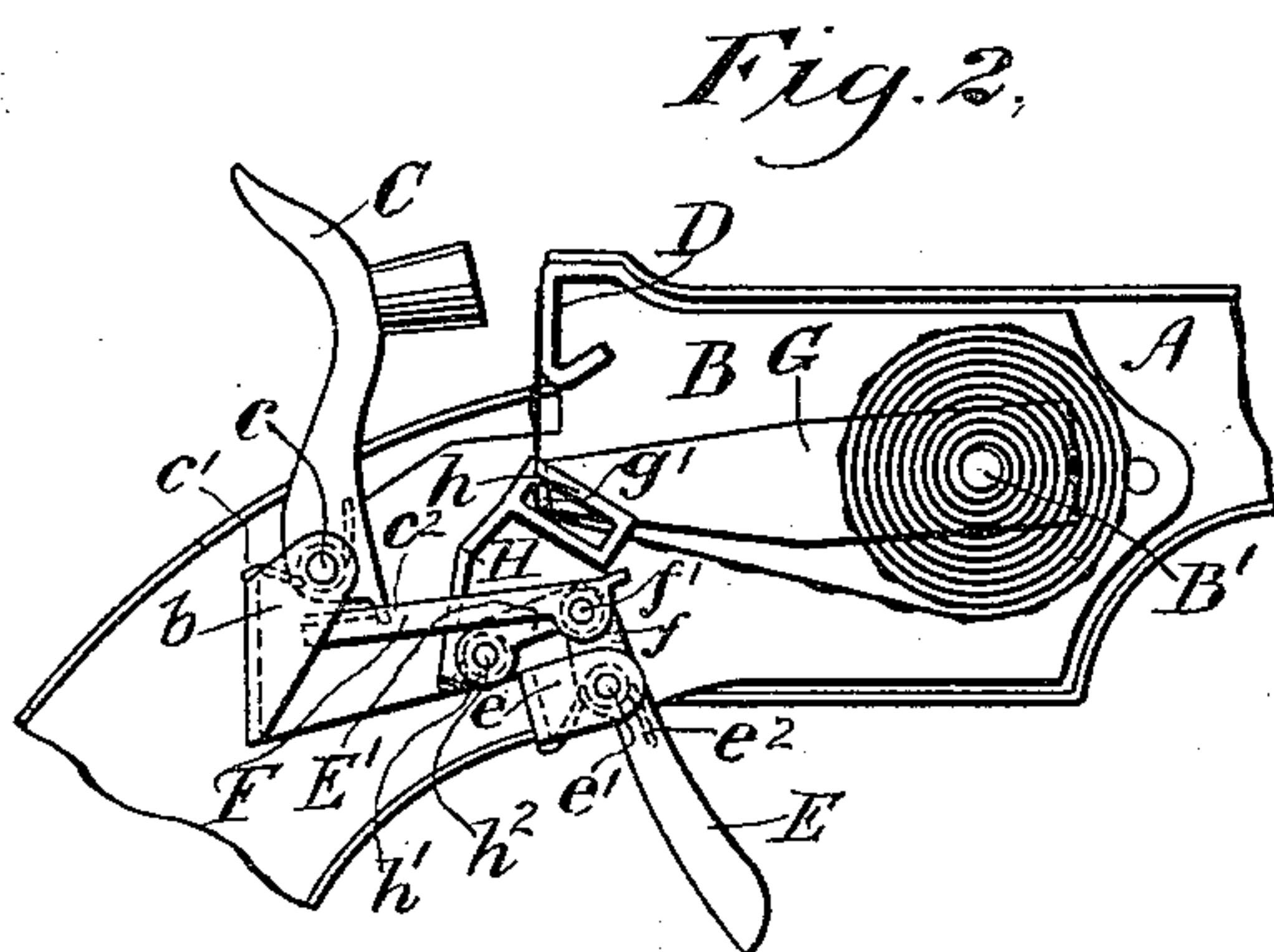
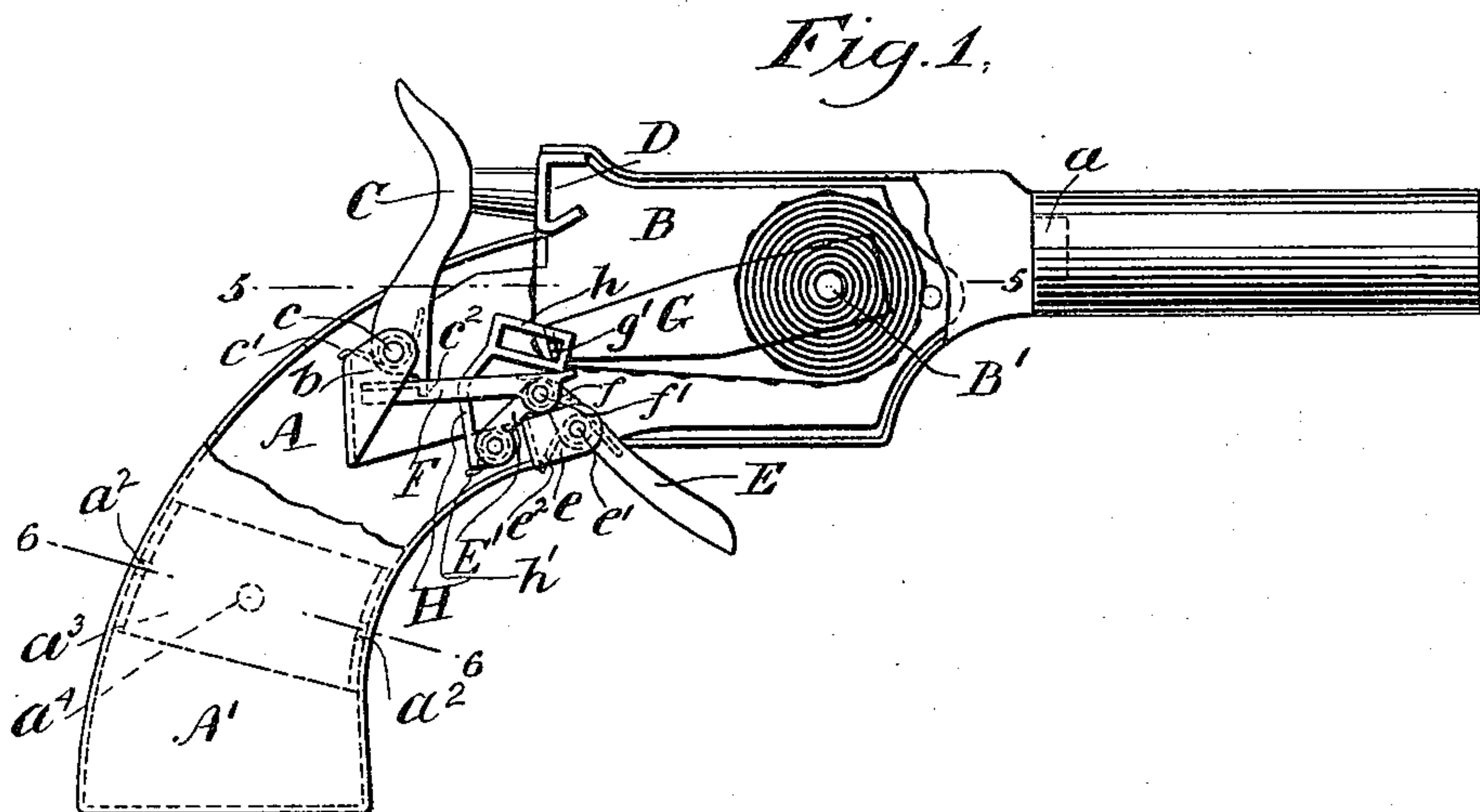
Patented Aug. 29, 1899.

