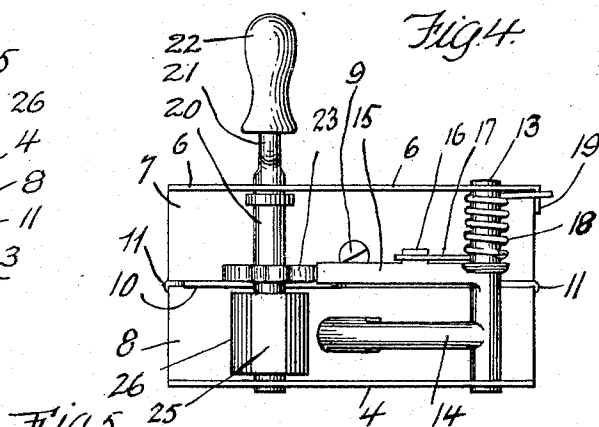
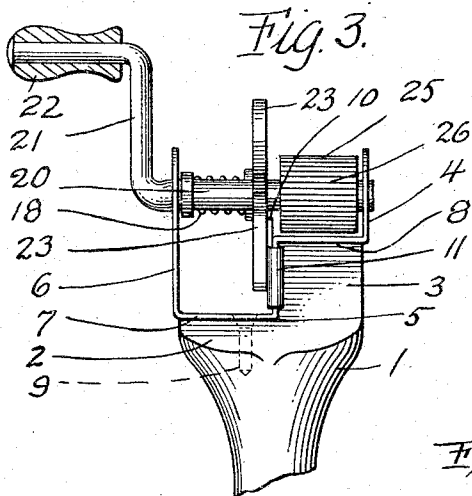
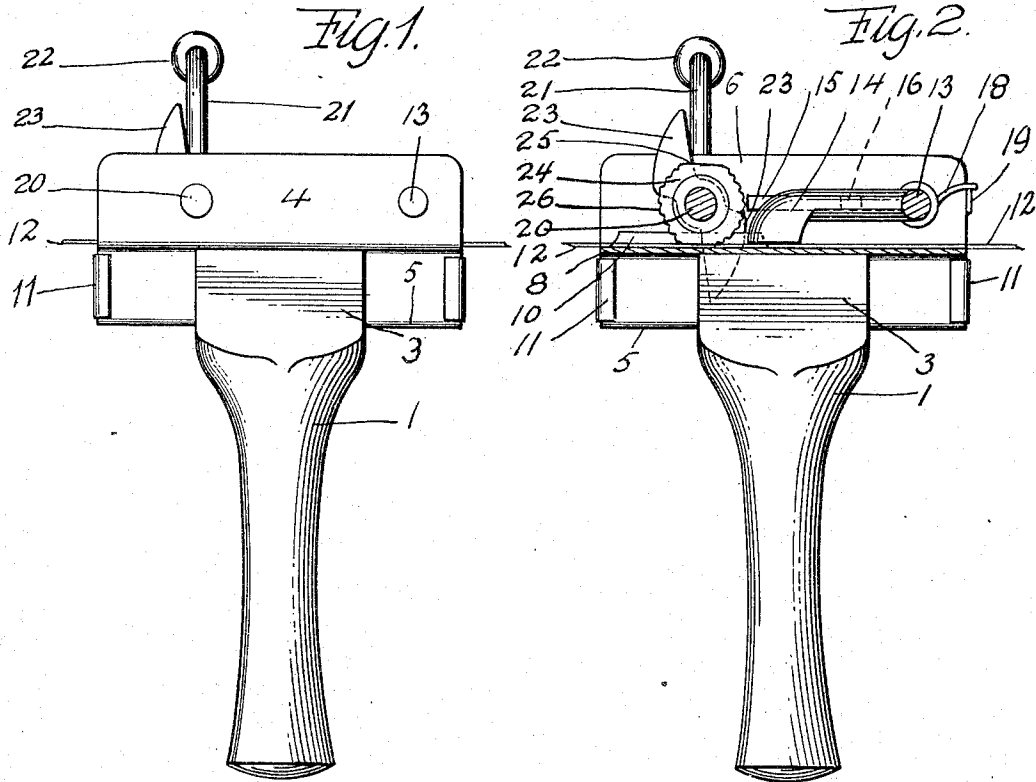


W. A. BERBIG.  
RAPID FIRING TOY GUN.  
APPLICATION FILED AUG. 7, 1909.

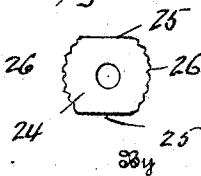
947,032.

Patented Jan. 18, 1910.



Witnesses

Samuel Payne  
A. H. Ratsoig



Inventor  
W. A. Berbig.

A. C. Everett & Co.  
Attorneys.

# UNITED STATES PATENT OFFICE.

WILLIAM A. BERBIG, OF ROCHESTER, PENNSYLVANIA.

## RAPID-FIRING TOY GUN.

947,032.

Specification of Letters Patent.

Patented Jan. 18, 1910.

Application filed August 7, 1909. Serial No. 511,798.

*To all whom it may concern:*

Be it known that I, WILLIAM A. BERBIG, a citizen of the United States of America, residing at Rochester, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Rapid-Firing Toy Guns, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to rapid-firing toy guns, and the invention has for its object to provide a toy that can be safely used by children for firing caps or prepared charges of powder.

Another object of the invention is to provide a toy with a spring pressed hammer and novel means for successively elevating and releasing said hammer.

