

**No. 630,775.**

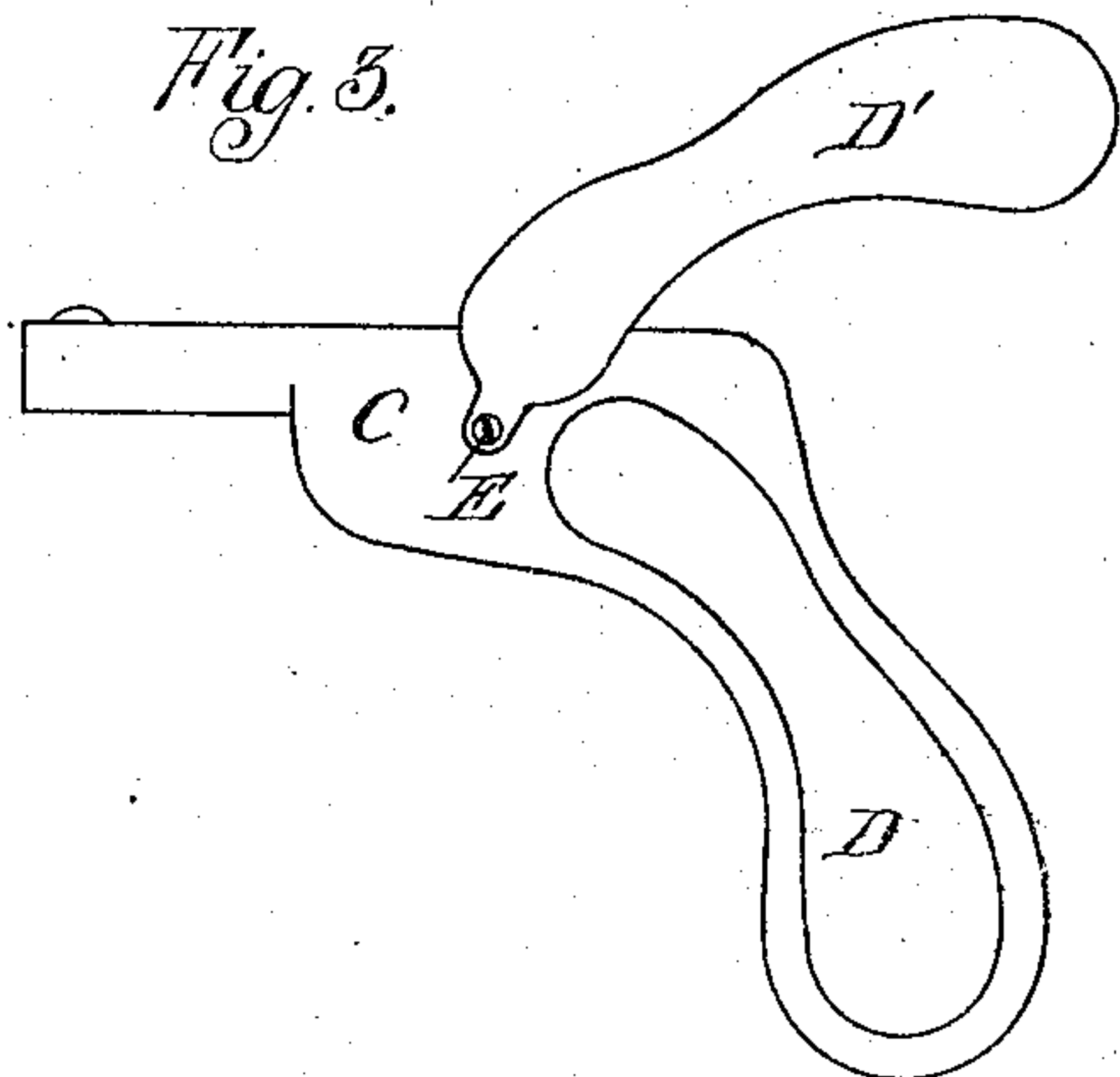
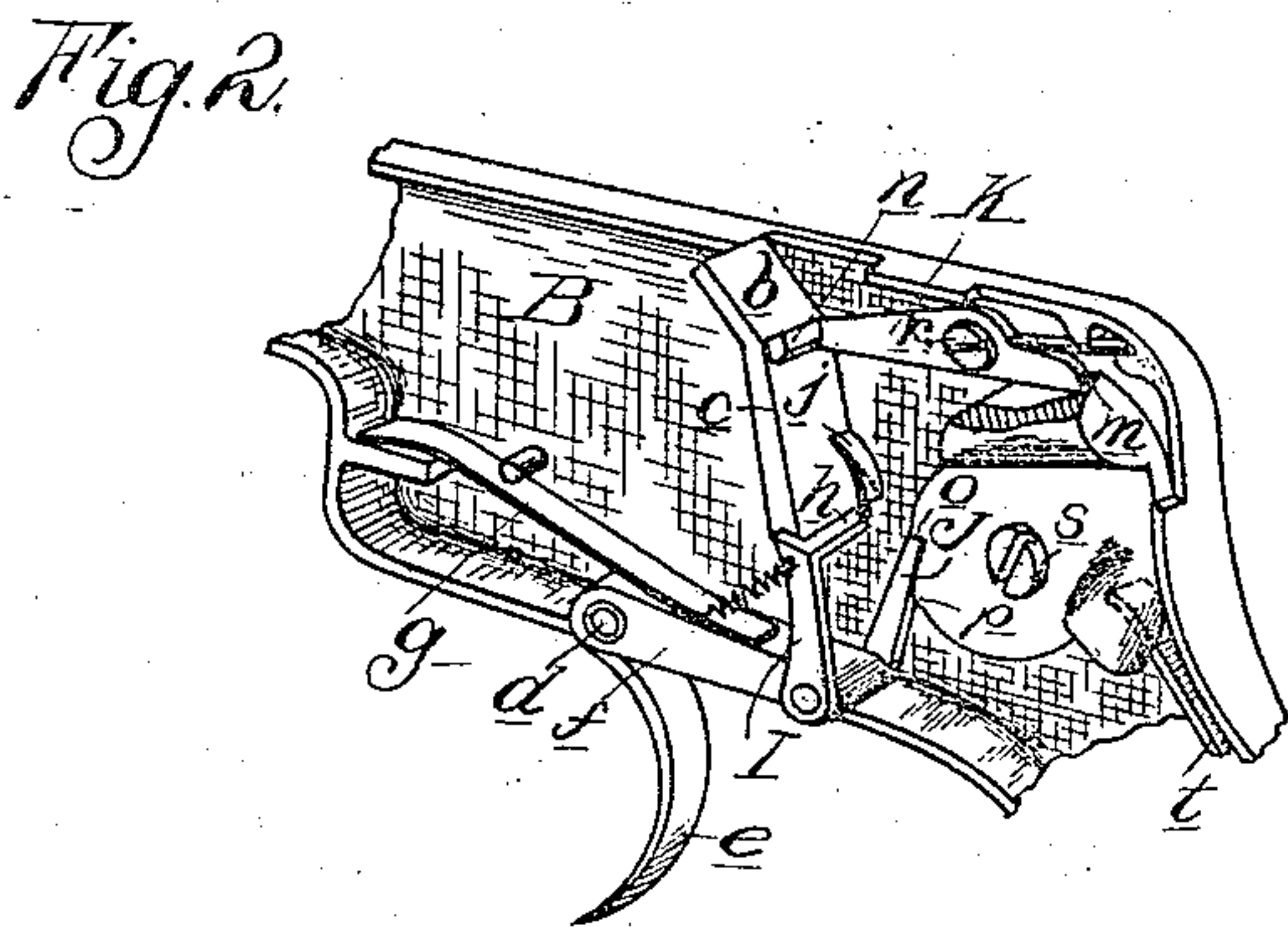
