

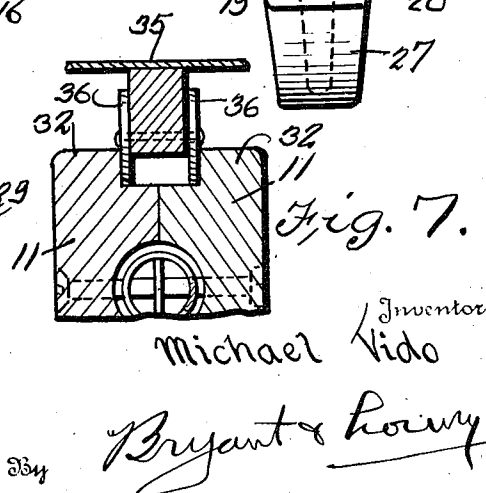
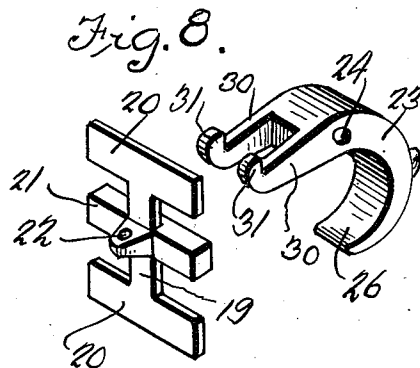
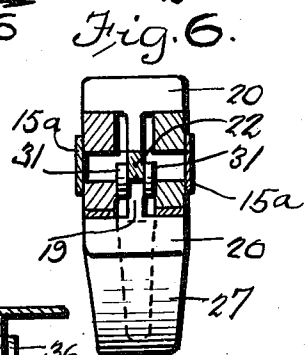
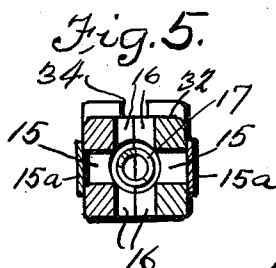
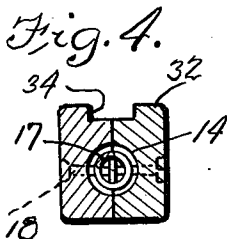
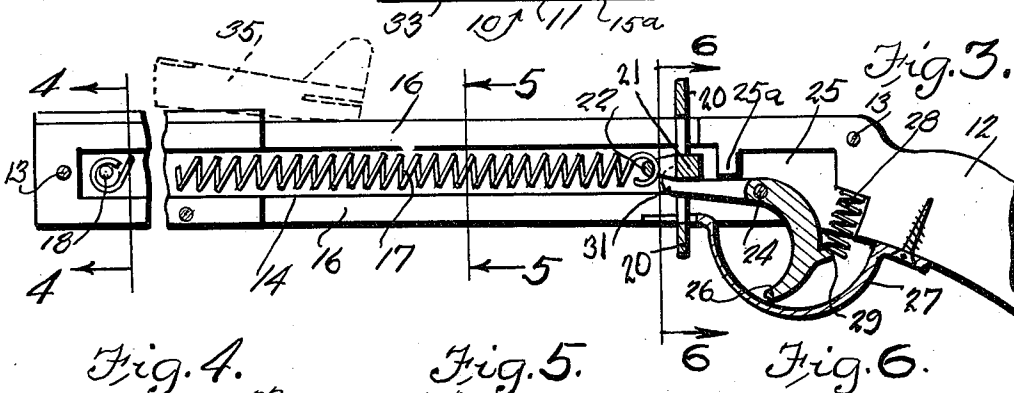
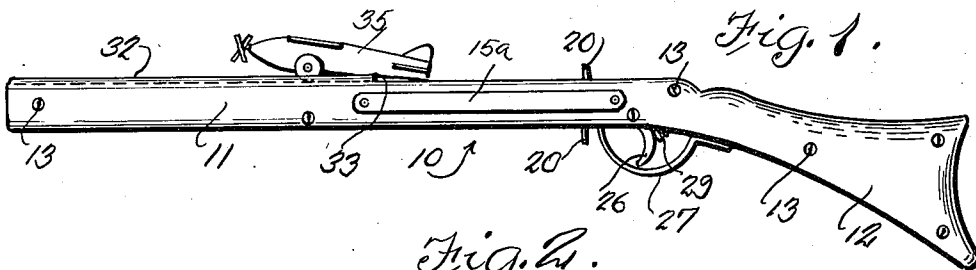
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M. VIDO

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TOY AIRPLANE PROJECTOR GUN

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Inventor
Michael Vido

Bryant & Lowry

Attorneys

UNITED STATES PATENT OFFICE

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TOY AIRPLANE PROJECTOR GUN

Michael Vido, Hopelawn, N. J.

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1 Claim. (Cl. 124—12)

This invention relates to certain new and useful improvements in toy airplane projector guns.

The primary object of the invention is to provide a toy airplane projector gun wherein a tensioned projector device carried by the gun and trigger controlled in its operation is adapted to be forcibly engaged with a toy airplane supported on the barrel of the gun for the aerial projection thereof.

10 A further object of the invention is to provide a toy airplane projector gun of the foregoing character wherein the toy airplane embodies a pair of supporting wheels disposed in a guide groove in the upper side of the gun barrel with the guide
15 groove of tapering formation in a direction toward the gun stock and widening toward the muzzle end of the gun whereby the toy airplane wheels may be moved into semi-binding engagement with the walls of the groove to prevent accidental displacement of the toy airplane during
20 the handling of the gun for the projection thereof.

