(No Model.)

J. K. MEDRICK

TOY PISTOL.

No. 513,193. Patented Jan. 23, 1894.

Fig 1

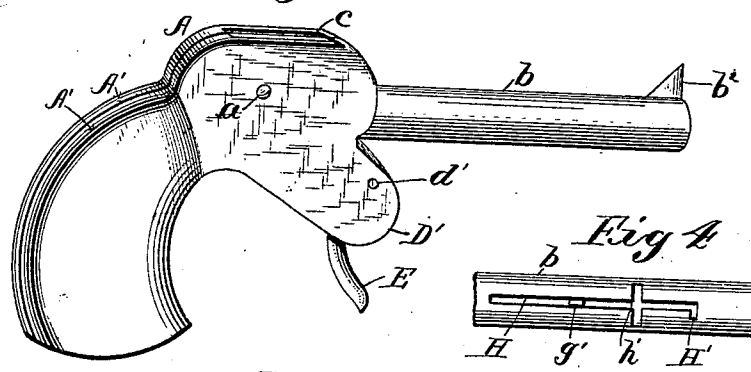


Fig 4

Fig 2

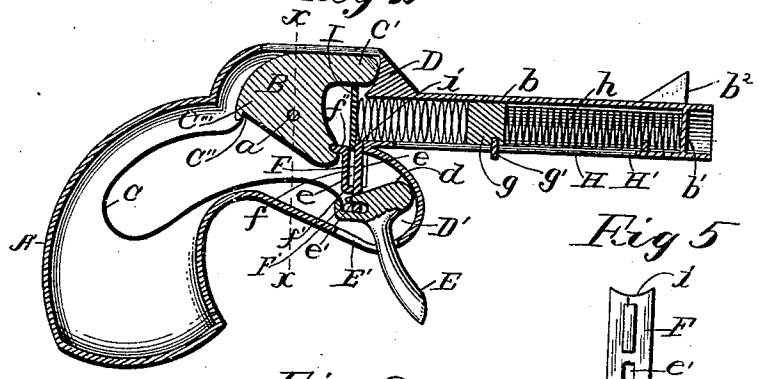


Fig 5

Fig 3

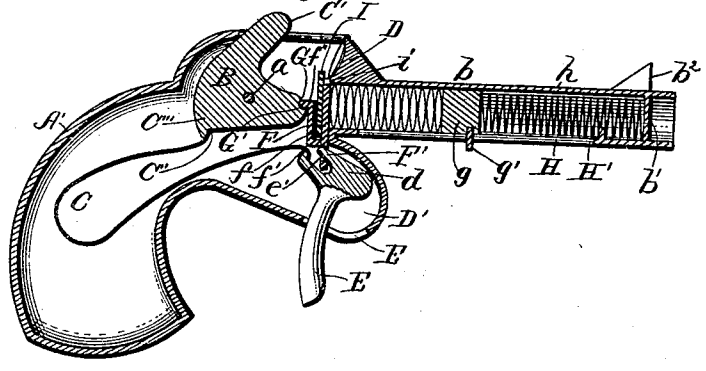
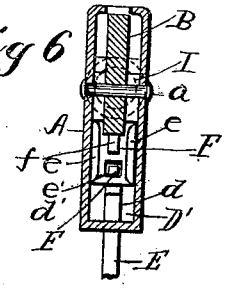


Fig 6



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TOY PISTOL.

SPECIFICATION forming part of Letters Patent No. 513,193, dated January 23, 1894.

Application filed April 6, 1893. Serial No. 469,292. (No model.)

To all whom it may concern:

Be it known that I, JOHN K. MEDRICK, a citizen of the United States, residing at Port Jervis, in the county of Orange and State of New York, have invented certain new and useful Improvements in Toy Pistols; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention has special reference to those toy pistols which are provided with mechanism for effecting a series of reports without recharging, and it contemplates for its object the construction of a more simple, durable, cheap and desirable toy having the above mentioned characteristics, and that one may be cocked and fired by a single movement of the trigger.