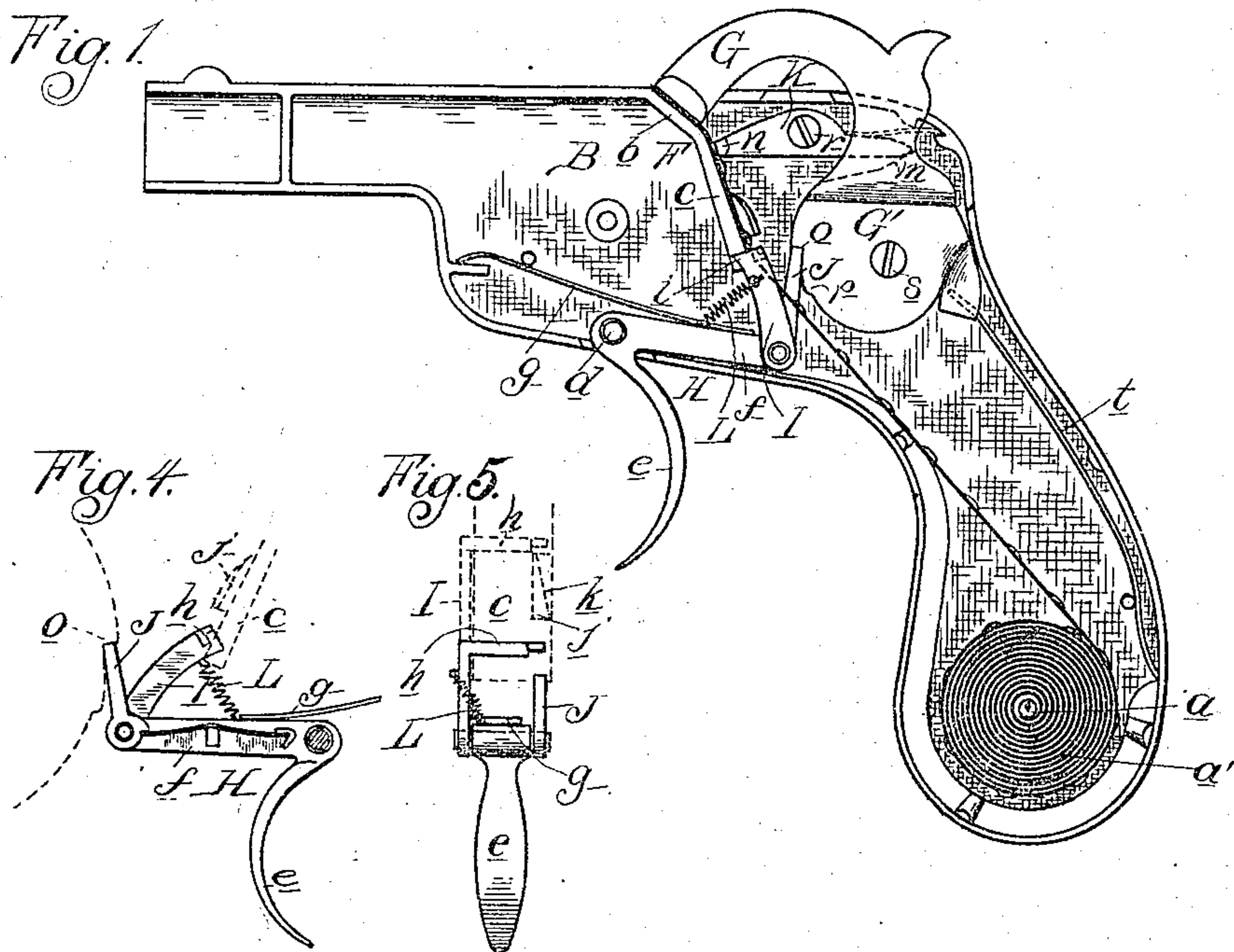
Patented Aug. 8, 1899.