A further object of the invention is to provide a toy gun with simple and effective means for feeding a strip of caps into position to be detonated.

A still further object of the invention is to accomplish the above results by a toy gun that is simple in construction, inexpensive to manufacture and efficient for the purposes for which it is intended.

The above objects are attained by a toy gun that can be advantageously used on the 4th of July and other celebrations, and in order that my invention can be fully understood, reference will be had to the drawing forming a part of this specification, wherein,

Figure 1 is a side elevation of the toy gun, Fig. 2 is a longitudinal sectional view of the same, Fig. 3 is a front elevation of a portion of the gun, Fig. 4 is a plan of the same, and Fig. 5 is an end view of a detached feed roller used in connection with the toy gun.

In the drawings, 1 denotes a handle having the upper end thereof provided with a head 2. One side of the head 2 is provided with a longitudinal enlargement or raised portion 3 and mounted upon the head 2 and the enlargement 3 thereof is a longitudinal metallic casing, comprising longitudinal side walls 4, 5 and 6 connected by integral bottom plates 7 and 8. The longitudinal wall 5 is parallel with the lower half of the wall 6 and joins the bottom plate 7 with the bottom plate 8. The longitudinal wall 4 is parallel with the upper half of the wall 6, and the bottom of the casing in cross section conforms to the head 2 of the handle 1. The bottom plate 7 of the casing is secured to the head 2 by a screw 9 or similar fastening

means, and clamped to the ends of the wall 5 is a guide plate 10, said plate having the ends thereof bent around the ends of the wall 5, as at 11. The upper edge of the plate 10 extends above the bottom plate 8 and together with the wall 4 forms a channel for a strip of caps 12.

Pivotaly mounted in the walls 4 and 6 at one end of the casing is a transverse shaft 13, which is provided with a forwardly extending hammer 14 and a forwardly extending arm 15, said arm being provided with a side lug 16 adapted to be engaged by the end 17 of a coil spring 18 encircling part of the shaft 13. The opposite end of the coil spring 18 bears upon a right angular lug 19 carried by the end of the wall 6 adjacent to said shaft. The tension of the coil spring 18 is sufficient to normally maintain the end of the hammer 14 in engagement with the bottom plate 8.

Revolubly mounted in the side walls 4 and 6 is a shaft 20 having one end thereof extending beyond the wall 6 and provided with a crank 21 and a revoluble handle 22. That portion of the shaft 20 longitudinally alining with the arm 15 is provided with two oppositely disposed beveled cams 23 adapted to successively engage the under side of the arm 15 when the shaft 20 is revolved, said cams elevating the arm 15 and releasing the same whereby the hammer 14 of the transverse shaft 13 will repeatedly strike the strip of caps 12 located upon the bottom plate 8.

To intermittently move the strip of caps 12 upon the bottom plate 8, the crank shaft 20 is provided with a feed roller 24 directly above the plate 8, said feed roller having oppositely disposed flattened sides 25, and oppositely disposed corrugated or roughened sides 26, the object of which will presently appear. It is in connection with this roller that I reserve the right to use a rubber sleeve upon the roller to obtain a degree of friction in connection with the strip of caps 12.

By rotating the shaft 20 the strip of caps 12 can be fed under the roller 24 to the hammer 14, and the flattened sides 25 of the roller are adapted to release the strip of caps while the hammer 14 is in engagement with said strip, thus obviating all danger of the strip being torn by rotating the shaft 20 while the hammer is in engagement with the strip. The corrugated or roughened op-

positely disposed sides 26 of the roller are adapted to intermittently feed and correctly position the strip of caps 12, whereby that portion of the strip beneath the cap will be placed beneath the hammer.

It is apparent that when a long strip of caps is provided and fed into the gun that a rapid rotation of the shaft 20 will cause successive detonations that will sound as though an ordinary repeating gun was being used.

It is thought that the operation of my toy is apparent without further description, and while in the drawings there is shown what I believe to be a practical embodiment of my invention I reserve the right to make various changes without departing from the scope of the invention.

Having now described my invention what I claim as new, is:

1. A toy gun, comprising a handle, a casing mounted upon the upper end of said handle, a spring pressed hammer movably mounted in one end of said casing, a crank shaft revolubly mounted at the opposite end of said casing, oppositely disposed cams carried by said shaft and adapted to intermittently elevate said hammer, and a feed roller carried by said shaft for intermittently feeding a strip of caps beneath said hammer, said roller having oppositely dis-

posed flat faces and oppositely disposed roughened faces.

2. A toy gun, comprising a handle, a casing carried by said handle and having longitudinal walls connected by bottom plates, a guide plate fastened to one of said longitudinal walls and coöperating with another longitudinal wall to form a channel for a strip of caps, a transverse shaft pivotally mounted in two of said walls, a forwardly extending hammer carried by said shaft, a forwardly extending arm carried by said shaft, a coil spring arranged upon said shaft and adapted to engage said arm and normally maintain said hammer in engagement with the bottom plate forming part of the guide channel, a crank shaft journaled in the same side walls, oppositely disposed cams carried by said shaft and adapted to engage said arm for intermittently raising said hammer, and a roughened feed roller mounted upon said crank shaft and adapted to intermittently feed a strip of caps beneath said hammer, substantially as described.

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

WILLIAM A. BERBIG.

Witnesses:

HERBERT DAMAN,  
FERNAND WALKER.