Dec. 7, 1948. T. F. BURTON 2,455,558

ELASTIC BAND PROJECTOR AND CAP EXPLODER

Filed Jan. 7, 1946

Fig. 1

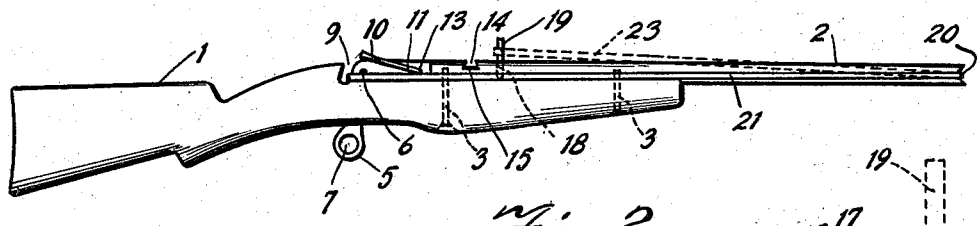


Fig. 2

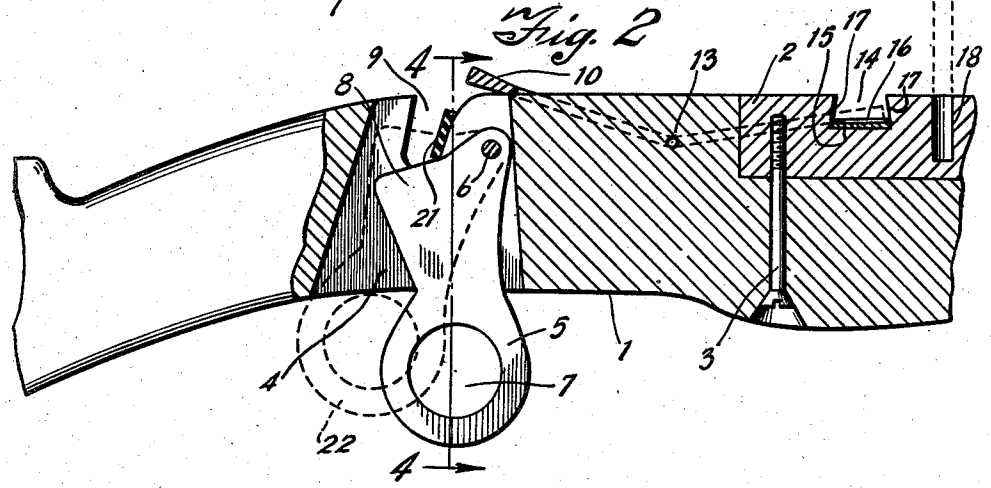


Fig. 3

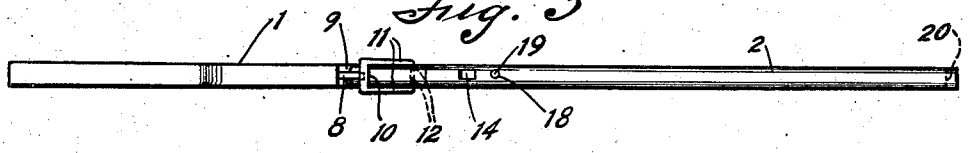
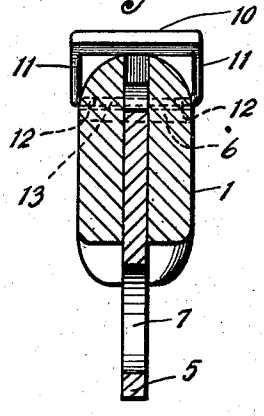


Fig. 4



Inventor

Thomas Fulton Burton

By *Clarence A. O'Brien and Harvey B. Jacobson*

Attorneys

Patented Dec. 7, 1948

2,455,558

UNITED STATES PATENT OFFICE

2,455,558

ELASTIC BAND PROJECTOR AND CAP EXPLODER

Thomas Fulton Burton, Brentwood, Mo.