**L. BUEHLER.**

**TOY PISTOL.**

(Application filed Dec. 19, 1898.)

(No Model.)



Witnesses;

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# UNITED STATES PATENT OFFICE.

LOUIS BUEHLER, OF DETROIT, MICHIGAN.

## TOY PISTOL.

SPECIFICATION forming part of Letters Patent No. 630,775, dated August 8, 1899.

Application filed December 19, 1898. Serial No. 699,633. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS BUEHLER, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Toy Pistols, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention belongs to that class of toy pistols in which a continuous strip of tape is employed to feed an explosive under the hammer; and it consists in the construction, arrangement, and combination of the various parts by which the trigger operates the hammer and feeds the tape simultaneously therewith and whereby I am enabled to make a simple and reliable device that is sure in its operation, all as more fully hereinafter described, and shown in the accompanying drawings, in which—

Figure 1 is a side elevation of the pistol with one-half of the casing removed, illustrating the interior parts. Fig. 2, is a perspective view of the operating parts of the pistol, the hammer being broken away. Fig. 3 is a diagrammatic side elevation showing the movable slide for the insertion of a new strip of tape. Fig. 4 is a detached side elevation of the trigger and operating-pawls, looking from the reverse side of Fig. 1. Fig. 5 is an end view of Fig. 4, looking from left to right.

The casing is composed of a hollow shell made in imitation of the shape of a pistol and is composed of two separable halves B C, secured together by means of a screw E, the part B containing all the working parts and with the part C forming a housing for the same. The part C has formed in the grip portion an opening D, (for the insertion of a new strip of tape,) provided with a suitable cover D', pivotally secured by means of the screw E.

In the grip portion of the casing B is a pin *a* for engaging thereon a roll of tape *a'*, and in the body portion, cast integral with the casing B, is the double inclined partition-wall F, the upper portion of which forms the anvil *b*, against which the hammer G is adapted to strike. The lower portion of this partition forms the feed-table *c*. Below the feed-table and forward of the same is pivotally se-

cured at *d* in the casing the trigger H, formed with the usual finger-piece *e* and the trigger-arm *f*, provided with the usual retracting-spring *g*.