The invention further embodies novel details of construction in the projector hammer, the manner of tensioning the same and the trigger release therefor.

With the above and other objects in view that will become apparent as the nature of the invention is better understood, the same consists in the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawing and claimed.

In the drawing:—

Figure 1 is a side elevational view of a toy airplane projector gun constructed in accordance with the present invention and illustrating a toy airplane in position thereon to be projected;

Figure 2 is a top plan view of the gun;

Figure 3 is a vertical longitudinal sectional view of the projector gun showing the projector hammer in its retracted and set position with the toy airplane fragmentarily illustrated by dotted lines;

Figure 4 is a cross-sectional view taken on line 4—4 of Figure 3, showing the two-part formation of the projector gun and the anchor means for the forward end of the spring;

Figure 5 is a cross-sectional view taken on line 5—5 of Figure 3;

Figure 6 is a cross-sectional view taken on line 6—6 of Figure 3, showing the projector hammer having finger grips for manual retraction thereof projecting above and below the barrel of the gun;

Figure 7 is a fragmentary cross-sectional view

similar to Figure 4, showing the wheels of a toy airplane confined within the guide groove in the upper face of the barrel; and

Figure 8 is a perspective view of the projector hammer and associated trigger.

The projector gun is of two-part construction, being designated generally by the reference character 10 and comprises two mating sections, each having a barrel portion 11 and a stock 12, secured together by cross pins 13 sufficient in number to securely hold the sections assembled. The innerface of each barrel section adjacent its forward end is provided with a longitudinally extending groove 14 and the inner portion of the barrel section 11 has a side slot 15 extending longitudinally thereof with cut-away portions 16 extending longitudinally of the upper and lower sides thereof as shown in Figure 5.

A coil spring 17 is confined within the barrel section 11 with the forward end thereof extending into the grooves 14 and anchored to the cross pin 18 at the forward end of the barrel while the inner end of the coil spring 17 is secured to a projector hammer. As shown more clearly in Figures 3, 6 and 7, the projector hammer comprises a vertical leg 19 slidable longitudinally of the gun barrel and extending through the cut-away portions 16 with a cross head 20 upon each end thereof respectively disposed above and below the gun barrel and constituting finger grips for the manual retraction thereof to set position. A cross bar 21 is carried by the leg 19 of the projector hammer intermediate the upper and lower ends thereof and extends into the side slots 15 for guiding the movements of the projector hammer. An apertured lug 22 projects from the cross bar 21 intermediate its ends and to which the inner end of the coil spring 17 is attached as shown in Figure 3.

The trigger 23 is pivotally mounted as at 24 within the cut away portion 25 of the two gun sections and has the finger grip 26 projecting below the gun barrel and into the guard 27, the finger grip 26 being tensioned by means of the spring 28 having one end abuttingly engaging the gun stock 12 and the other end engaged with the lug 29 on the finger grip 26 of the trigger. The forward end of the trigger is bifurcated to provide a pair of arms 30, each provided with an upwardly directed hook 31 upon its forward end, the arms adapted to straddle the lower end of the leg 19 in the projector hammer with the hooks 31 engageable with the ends of the cross bar 21 for holding the projector hammer in its retracted position against the tension of the spring 17.

An upstanding rib 32 extends longitudinally of the upper side of the forward end of each barrel section 11, providing a rear abutment shoulder 33 constituting stops for the forward projection of the projector hammer, the adjacent faces of the ribs 32 being inclined as at 34 and divergent toward the forward end of the gun barrel. The toy airplane 35 carries a pair of wheels 36 that ride on the upper face of the barrel between the ribs 32 and said airplane is adapted to be positioned on the gun barrel as shown in Figures 1 and 7 with the side wheels 36 thereof having a semi-binding engagement with the inclined walls 34 of the ribs to prevent accidental displacement of the airplane from the gun during the handling of the latter. However, the frictional engagement between the airplane and gun barrel is insufficient to retard the projecting force of the projector hammer. The forward divergence of the inclined surfaces 34 permits instant separation of the airplane wheels 36 from the inclined surfaces when the airplane is struck by the projector hammer.

The projector hammer is shifted to its set position by gripping the cross head 20 and retracting the same against the tension of the spring 17 to cause the hooks 31 on the trigger arms 30 to be engaged with the cross bar 21 of the projector hammer and upon operation of the trigger 23, the hooks 31 are disengaged from the

projector hammer and the latter is forcibly projected by means of the spring 17 into engagement with the rear end of the toy airplane 35 for the aerial projection thereof. The depending lugs 25a within the gun section limit upward movement of the trigger arms 30 while the side slots 15 are closed by removable side plates 15a.

From the above detailed description of the invention, it is believed that the construction and operation thereof will at once be apparent and while there is herein shown and described the preferred embodiment of the invention, it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

I claim:—

In a toy of the character described, a gun including a barrel and a stock, a tensioned projector hammer slidably mounted longitudinally of the barrel and carrying a finger grip at each end above and below the barrel, a tensioned trigger with which the projector hammer is engageable, a pair of spaced upstanding ribs on the top of the forward end of the barrel with their adjacent faces diverging towards the forward end of the barrel adapted for semi-wedging engagement with a toy airplane mounted therebetween for aerial projection by the hammer.

MICHAEL VIDO. 30