To these ends my invention consists of mechanism for raising the hammer and striking the anvil and simultaneously feeding a cap to be exploded, all of which will now be fully described, together with those parts which go to make a complete device, and the novel portions finally embodied in the claim.

Referring to the accompanying drawings which illustrate my invention: Figure 1 represents a perspective view of my complete arrangement; Fig. 2 a longitudinal section; Fig. 3 a longitudinal section showing the operative parts in a different position; Fig. 4 a detail showing a bottom view of the barrel or stock; Fig. 5 a side elevation of the feed detent; Fig. 6 a cross-section on the line X—X, Fig. 2.

The reference letter A indicates the body of the pistol, which is formed in two longitudinal halves A′, A′ securely fastened to each other by means of the horizontally extending pin *a*, which pin serves the additional function of forming the pivot for the hammer B, which will be fully described hereinafter.

b indicates the pistol-barrel which is cast in longitudinal sections like the body and forming a continuation thereof. Arranged in the barrel and forming a part of it, is a bulk-head or stop *b′*. A sight-point *b″* is also provided which is designed to add to the appearance of the pistol, by imitating the usual sight.

The body of the pistol is formed hollow as heretofore, the hollow extending down in the handle, and is designed to receive the actuating spring C. The hammer B is arranged on the pin *a* so that the greater part of it will occur within the pistol-body; only the nose C′ being adapted to work back and forth in the longitudinal slot *c* in the upper portion of the pistol. The hammer is substantially tri-angular in shape and is pivoted at a point nearly equi-distant from its several angles. By means of the spring C, which is connected to the angle C‴ of the hammer through the medium of a notch C″, the hammer is given a normal tendency to bear against the anvil D, as in other pistols of its class.

Located in an extension D′ of the pistol-body, is the trigger *d*, which is pivoted in place by means of a pin *d′* cast integral therewith and journaled in openings formed in the sides of the pistol. The thumb-piece E of the trigger projects through a longitudinal opening E′ in the pistol in such a manner that it may be easily accessible to the operator, and it is held as far forward as the slot or opening E′ will allow, by means of the lower end of the spring C, which end fits into a notch in the trigger and owing to its downward tendency, swings the whole trigger on its pivot to the position shown by Fig. 2, which is its normal position.

Working in vertical guides *e* formed integral with each section of the pistol-body, is a cap-feeding plate or plunger F, having its lower end formed with an opening *e′* therein, which opening receives the stud or pin F′ of the trigger. By this means the plunger F is reciprocated vertically in its guides in unison with the movements of the trigger. It will also be seen that the normal position of this plunger, or that position which it assumes contemporaneously with the normal position of the trigger, is at the lowest point of its downward throw, and that its upper end will at such a time occur at a point below the level of the pistol-barrel.

Formed integral or in rigid connection with the plunger F, is stud *f* projecting out laterally therefrom to the point *f′* where it bends

and then extends vertically and parallel with the plunger, and is provided at its end with a lateral stud f''. This stud is adapted to fit loosely in the notch G of the angle G′ of the hammer, and by way of this connection, the plunger F and stud f, the trigger and hammer are united and the hammer actuated as will appear hereinafter.

Arranged in the hollow portion of the barrel b and movable longitudinally therein, is a slide g, provided at its under side with a stud g', which projects through the longitudinal slot H in the under side of the barrel, and by which the slide is moved along the barrel, a cross slot or indentation H′ being formed at the outer end of the slot into which the stud g' may be fitted so as to hold it in its position. Located in the pistol-barrel between the stop b and slide g, is an expansive coil-spring h which gives the slide a continual tendency to project toward the inner end of the barrel. This fact necessitates the indentation H′ in the slot H, so that the slide may be held at the outer end of the barrel during the recharging operation.

Extending across the slot H at a point adjacent to the indentation H′ and on the side next to the body of the pistol, is a transverse or cross slot h' of a size equal to that of the caps to be used with the pistol. By means of this slot the caps are fed into the barrel of the pistol, which is properly speaking the magazine. All of this however, will fully appear hereinafter.

