June 16, 1942. P. VINCENT 2,286,700

TOY GUN

Filed March 26, 1941

Fig. 1.

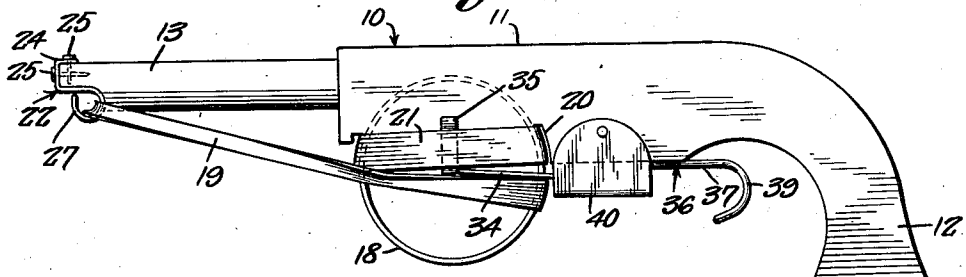


Fig. 2.

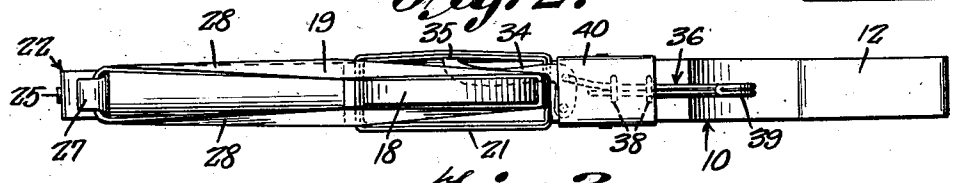


Fig. 3.

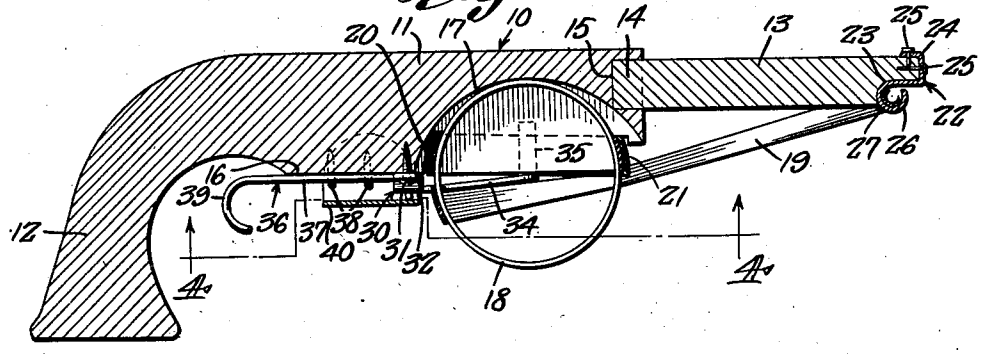
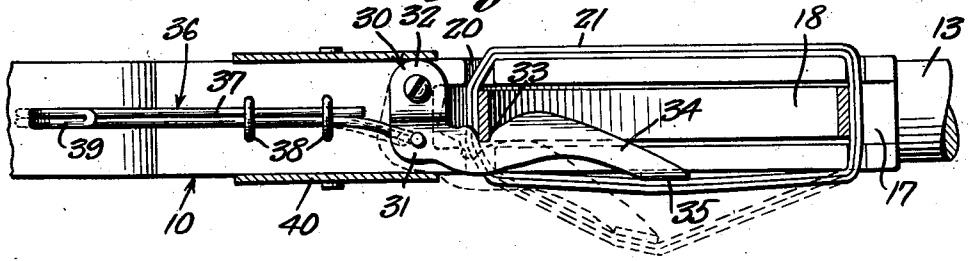


Fig. 4.



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TOY GUN

Perlo Vincent, Gloversville, N. Y.

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4 Claims. (Cl. 124—17)

My invention relates broadly to new and useful improvements in toys, and more particularly to those types of toys adapted to simulate firearms.

An immediate object of my invention is the provision of a toy firearm that is adapted to discharge hoop-shaped missiles or projectiles and that is uniquely constructed to discharge the missile in such a manner that the spin imparted to the missile during its ejection from the firearm will cause the same to return to the user after striking any obstructing object such as a table, a wall, or a floor.

Another object of my invention is the provision of a toy firearm of the above mentioned character wherein the missile is characterized by safeness, the inherently light weight of the missile causing it to strike an obstructing object with negligible force and the inherently springy nature of the hoop causing the same to rebound from the object without, in any way, damaging the same.