Application January 7, 1946, Serial No. 639,542

6 Claims. (Cl. 124—2)

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This invention relates to novel and useful improvements and structural refinements in toy guns, and the principal object of the invention is to provide a device of the character herein described, in which the projectile assumes the form of an elastic band.

A further object of the invention is to provide a toy gun which may be used for harmless pleasure without endangering the safety of the user and that of his surroundings.

Another object of the invention is to provide a toy gun which may be employed effectively for the destruction of flies, insects, and the like.

An additional object of the invention is to provide a toy gun, the discharge of which is accompanied by an audible report.

A still further object of the invention is to provide a toy gun in which a provision is made for retaining the discharged band upon the barrel when it is not desired to propel the same through the air.

A further object of the invention is to provide a toy gun which is of simple construction and which cannot easily become damaged.

With the above more important objects in view, and such other objects as may become apparent as this specification proceeds, the invention consists essentially of the arrangement and construction of parts as illustrated in the accompanying drawings, in which:

Figure 1 a side elevation of the invention, showing the same in readiness for use.

Figure 2 is a fragmentary detail thereof, partially broken away to reveal its construction.

Figure 3 is a plan view of the invention, and

Figure 4 is a cross-sectional view taken in the plane of the line 4—4 in Figure 2.

Like characters of reference are used to designate like parts in the specification and throughout the several views.

Referring now to the accompanying drawings in detail, the invention consists of a gun stock 1, configurated essentially as shown and provided at the forward end thereof with a barrel 2. The latter is secured to the stock 1 by means of suitable bolts 3, and both the barrel and the stock may be formed from wood, plastic, or similar other materials.

Provided centrally in the stock 1 is a vertically extending slot 4, designed to receive a trigger 5. The latter is pivotally connected to the stock by means of a transversely extending pin 6, and in addition to a finger receiving eye 7, the trigger 5 is also provided with a projecting shoulder 8.

The upper end of the slot 4 opens into an open-

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ended, transversely extending recess 9, the purpose of which will be hereinafter more fully described.

Pivotally connected to the stock 1 adjacent the breech of the barrel 2 is a U-shaped hammer 10, the legs 11 of which are provided with the inturned portions 12. The latter are rotatably inserted into the ends of an aperture 13, which extends transversely through the stock 1.

The breech of the barrel 2 is provided with a transversely extending, recessed notch 14, on the bottom of which is positioned a metallic impact plate 15. An explosive cap 16, such as is commonly used in conventional toy guns and the like, is removably positioned upon the impact plate 15, and it will be noted that the side walls 17 of the notch 14 are tapered inwardly at the top thereof in order to retain the cap in position.

The breech of the barrel 2 is also provided, forwardly of the notch 14, with an aperture 18 in which is receivable a stop pin 19, hereinafter to be more particularly described.

The forward end, or the muzzle of the barrel 2 is transversely concaved as indicated by the reference character 20, and an elastic band 21 is stretched between the concaved muzzle and the afore-mentioned recess 9.

When the invention is placed in operation, the band 21 is stretched into position and an explosive cap 16 is placed upon the impact plate 15, as has been already described. The hammer 10 should be in the position as indicated by the solid lines in Figure 2, whereupon the gun is in readiness for use.

By releasing the trigger, that is, by pulling it into a position indicated by the phantom lines 22, the shoulder 8 associated therewith will force the band 21 upwardly and disengage the same from the recess 9.

The disengaged band will be propelled forwardly from the forward end of the barrel, and at the same time it will momentarily catch the hammer 10 and project it forwardly into the recessed notch 14. The impact of the hammer against the plate 15 will explode the cap 16, whereby the discharge of the gun will be concurrent with an audible report.

When it is not desired to propel the band 21 through the air upon the discharge of the gun, the stop pin 19 is inserted into the aperture 18 and the band will be caught on the pin as illustrated by the phantom lines 23.

