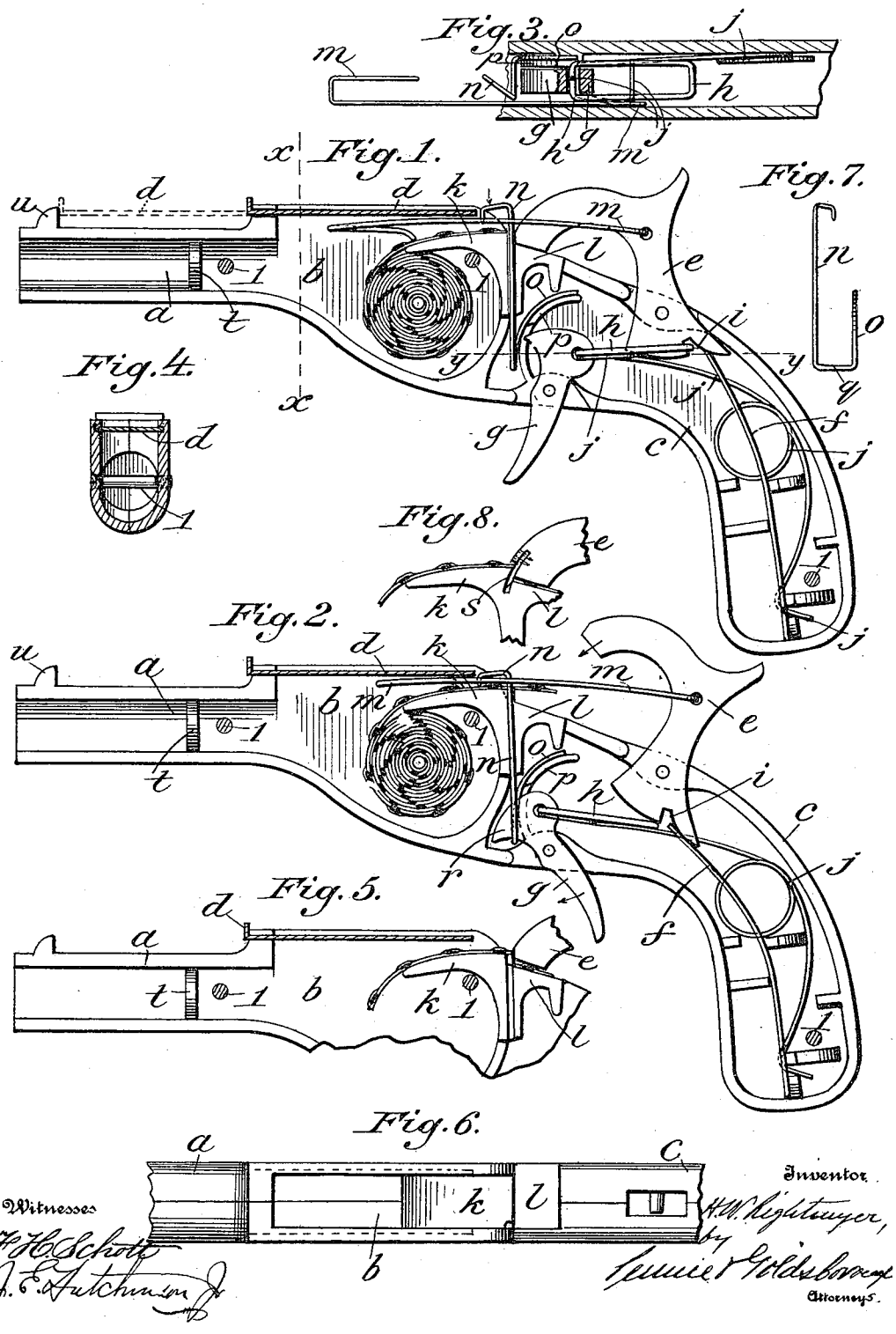
No. 624,543. Patented May 9, 1899.