Formed integral with one of the sections of the pistol-body and adapted when the parts are in place, to occur directly opposite the opening at the inner end of the barrel, is a plate I. This plate is so arranged that a space will be left between it and the barrel for the reciprocation of the plunger F, and the plunger is arranged so that when in its normal position its top will lie directly under or alongside the inner end of the barrel, thereby forming a continuation of the barrel and a support for the pistol-caps which are stored therein. The end i of the plunger F is formed concave, as shown in Fig. 6, so as to present an even and uniform surface to the caps when forced over it by the spring h. When the plunger is in its normal position, the plate I serves to form the inner end of the barrel, and to confine the caps in their place.

The anvil D is formed at the forward extremity of the slot c, above and directly forward the opening in the barrel end. To this anvil the caps are successively fed and fired as will now be explained.

To charge the pistol-magazine (the barrel serves this function) the slide g is moved longitudinally in the barrel against the tendency of the spring h, by means of the stud g', and locked temporarily in its extended position by means of the stud g' and indentation H′. The pistol barrel is then pointed upward and the caps fed thereinto by way of the cross-slot h'. From this point they gravitate down the barrel and rest on the plate I. When the barrel has been filled, the slide f is released and allowed to engage the caps in the barrel, whereby they are pressed against the plate I preparatory to being fed to the anvil b. To fire one of the caps, the thumb-piece E of the trigger is pulled back toward the handle of the pistol. This will be followed by the rising or vertical movement of the plunger F and stud f. As the plunger F moves upwardly through the space occurring between the plate I and the end of the barrel, its concave end i will engage the end of the cap nearest the plate I, and will, as it continues upward, carry the cap, with it and finally push it entirely out of its seat in the barrel, lifting it to the position shown by Fig. 3. Simultaneously with this operation, the hammer B will be swung on its pivot against the tendency of the spring C, by means of the stud f, which, forming a part of the plunger F, moves with it, and owing to the stud's connection with the trigger, will tend to swing the nose of the hammer back as shown in Fig. 3. This will occur contemporaneously with the lifting of the cap by the plunger F. When the shoulder f' of the stud f, has moved vertically so that it will engage the lower edge of the plate I, the upward movement of the plunger F has reached its limit. Directly prior to this condition the rear portion of the nose C′ of the hammer B, will have engaged the end of the slot nearest the pistol handle, thereby arresting its further movement. The stud f however, continues to move upwardly and finally slips out of the notch G. This releases the hammer and the retractile force of the spring C operates to throw it forward and against the anvil with force sufficient to explode the cap. During this operation, viz: the forward stroke of the hammer, the plunger F remains in its extended position long enough to hold the cap on the anvil before exploded by the hammer, after which it is returned to its normal position by releasing the trigger and allowing the lower end of the spring C to return it. As the hammer-nose passes over the plunger F it carries with it the cap which the plunger has lifted, and proceeds with it until the anvil b has been reached, whereupon the cap is exploded owing to the concussion occasioned by the violent contact of the hammer with the anvil. This is, however, well understood and requires no further description.

It is essential to a thorough understanding of the functions of my invention that it be borne in mind that the operations of the hammer and feed-plunger F are concurrent, and that the cap is no sooner poised on the concave end i of the plunger, than it is carried away and against the anvil by the hammer when on its forward course and under the influence of the spring C.

Immediately after the first cap has been exploded, the parts assume their normal position and will be ready for a second report,

which of course is effected by the process described in connection with the first. From this it will be apparent that the pistol may be fired as fast as the trigger can be pulled and released, and that when the magazine has been emptied it can be renewed as before explained.

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

In a toy pistol, the combination with a cap-magazine, of a hammer, a spring for normally keeping the hammer on its anvil, a trigger, a vertically reciprocating plunger operating with the trigger and adapted to pass into the cap-magazine and present a cap to the anvil, and a detent projecting from the plunger and connected to the hammer, whereby upon the reciprocation of the plunger the hammer is lifted from its anvil against the tendency of its spring and finally allowed to return under its influence, substantially as specified.

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

JOHN K. MEDRICK.

Witnesses:
BARCLAY S. MARSH,
EDGAR J. BARRETT.