G. A. WILBUR.

TOY PISTOL.

APPLICATION FILED FEB. 5, 1921.

1,395,072. Patented Oct. 25, 1921.

Fig. 1

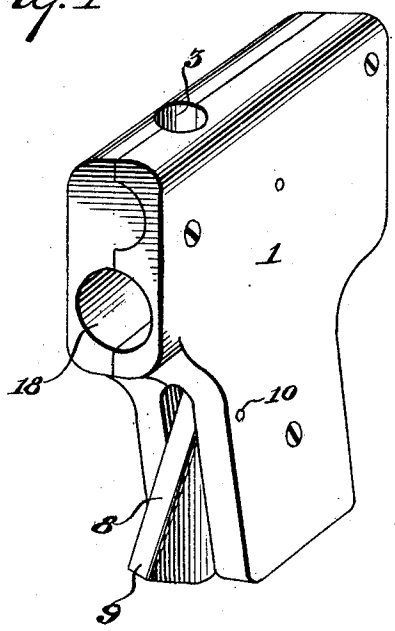
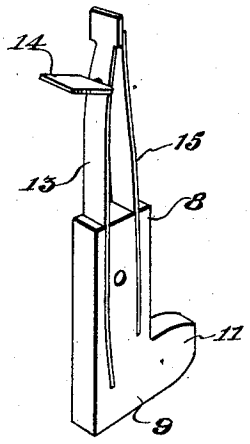


Fig. 3



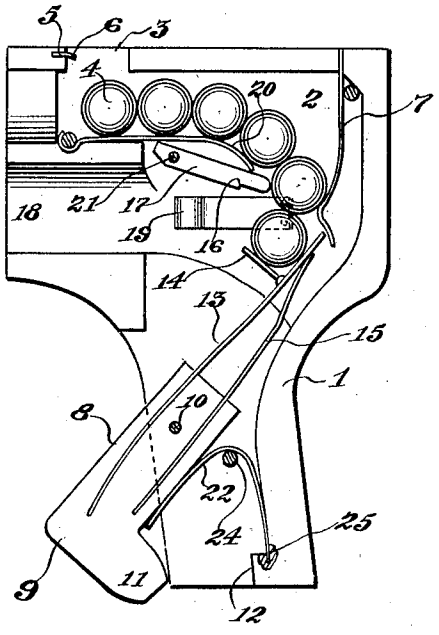


Fig. 2

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TOY PISTOL.

1,395,072. Specification of Letters Patent. Patented Oct. 25, 1921.

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To all whom it may concern:

Be it known that I, GEORGE A. WILBUR, a citizen of the United States, residing at Lansing, in the county of Ingham and State of Michigan, have invented new and useful Improvements in Toy Pistols, of which the following is a specification.

This invention relates to toy pistols and an object of the invention is to provide a toy pistol of the magazine type which may use ordinary marbles for ammunition and which will project the marbles with a certain degree of accuracy and force to lend reality to the use of the toy pistol.

Another object of the invention is to provide a toy pistol as specified, which is comparatively simple in construction and comprises a pivotally mounted projector having a spring thereon which is obstructed by a suitable obstructing pawl during the initial trigger movement to provide sufficient impelling force for projecting the projectiles, and also to provide means for guiding the projectiles from the magazine to the projector so as to prevent interference with the operation of the pistol to properly guide and feed the projectiles into the projecting positions.

Other objects of the invention will appear in the following detailed description and in the accompanying drawing wherein:

Figure 1 is a perspective view of the improved toy pistol.

Fig. 2 is a longitudinal section through the pistol.

Fig. 3 is a detailed perspective of the projector.

Referring more particularly to the drawing the improved toy pistol comprises a main body 1 formed similar to a magazine or automatic pistol and of any suitable material, preferably of wood. The body 1 is provided with a magazine 2 which opens out through the opening 3 in the upper edge of the pistol body 1, through which opening 3 the projectiles 4 are inserted in to the magazine. The projectiles 4 are spherical and ordinary playing marbles may be used as projectiles if desired. A spring 5 is carried by the body 1 and projects into the opening 3, having its inner end slightly inturned as shown at 6. The spring 5 yields upon inward pressure thereagainst, of a projectile 4 to permit the projectile to be forced into the magazine 2, however, the spring will not permit the projectiles to pass out of the opening 3, as sufficient force cannot be applied to the projectiles when off the magazine to overcome the tensioning of the spring. The magazine 2 opens out into the hollow interior of the body 1 and a feed spring 7 is carried by the body 1 and projects into the interior of the body for engaging and guiding the projectiles 4 into operative position with the projector 8.