While in the foregoing there has been shown and described the preferred embodiment of this invention it is to be understood that minor

changes in the details of construction, combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

What I claim as my invention is:

1. A toy gun comprising a stock having a breech and a simulated barrel secured thereto, said stock having a vertically extending slot adjacent the breech, a transverse recess at the upper end of said slot, a trigger pivoted to the stock within said slot and having a projecting shoulder which moves partially into said recess upon pivotal movement of said trigger, a U-shaped hammer having legs and a web portion, said legs being pivotally secured to said stock in front of the recess and said web resting on said stock adjacent said recess, an inturned portion at the free end of each of said legs forming a part of the pivotal connection between said legs and said stock, said stock having a transverse aperture therethrough accommodating said inturned portions, said barrel having a notch in the upper side thereof adjacent its breech and opening through the side walls of the barrel, the walls of said notch converging toward the top of the barrel, said hammer web portion resting on said stock between said recess and said notch, an impact plate on the bottom of said notch for receiving an explosive cap removably thereon, said barrel having a concave forward end, said recess and said concave end adapted to have a stretched elastic band seated therein, said projecting shoulder adapted to disengage the stretched elastic band from the lower portion of said recess upon pivotal movement of said trigger, the web of the hammer resting on the stock between said recess and said notch so as to be in the path of an elastic band released from the recess by movement of the trigger, said notch being positioned a proper distance from the pivot point of said hammer so as to receive said web when said hammer is swung forwardly.

2. The combination of claim 1 and means for retaining a band upon said barrel after the disengagement thereof from said recess, said means comprising a removable stop pin projecting upwardly from the breech of said barrel and forwardly of said recessed notch and in the path of a band.

3. A toy gun comprising a stock, a simulated barrel secured thereto, said stock having a slot therein and a recess communicating with said slot for seating an elastic band therein, said slot and said recess terminating at the upper portion of said stock, a trigger pivoted to said stock within said slot and swingable into said recess to urge an elastic band seated in said recess therefrom, a substantially U-shaped hammer having legs and a web, said legs being pivoted to said stock and said web resting on said stock in front of said recess in the path of an elastic band released therefrom, a notch in said barrel spaced from said recess so as to receive the web of said hammer therein at a predetermined pivotal position of said hammer when said hammer is swung forwardly by an elastic band released from said recess, and means in said notch for retaining an explosive means therein.

4. A toy gun comprising a stock and a simulated barrel fixed thereto, said stock having a slot terminating at the top thereof and a recess communicating with said slot extending transversely through said stock and terminating at the top thereof, a notch in the top of said barrel for receiving explosive means therein, said notch being spaced from said recess, a trigger pivoted to said stock within said slot and swingable to a position at least partially within said recess, a hammer pivoted to said stock between said notch and said recess and swingable forwardly to rest in said notch and swingable rearwardly to rest on said stock adjacent said recess, a concavity at the end of said barrel, said recess and concavity adapted to support a resilient element in tension which is engaged by said trigger upon pivotal movement of said trigger to release the resilient element from said recess, a portion of said hammer being in the path of a resilient element released from said recess by movement of said trigger.

5. The combination of claim 4, said barrel having an aperture therein at the top portion thereof between said concavity and said notch, and a pin detachably received in said aperture for retaining an elastic band on said barrel when the band is released from said recess.

6. A toy gun comprising a stock and a simulated barrel fixed thereto, said stock having a slot terminating at the top thereof and a recess communicating with said slot and terminating at the top of said stock, a notch in said barrel at the top thereof and spaced from said recess, said notch having means for retaining an explosive member, a trigger pivoted in said slot and movable to a position partially within said recess, a hammer pivoted to said stock between said recess and said notch and being of such length as to be selectively seated in said notch and on said stock adjacent said recess, a concavity at the end of said barrel, said concavity and said recess being adapted to receive a resilient element so as to be engaged by said trigger upon pivotal movement thereof to release the resilient element from the recess as a projectile and thereby cause said element to strike and urge into said notch a portion of said hammer, which is in the path of travel of a released resilient element, and stop means detachably mounted on said barrel between said notch and said concavity, said stop means extending from the top of said barrel and positioned in the path of the resilient element when said resilient element is released.

THOMAS FULTON BURTON.

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