Yet another object of my invention is the provision of a toy of the above mentioned character that includes novel means for discharging or projecting the missile, said means propelling the missile directly forwardly of the firearm and acting uniformly thereon to obviate any possibility of deflection thereof either to the right or left, thus assuring its return to the person firing the gun.

A further object of my invention is a provision of a toy firearm of the above mentioned character that includes a novel means for normally holding the missile against casual displacement, said means being efficacious in its action to normally hold the missile against the action of the discharge means and being adapted to substantially instantaneously release the missile when desired.

Other objects and advantages of my invention will be apparent during the course of the following description.

In the drawing, forming a part of this specification, and wherein like numerals are employed to designate like parts throughout the same,

Figure 1 is a side elevation of a device embodying my invention,

Figure 2 is a bottom plan view of the same,

Figure 3 is a longitudinal sectional view thereof, and

Figure 4 is an enlarged fragmentary longitudinal sectional view taken on the line 4—4 of Figure 3.

In the accompanying drawing, wherein for the purpose of illustration, is shown a preferred embodiment of my invention, the numeral 10 designates a toy firearm. The firearm may be formed of any desired shape or size and is here illustrated as being shaped to simulate a revolver or pistol. Any suitable material may be used, however. I have found that it may be satisfactorily fashioned from wood though it is to be understood that any suitable material such as metal, plastic or the like, may be used.

The pistol here illustrated includes a forearm stock portion 11 provided at its rearward end with a handle 12 and at its forward end with a barrel 13. I have here illustrated the barrel as being formed separately from the stock and handle, however, it obviously may be formed integrally therewith, if desired. The stock portion 11 is of essentially rectangular formation in transverse section and the cylindrical barrel 13 has the rearward end 14 thereof seating within a recess 15, provided in the end of the stock, as best illustrated in Figure 3.

The stock portion is formed with a flat lower edge 16 and the arcuate slot 17 formed at the forward end thereof opens through the edge 16 to receive the hoop-shaped missile or projectile 18. The forward end of the slot opens through the front of the stock below the barrel to facilitate the ejection of the hoop by the projector 19. The side walls of the slot 17 are provided with longitudinally spaced transverse grooves 20 and an elastic band 21 is received therein. Thus, parts of the band extend transversely of the slot 17 and parts thereof extend along the outer surfaces of the side walls of the slot. The hoop 18, when inserted into the slot, has its front and rear sides pressed against the transverse portions of the band, which portions frictionally engage therewith to hold the hoop against displacement.

The projector 19 comprises a second elastic band which extends through the bracket 22 mounted on the distal end of the barrel 13. The underside of the barrel is cut away, as at 23, and the essentially U-shaped upper portion 24 of the bracket is fitted to the projecting end of the barrel and fixedly secured thereto by means of the tacks 25, or the like. The arm of the bracket extending into the cut away portion 23 is looped upon itself, as at 26, which looped portion is of a width slightly in excess of the diameter of the barrel to provide an essentially long transverse passage 27 for receiving the projector 19. The projector is pulled rearwardly in the direction of the missile and, after being

essentially stretched, is passed over the portion of the hoop projecting below the stock. When released the projector will thus press against the rearward side of the hoop to urge the forward side thereof against the confronting transverse portion of the band 21. Thus, the side portions 28 and 29 of the projector 19 extend from the passage 27 in converging relation toward the missile 18 whereby the projector will engage only the rearward side of its missile. The counteracting bands 19 and 21 will each engage the missile, the band 21 being pressed against the forward side thereof above the transverse diameter and the band 19 being pressed against the rearward side thereof and below the transverse diameter.

The trigger member 30, mounted on the stock rearwardly of the recess 17, is adapted to normally engage the missile 18 to prevent the projector 19 from discharging the same. The trigger member includes a keeper plate 31 having a laterally offset end 32 pivotally secured to the edge 16 of the stock rearward of the slot 17. The portion 34 of the plate extends from the offset portion forwardly along the edge 16 and laterally of the hoop 18. As best illustrated in Figure 4, the inner edge of the plate is formed with a recess 33 which receives the confronting edge of the hoop and the forward end of the keeper curves outwardly toward the side of the stock. The portion 35 of the plate projecting beyond the side is bent upwardly and inserted between the side of the stock and the overlying portion of the band 21.