E. H. WAGNER.

TOY PISTOL.

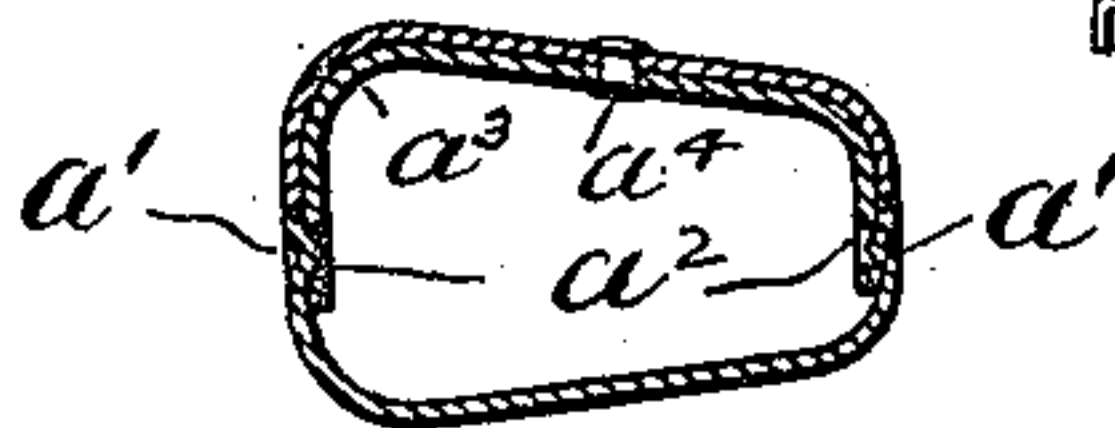
(Application filed Dec. 3, 1897.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