H. W. RIGHTMYER.

TOY PISTOL.

(Application filed Mar. 3, 1898.)

(No Model.)



Witnesses
F. H. Schott
J. E. Hutchinson Jr.

Inventor
H. W. Rightmyer,
by Jennie & Goldsborough
Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HOMER W. RIGHTMYER, OF ROWLESBURG, WEST VIRGINIA.

TOY PISTOL.

SPECIFICATION forming part of Letters Patent No. 624,543, dated May 9, 1899.

Application filed March 3, 1898. Serial No. 672,375. (No model.)

To all whom it may concern:

Be it known that I, HOMER W. RIGHTMYER, a citizen of the United States, residing at Rowlesburg, in the State of West Virginia, 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 invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of the invention is to provide a simple, inexpensive, and efficient magazine toy pistol, and the pistol herein illustrated also includes mechanism whereby it is made self-cocking or double-acting. The only ammunition employed is a strip or roll of fulminate patches, and the improvements relate particularly to, first, the means for automatically feeding this strip as the hammer rises; second, the means for holding the strip against retrograde movement as the hammer falls; third, the means for preventing the explosion of that one of the fulminate patches which is on the anvil from igniting those on the strip which have not yet reached the firing-point, and, fourth, the self-cocking mechanism.

The invention is shown in the accompanying drawings, wherein—

Figures 1 and 2 are central longitudinal sections, the latter showing the hammer cocked and the former showing it uncocked. Fig. 3 is a section of Fig. 1 on the line *y y*, and Fig. 4 is a section on the line *x x*. Fig. 5 is a detail showing the relation of the bridge over which the fulminate-strip feeds to the anvil where the patches are exploded. Fig. 6 is a top plan view, the magazine-slide being removed. Fig. 7 is a detached view of the strip-holder; and Fig. 8 shows a cutter which may be secured to the hammer, if desired, to more effectually cut the fulminate-strip.

The frame of the pistol, including the barrel *a*, the magazine *b*, and the handle *c*, is made in halves lengthwise the toy, as indicated in Figs. 4 and 6, and these halves are permanently secured together after the working parts have been put in place by rivets 1 1 1, as shown in Figs. 1 and 2.

The magazine is covered by a slide *d*, which may be drawn forward, as indicated in dotted lines in Fig. 1, to allow access to the interior for loading, &c.

The ammunition consists of the ordinary strip of fulminate patches commonly used in this class of toys. It is wound into a coil and placed loosely in the magazine, as illustrated in the first and second figures.

The pistol is a double-acting one and is made self-cocking by the following means: The hammer *e* has a heel below its pivot, against which the mainspring *f* reacts, as usual. The trigger *g* has an extension above the pivot and is provided with a rearwardly-extending link *h*, which is adapted to engage a notch *i* in the heel of the hammer when the latter is down. This link rests upon the top of the trigger-spring *j*, which holds it up and causes it to snap into the notch *i* when the trigger is released after the hammer has fallen. The action of these devices is clearly illustrated in Figs. 1 and 2, the former of which shows the normal position of the parts and the latter the position after the hammer has been cocked and is about to fall.

The fulminate-strip is drawn (by mechanism to be presently described) over the face of a bridge *k* as it unwinds from the roll, and the caps or patches are exploded upon an anvil *l*, which is located slightly below the level of the bridge. Two results are obtained by this arrangement—first, the front end of the hammer shears against the edge of the bridge and cuts off the patch that is being fired from the rest of the strip, and, second, the end of the hammer fits against the shoulder between the bridge and the anvil and prevents the flame from the exploding patch or cap from being communicated to those on the strip in front. I regard this as an important feature, for should the explosion of one cap set off any or all the others the pistol would be practically useless as a magazine-pistol. The strip is fed over the bridge *k* by means of a hook *m*, having a backwardly-bent and sharpened point. This hook is connected to the hammer above its pivot and is arranged to engage directly with the fulminate-strip while it is on the bridge. The advantage of this arrangement is that the strip is fed exactly the same distance at every rise of the hammer, no matter how large or small the roll, and the fulminate patches are always accurately placed on the anvil in position to be struck by the hammer. The feeding-hook catches