A fingerpiece 36 is located rearwardly of the keeper plate and includes a shank portion 37 slidably disposed within the guides 38. The forward end of the shank connects with the plate laterally of its pivot and the rearward end 39 thereof is arcuately bent in a direction away from the stock. If desired, a suitable guard plate 40 may be used to cover the portion of the fingerpiece extending through the guides 38. The curved rearward end 39 is normally disposed forwardly of the handle 12 whereby the user may hold the firearm in the conventional manner and curl his index finger there around.

The resilient action of the band 21 will normally hold the upstanding end 35 of the keeper plate pressed against the side wall of the stock whereby the recess 33 will receive the edge of the projectile to securely hold the same within the slot 17. If, however, the user of the toy tightens his grip on the handle 17 and contracts his index finger, the finger piece 36 will be pulled rearwardly to rock the keeper plate 30 about its pivot until it reaches the dotted line position illustrated in Figure 4 to release the projectile. The upstanding end 35 of the plate will stretch the overlying portion of the band 21 and the resilient action of this portion of the band will immediately return the keeper plate to the initial position upon the release of the fingerpiece. When the keeper plate is in the dotted line position, however, the missile 18 will be released from the recess 33 and the projector 19 may discharge the same from the slot 17.

As hereinabove set forth, the bracket 22 is of greater width than the hoop to permit the projector 19 to release the hoop from the slot without contacting the side edges of the hoop to deflect it to either side. It will be readily apparent that the manner in which the bands 19 and 21 engage the hoop at its front and rear sides and at opposite sides of its transverse diameter will impart an essentially rapid spin thereto when it leaves the slot. This spin will be in the direction of the user of the device whereby, upon impingement of the missile against an obstructing object, the spin will cause the hoop to roll in a reverse direction from its original line of flight and return to the user. The above action will prevail regardless of the position or inclination of the surface struck by the projectile.

The manner in which the band 21 coacts with the keeper plate when in the dotted line position permits the gun to be reloaded in an essentially rapid manner. When the hoop is discharged from the slot 17, the keeper plate will be in the dotted line position and insertion of a second hoop in the slot may be rapidly effected. Release of the fingerpiece will then permit the band 21 to move the keeper plate to the full line position in Figure 4 whereby the recess 33 will receive the hoop to securely hold the same against displacement. The projector band 19 may then be stretched rearwardly and passed over the hoop to render the device fully loaded and ready for firing.

It is to be understood that the form of my invention, herewith shown and described, is to be taken as a preferred example of the same, and that various changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of my invention, or scope of the appended claims.

Having thus described my invention, I claim:

1. A toy comprising a body having a hoop receiving slot, a projector member connected with the body and engageable with a hoop in the slot for projecting the hoop, a trigger member pivotally connected with the body for movement transversely thereof, the said trigger having a hoop engaging notch and an extension disposed at one side of the body, a longitudinally slidable member for actuating the trigger to hoop releasing position, and means resiliently engaging the trigger extension to yieldingly hold the trigger in hoop holding position.

2. A toy comprising a body having a hoop receiving slot, a projector member connected with the body and engageable with a hoop in the slot for projecting the hoop, a trigger member pivotally connected with the body for movement transversely thereof, the said trigger having a hoop engaging notch and an extension disposed at one side of the body, a longitudinally slidable member for actuating the trigger to hoop releasing position, and a band of elastic material fitted about the slotted portion of the body and embracing the side extension of the trigger for yieldingly holding the trigger in hoop engaging position.

3. A toy comprising a body having a hoop receiving slot, a projector member connected with the body and engageable with a hoop in the slot for projecting the hoop, a trigger member pivotally connected with the body for movement transversely thereof, the said trigger having a hoop engaging notch and an extension disposed at one side of the body, a longitudinally slidable member for actuating the trigger to hoop releasing position, a band of elastic material fitted about the slotted portion of the body and embracing the side extension of the trigger for yieldingly holding the trigger in hoop engaging position, and a U-shaped guard member attached to the body and covering the inner portion of the longitudinally movable trigger actuating member.

4. In a toy, a support body having a hoop engaging slot intermediate its ends, a bracket secured to the forward end of the body having a transversely extending tubular portion, an elastic projecting band trained through the said tubular portion of the bracket and engageable with a hoop mounted in the slot of the body, the said tubular portion being of such width that the side reaches of the elastic member will diverge as they extend forwardly from the hoop to the bracket, a trigger pivotally connected to the body operable to releasably hold the hoop in the slot of the body, and means yieldingly holding the said trigger in hoop engaging position.

PERLO VINCENT.