EDWARD H. WAGNER, OF NEW YORK, N. Y.

## TOY PISTOL.

SPECIFICATION forming part of Letters Patent No. 631,945, dated August 29, 1899.

Application filed December 3, 1897. Serial No. 660,638. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD H. WAGNER, a subject of the King of Denmark, and a resident of the city, county, and State of New York, have made certain new and useful Improvements in Toy Pistols, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

The object of my invention is the construction of a toy pistol arranged to contain a strip or roll of detonating caps which may be fired in succession without recharging the pistol; and to this end it consists in novel mechanism for advancing the roll of caps and for cocking and releasing the hammer by a single movement of the trigger.

In the accompanying drawings, Figure 1 is an elevation, partly in section, of a toy pistol containing my improvement. Fig. 2 is a partial sectional elevation thereof, showing the mechanism in the positions they assume when the pistol is partially cocked. Fig. 3 is a similar view showing the hammer at full-cock. Fig. 4 is a similar view showing the position of said parts when the hammer has been released and the cap exploded. Fig. 5 is a partial horizontal section on the line 5-5, Fig. 1. Fig. 6 is a cross-section on the line 6-6, Fig. 1, and Fig. 7 is a perspective view of the link F. Similar reference characters designate corresponding parts in all the views.

The stock and barrel of the pistol consist of a hollow metal shell shaped externally to simulate a revolver. This shell is cast or stamped in two parts A and A', the part A' being separable from the part A for the purpose of affording convenient access to the actuating mechanism of the pistol, which is carried by the part A.

While I do not intend to limit my invention to a toy pistol of any particular construction, I have herein shown the stock and frame of the pistol formed in two equal halves to the point at which the barrel joins the frame, the parts being secured to each other by forming on the part A' a short projecting flange  $a$ , which extends into the rear end of the barrel, and by forming on the opposite end of the part A' small teats or projections  $a'$ , which engage with holes  $a^2$  in the yielding ends of the spring  $a^3$ , which is secured within that

part of the part A which forms its half of the pistol-stock by the rivet  $a^4$  or other suitable means, as shown in Fig. 6.

The parts or sections A and A' are cut away to permit the necessary action of the projecting hammer and trigger, and when the flange  $a$  is inserted in the rear end of the barrel and the stock ends of the sections pressed together the projections  $a'$  will engage with the ends of the spring  $a^3$ , pressing them toward each other until the projections enter the holes  $a^2$ , when the ends of the spring will return to their normal position and the parts will be securely but separably held together.

The caps employed in my improved pistol are the ordinary detonating paper caps formed in a continuous strip and, with the actuating mechanism of the pistol, are preferably carried by a plate B, which is formed to fit into a concavity formed in the section A, to which it is riveted or otherwise rigidly secured. From the plate B a pin B' projects, over which the strip of caps in the form of a roll is slipped. Upon the plate B is also mounted the hammer C, by which the caps are exploded. The rear end of the plate B is bent outwardly and forwardly, so as to form the lug b, and the hammer C is mounted on a pivot c, which passes through said ear and enters the opposite side of the plate. A spiral spring  $c'$  is mounted on the pivot c, and one end of said spring is bent rearwardly and extends over the outwardly-bent edge of the plate B, while the opposite end of said spring is bent upwardly and under considerable tension presses against the rear side of the hammer, so that when the latter is raised in the act of cocking the tension on said spring is increased, so as to carry the hammer when the latter is released forcibly against the anvil D, which, as shown, is formed integrally with the plate B. The trigger E is also pivotally mounted on the plate B, the plate being bent outwardly and forwardly to form the lug e, the pivot  $e'$  being carried at one end by the lug e and at the other by the plate B, and the trigger is normally held in the position shown in Fig. 1 by the spiral spring  $e^2$ . To the upper end of the trigger is pivoted the slotted link F, and the hammer is provided with a projection  $c^2$ , which is arranged to enter the slot in the link F when the parts are