in the strip between the patches as the hammer is cocked, and it yields freely and passes over the patches as the hammer falls. As the strip-feeding hook drags over the strip when the hammer falls, it might cause some retrograde movement of the strip; but I provide a strip stop or holder *n*, which is normally out of action and comes into play when the hammer is about to fall and holds the strip on the bridge until the trigger is released. It also acts to hold the fulminate patches in position on the anvil, so that the hammer cannot miss them. The form of this holder is shown in Fig. 7, and its location and arrangement are seen in Figs. 1 and 2. It has a curved spring extension *o*, which bears against a curved part *p* of the frame, so that the spring of the part *o* tends to keep the holder in a raised position and its point elevated above the strip, as seen in Fig. 1. The bend *q* at the lower end of the holder is engaged by the nose *r* of the trigger when the latter is pulled, and this draws the holder down into the position shown in Fig. 2, which holds the strip and effectually prevents any retrograde movement while the hammer is falling. As soon as the trigger is released the holder rises and the strip is free to be fed forward again. The end of the holder is so bent and located that it does not engage the fulminate patches, but acts on the strip between the patches.

If desired, the forward end of the hammer may be provided with a knife *s* for the purpose of cutting the patches of fulminate from the strip as fast as they are exploded. A partition *t* forms the front end of the barrel into a convenient holder for shooting crackers, fuses, or torches, and the sight *u* prevents the slide from being drawn clear out and being lost.

Having thus described the invention, what I claim is—

1. The combination of the bridge over which the fulminate-strip is drawn, the hammer, and the strip-feeder connected to the hammer and engaging the strip in advance of the hammer.

2. The combination of the bridge over which the fulminate-strip is drawn, the hammer, the strip-feeder connected to the hammer and engaging the strip in advance of the hammer, and the holder operated to prevent retrograde movement of the strip when the hammer falls.

3. The combination of the bridge over which the fulminate-strip is drawn, the hammer, the trigger connected to the hammer below its pivot, and the strip-feeder connected to the hammer above its pivot and engaging the strip in advance of the striking-point of the hammer.

4. The combination of the bridge over which the fulminate-strip is drawn, the hammer, the strip-feeder connected to the hammer and engaging the strip, the trigger, and the holder operated by the trigger, and acting to prevent retrograde movement of the strip when the hammer falls.

5. The combination of the bridge, the anvil, the hammer, and the strip-feeder connected to the hammer and engaging the strip, the anvil being located below the bridge so as to prevent the explosion from igniting the fulminates on the bridge.

6. The combination with the bridge over which the fulminate-strip is drawn, of a hammer, and a strip-feeder connected to the hammer, with its free end over the bridge, and adapted to engage the strip in advance of the hammer.

7. The combination with the bridge over which the fulminate-strip is drawn, of a hammer and a strip-feeder connected to the hammer and engaging the strip in advance of the hammer, a trigger and a holder actuated by the trigger for preventing retrograde movement of the strip when the hammer falls.

8. The combination with the hammer, the mainspring, and a trigger and spring-actuated link for cocking the hammer, of a holder actuated by the trigger for holding the fulminate-strip against movement while the hammer is falling.

9. The combination of the hammer, the mainspring engaging the hammer, the trigger, the trigger-spring, the notch in the heel of the hammer below its pivot, and the horizontally-arranged link pivoted to the trigger and supported on the trigger-spring, and engaging the hammer-notch when the hammer is down and acting to cock the hammer when the trigger is pulled.

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

HOMER W. RIGHTMYER.

Witnesses:
C. W. WISNER,
WM. W. VARNEY.