To the free end of the trigger-arm *f* are pivotally secured the feed-pawl I and hammer-actuating pawl J.

The feed-pawl I is loosely pivoted, so that in addition to being free to oscillate upon its pivot in a plane at right angles to the axis thereof it is also capable of being slightly oscillated in the plane of the feed-table.

The feed-pawl I has at its upper end a finger *h*, extending across the feed-table, and a guide-lug *i*, adapted to travel along the exposed edge of the feed-table *c*.

L is a spring adapted to draw the finger *h* of the feed-pawl I against the face of the feed-table and by means of its angular pull to hold the guide-lug *i* in contact with the exposed edge thereof.

Upon the rear wall of the casing in the path of the free end of the finger is formed a cam-lug *j*, having an inclined cam-groove *k*, into which the free end of the finger *h* is adapted to engage in its upward movement, as more fully hereinafter described.

G is the hammer of usual construction, having its body portion G' pivoted within the casing by means of a screw *s*. It is provided with the usual actuating-spring *t*, secured within the grip portion.

K is a spring-pressed pawl pivoted in the upper part of the casing by means of a screw *r* and having a clamping-foot *n*, extending across the upper end of the feed-table *c* and adapted to clamp the tape thereon.

An inclined cam *m* is formed on the rear face of the hub portion of the hammer, by means of which the pawl K is adapted to be operated in conjunction with its spring.

J is a spring-pressed hammer-actuating pawl, as plainly shown in Fig. 4, and *o* is a shoulder on the hub of the hammer with which said pawl is adapted to engage.

P is an eccentric projection below the shoulder *o* and adapted in the operation of the parts to disengage the pawl J from its engagement with the hammer.

Having now fully described my invention, it is intended to operate as follows: A roll of tape being inserted into the pistol and its free



end passed upwardly over the feed-table, as shown in the drawings, a pull upon the trigger actuates the feed-pawl I, the hammer-actuating pawl J, and the clamping-pawl K simultaneously in such manner that the feed-pawl feeds a portion of the tape equal to the distance between the explosives thereon upwardly under the hammer while the hammer and clamping-pawl are being raised. At the proper moment the pawl J disengages from the hammer, which then explodes the explosive on the tape. In the upward movement of the pawl I the finger *h* engages with its free end in the cam-groove, which being inclined crowds it slightly outwardly until the top of the groove is reached, when by reason of the pull of the spring L it will be drawn inwardly again, so that when the trigger is released the arm of the feed-pawl will be compelled to ride back over the top of the lug *j* until it drops into its initial position. The feed-pawl is thus kept out of contact with the tape during its return motion. Simultaneously with the feed-pawl the spring-pressed actuating-pawl J moves downward and engages again under the shoulder *o* on the body portion of the hammer, and the pistol is ready for a second operation.

What I claim as my invention is—

1. In a toy pistol the combination with the casing and tape-roll inclosed therein, of the inclined feed-table formed within the casing for guiding the tape to the hammer, the hammer adapted to strike upon the upper portion of said table, the feed-pawl I having the finger *h* bearing upon the lower portion of the feed-table, the trigger actuating said feed-

pawl, to feed the tape, the cam *j* for guiding the feed-pawl in its return movement, and the spring L angularly connected to the feed-pawl, said feed-pawl being adapted to oscillate in a plane with the axis of its pivot and at right angles thereto.

2. In a toy pistol, the combination with the casing and tape inclosed therein, of the feed-table formed in the casing and upon which the tape is fed to the hammer, the hammer adapted to strike upon the upper portion of said table, the trigger H, the feed-pawl I, and hammer-actuating pawl J operated by the movement of said trigger, the clamping-pawl adapted to clamp the tape upon the feed-table and the cam on the hammer for operating said clamping-pawl.

3. In a toy pistol, the combination of the casing, the tape-roll inclosed therein, the feed-table in the casing adapted to guide the tape under the hammer, the hammer arranged to strike upon the upper portion of said feed-table, the feed-pawl having an arm bearing upon the lower portion of the table and adapted to feed the tape toward the hammer, the clamping-pawl having an arm bearing against the feed-table intermediate between the feed-pawl and hammer, the cam on the hammer for actuating said clamping-pawl, and the trigger actuating the feed-pawl and hammer.

In testimony whereof I affix my signature in presence of two witnesses.

LOUIS BUEHLER.

Witnesses:

OTTO F. BARTHEL,  
D. H. STEFFENS.