The projector 8 comprises a trigger 9 pivotally connected as shown at 10, to the body 1, which trigger extends outwardly through one edge of the body 1, as clearly shown in Figs. 1 and 2 of the drawings so as to permit the trigger to be operated by the finger of the user. A guiding tongue 11 is formed on the lower end of the trigger and projects into the body 1 for assisting in guiding the movement of the trigger and also for forming a stop to limit the inward movement of the trigger, by engagement of the inner end of the tongue 11 with the abutment 12. A metal strip 13, preferably of spring steel, is carried by the trigger 9 and projects upwardly and inwardly into the body 1 having a shelf 14 attached thereto adjacent its upper end, which shelf is adapted to receive a projectile 4 for holding the propectile in a projecting position as shown in Fig. 2 of the drawings. A spring 15 is also carried by the trigger 9 and extends upwardly and inwardly from the trigger and into the body 1 having its upper end engaging the upper end of the spring stop 13. The spring stops 13 and 15 are oppositely bowed, and their upper edges are adapted to engage against the shoulder 16 of the pawl 17 when the trigger 9 is first moved inwardly, thus tensioning the springs 13 and 15 until the tension of the springs becomes great enough to cause them to snap off the shoulder 16, at which time they assume their normal positions and impel the projectile 4, which has been resting upon the shelf 14, outwardly through the barrel opening 18 of the pistol. Springs 19 are carried by a body 1, at opposite sides of the barrel opening 18 and adjacent the normal positions of the projectile 4 when in a position to be projected. These springs 19 yieldably engage the projectile 4 and prevent it from accidentally rolling off the shelf 4 during the initial movement of the trigger. A flat spring 20 is carried by the body 1 and engages the pawl 17 outwardly of the pivot 21 of the pawl, for arranging the pawl in

the position for engagement of the spring 13 against the shoulder 16. The projectiles 4 travel over the spring 20 and over the upper surface of a portion of the pawl 17 while moving into a projecting position.

The trigger 9 and the springs 13 and 15 are returned to their normal positions after a projectile has been projected from the pistol by a leaf spring 22 which has one end engaged in a suitable recess 25 of the body 1 while its other end portion engages against the inner side of the trigger 9, the said spring being bent about a suitable supporting pin 24 to provide the necessary tension in the proper direction for moving the trigger to its normal position.

In operative position, the spherical projectiles are forced through the opening 3 into the magazine 2, and pass downwardly over the spring 20 and pawl 17, the foremost projectile falling upon the shelf 14 being guided in its falling movement by the spring 7. When pressure is applied to the outer edge of the trigger 9 for directing the trigger toward the body 1, the springs 13 and 15 will be moved outwardly and to the upper end of the spring 13 brought into engagement with the shoulder 16, further movement of the trigger 9 will then tension the springs 13 and 15 and when the springs snap off the shoulder the spherical projectiles 4 will be projected with force and a certain degree of accuracy through the barrel 18 after which the trigger 9 and springs 13 and 15 which form the projector will be returned to their normal positions under action of the spring 22. The pawl 17 is pivotally mounted so that it will move upward upon the rearward movement of the projector 8, preventing obstructing of the return movement of the projector.

It is, of course, to be understood that the invention may be constructed in various other manners, and the parts associated in other relations, and therefore, I do not desire to be limited in any manner except as set forth in the claims hereunto appended.

Having thus described my invention what I claim is:

1. In a toy pistol, a body provided with a magazine chamber and a barrel bore, said magazine chamber opening out through the upper edge of the body, a pivoted trigger, projector springs carried by said trigger and adapted to receive projectiles, one at a time, from said magazine, and projectile carrying means on one of said projecting springs.

2. In a toy pistol, a body provided with a magazine chamber, a projector, a spring carried by said body and extended into said opening for preventing projectiles from passing out of the chamber through said opening, and projector guide springs for guiding the projectiles to said projector.

3. In a toy pistol, a projector comprising a pivotally mounted trigger, oppositely bowed leaf springs carried by said trigger, a shelf on one of said leaf springs for supporting a projectile, and means for tensioning said leaf springs during the initial movement of said trigger.

4. In a toy pistol, a projector comprising a trigger, oppositely bowed projecting springs, a projectile supporting shelf on one of said springs and pivotally mounted tensioning pawl for tensioning said projecting springs, and guiding springs for guiding the projectiles to said shelf.

5. In a toy pistol a body provided with a magazine chamber, a projector pivotally carried by said body and comprising a trigger, leaf projector springs carried by said trigger, a shelf carried by one of said springs adapted to support projectiles for projection, a pivotally mounted pawl for tensioning said projector springs, and leaf springs carried by said body for preventing accidental movement of a projectile off said shelf during tensioning of the said projector springs.

6. In a toy pistol a body provided with a magazine chamber, a projector pivotally carried by said body and comprising a trigger, leaf projector springs carried by said trigger, a shelf carried by one of said springs adapted to support projectiles for projection, a pivotally mounted pawl for tensioning said projector springs, and leaf springs carried by said body for preventing accidental movement of a projectile off said shelf during tensioning of the said projector springs, a spring for returning said trigger and projector springs to their normal positions, and means for limiting the projecting movement of said trigger.

In testimony whereof I affix my signature.

GEORGE A. WILBUR.