in the position shown in Fig. 1. The free end of the link F is held up against the lower portion of the hammer by the spring  $f$ , which encircles the pivot  $f'$  and one end of which passes against the under side of the link and the other against the rear side of the trigger. The parts just described cooperate to form hammer-actuating mechanism. When the trigger is pulled back, its upper end, to which is secured the link F, will with said link be drawn forward, and the rear side of the slot in said link engaging with the projection  $c^2$  on the hammer will draw the hammer away from the anvil, as shown in Fig. 2. As the hammer is raised the projection  $c^2$  will be gradually swung clear of the rear side of the slot and be disengaged therefrom, thus releasing the hammer, which, under the action of the spring  $c'$ , will fall upon the anvil D with sufficient force to explode the cap, which has been carried into position by the simultaneous action of the cap-advancing mechanism, which I will now proceed to describe.

An arm G is arranged to swing freely on the pin B'. The free end of this arm is bent outwardly at right angles to the arm, and upon this outwardly-extending portion  $g$ , which is slightly longer than the width of the cap-strip, is formed a pin  $g'$ . The trigger E is formed with a rearwardly-extending arm E', to which the link H is pivoted. This link H is slightly wider than the strip of caps and is formed with a slotted ear  $h$ , into which the pin  $g'$  projects, and the end of said ear normally rests against the end of the link F, being held there by the coil-spring  $h'$ , which is carried by the pivot  $h^2$  and tends to throw the link H forward.

The operation of the cap-advancing mechanism just described is as follows: The coil of caps having been placed on the pin B', the end of the strip is carried backward under the end of the arm G and up between the bent portion  $g$  of said arm and the upper end of link H, and the end of the strip is inserted between the hammer and anvil. The removable section of the pistol A' is then replaced in position, as described, and when the trigger is pulled the link H moves forward with it, the pin  $g'$  riding up the inclined slot in the ear  $h$  and lifting that end of the arm G. When the parts have reached the position shown in Fig. 2, the end of the cap-strip will be caught and firmly held between the bent end of the arm G and the link H. This will arrest the further forward movement of the upper end of the link H, and the continued movement of the trigger will carry the swinging end of the arm G and the end of the link H upward, and the end of the cap-strip, which is firmly held between them, is carried up to the posi-

tion shown in Fig. 3, at which point the hammer is released, as previously described, and falls upon the cap, the strip having been properly adjusted, so that this movement of the parts will bring the end cap just over that part of the anvil upon which the hammer strikes. The parts are so proportioned and the caps so spaced upon the strip that the cap-strip is advanced the requisite distance to bring a fresh cap into proper position with each release of the hammer, and the entire coil of caps may thus be fired without removing the finger from the trigger and without any manipulation of the parts further than simply pressing the trigger.

It will of course be understood that I do not wish to limit myself to the exact form, construction, and arrangement of parts herein shown and described, since numerous modifications may be made therein without departing from the spirit of my invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a self-cocking toy pistol, the combination of a spring-controlled hammer, a spring-controlled trigger, a link pivoted to the trigger, means for forming a positive connection between said link and said hammer when the parts are in their normal position, means for releasing such connection when the hammer reaches the position of full-cock, a pivoted arm, a link pivoted to the trigger, said arm and said link bearing oppositely-disposed gripping-surfaces arranged to engage the cap-strip and a yielding connection between said arm and said link whereby the same may be cooperatively actuated by the trigger to bring the gripping-surfaces into engagement with the cap-strip and to advance the latter, substantially as shown and described.

2. In a self-cocking toy pistol, the combination of a spring-controlled hammer, a trigger, a releasable connection between the same, means for releasing such connection when the hammer is moved to the position of full-cock, a pivoted arm provided with a cap-strip-engaging surface, a link pivoted to and carried by the trigger and provided also with a cap-strip-engaging surface, and a cooperating pin and slot carried by said arm and link and forming a yielding engagement between the two whereby they are guided and cooperatively actuated to grip and advance the cap-strip when pressure is exerted upon the trigger, substantially as shown and described.

EDWARD H. WAGNER.

Witnesses:

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